

St Mark's Hospital, London

A social history of a specialist hospital

LINDSAY
GRANSHAW



King's Fund historical series 2

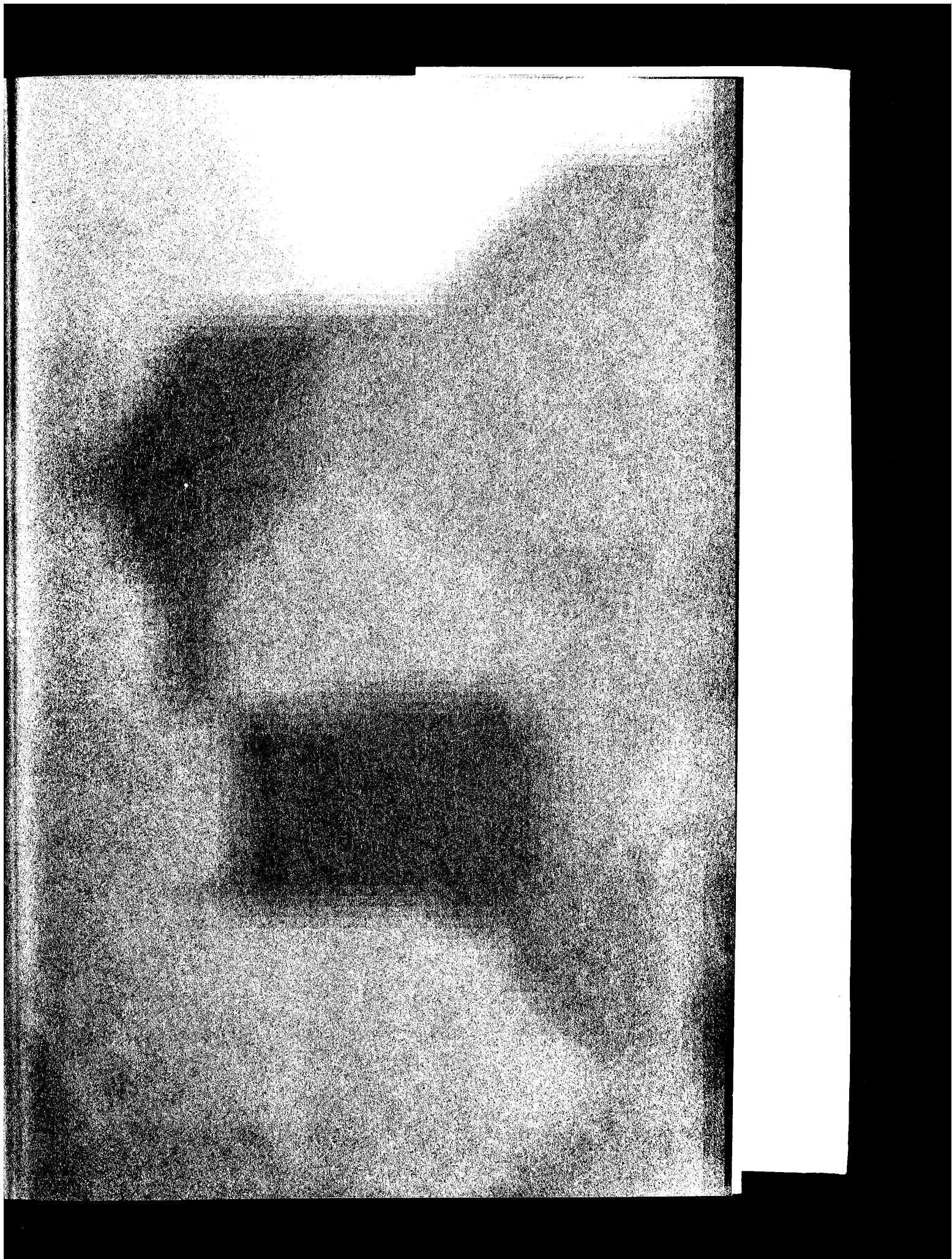
A large number of special hospitals were established in the nineteenth century, mostly by medical entrepreneurs who lacked the right social connections to join the medical elite. Most of the medical establishment condemned such hospitals as unnecessary and damaging to the profession, but by the end of the century these hospitals were taking the lead in the development of medical specialisation. St Mark's Hospital, London, which was founded in 1835, is unique in that it is the only colo-rectal hospital to survive in Britain. In other ways its history reflects that of other special hospitals.

Lindsay Granshaw traces the development of the hospital in the context of the rapidly growing metropolis and the changing medical profession. In addition, the evolution of the specialty is described in detail, from the early nineteenth century to the present day. It began as proctology; with the growth of surgery, it extended to become colo-proctology. More recently it became associated with another developing field, gastroenterology. For most of the hospital's history, the public shied away from St Mark's and its specialty. Its twentieth century association with cancer, however, gave it a powerful emotional appeal.

St Mark's was founded as a tiny dispensary with no beds. Like other hospitals at that time, it treated only the poor. Over the succeeding century people from all levels in society began to seek hospital treatment. Patients are frequently ignored in hospital histories, but Lindsay Granshaw has devoted two sections of the book to an analysis of their social make-up and their changing experience in hospital. Nursing, too, altered considerably during this period as the nature of the work changed and as nurses sought professional status. The impact of these changes on St Mark's is also examined.

As interest in the social history of medicine has grown, historians are beginning to examine the institutions of medical care. This is one of the first books in Britain to emerge from that growing concern.

Lindsay Granshaw, MA(Oxon), PhD, is historian of twentieth century medicine at the Wellcome Institute, London.



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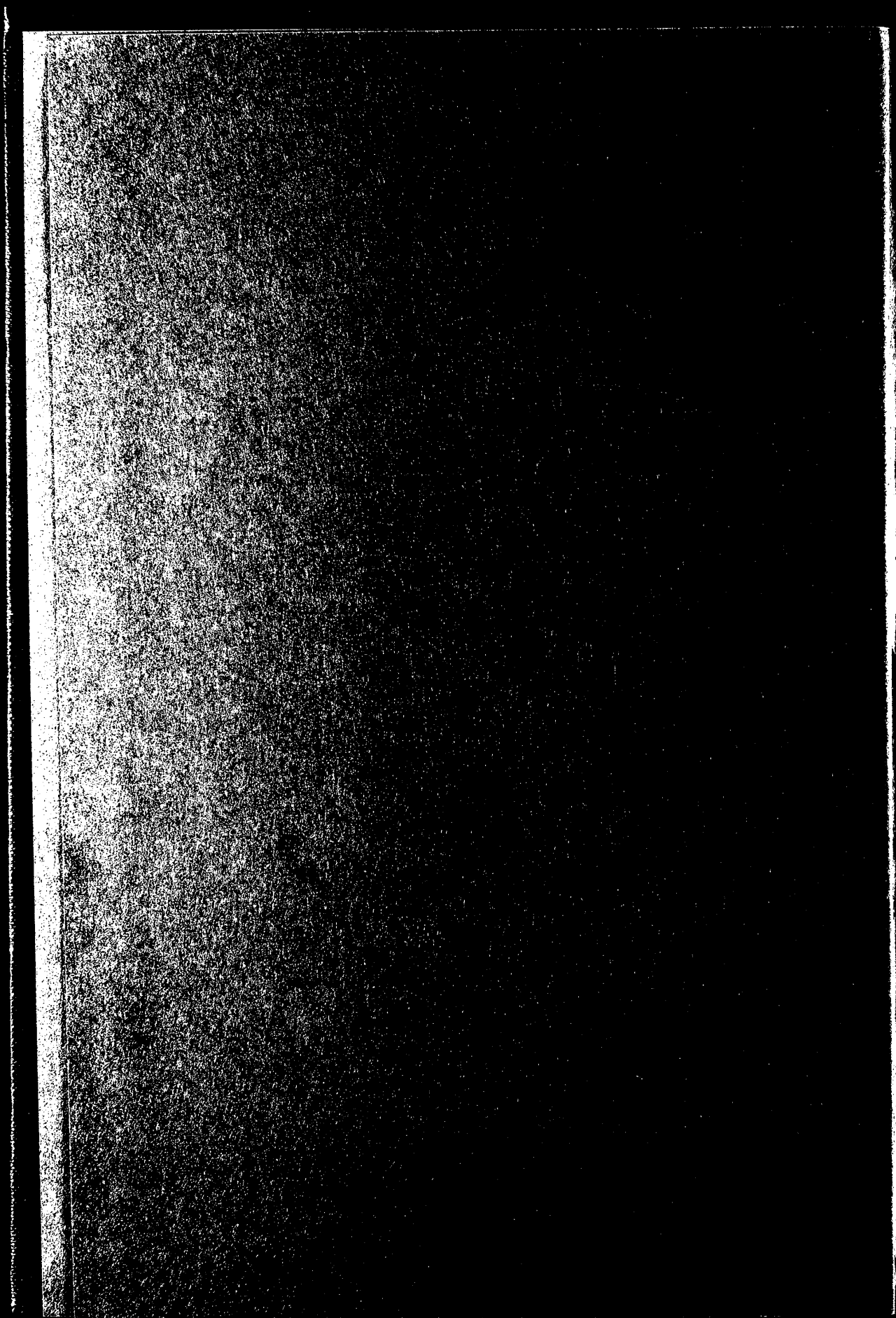
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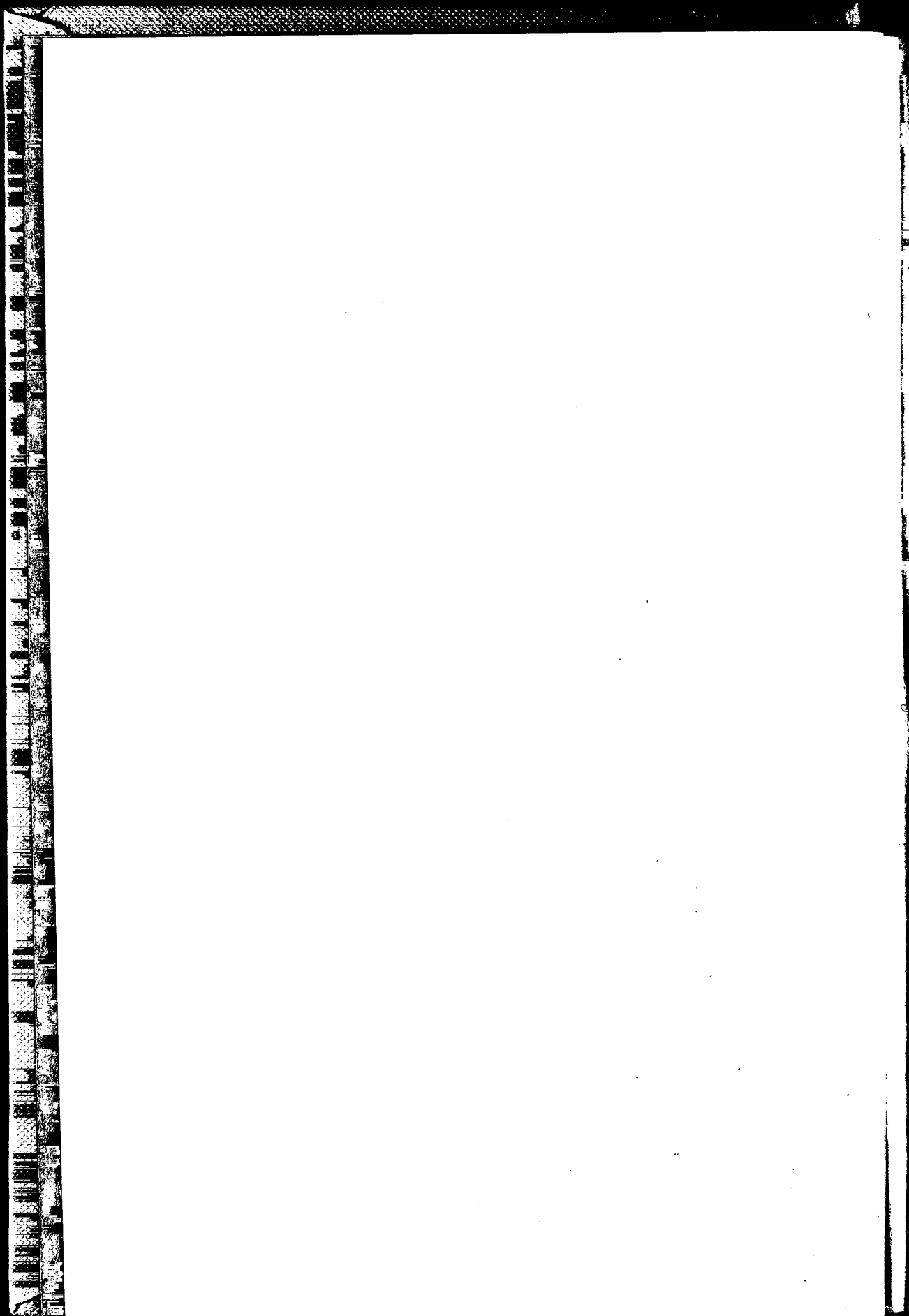
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A social history of a specialist hospital



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A social history of a specialist hospital

LINDSAY GRANSHAW



King Edward's Hospital Fund for London

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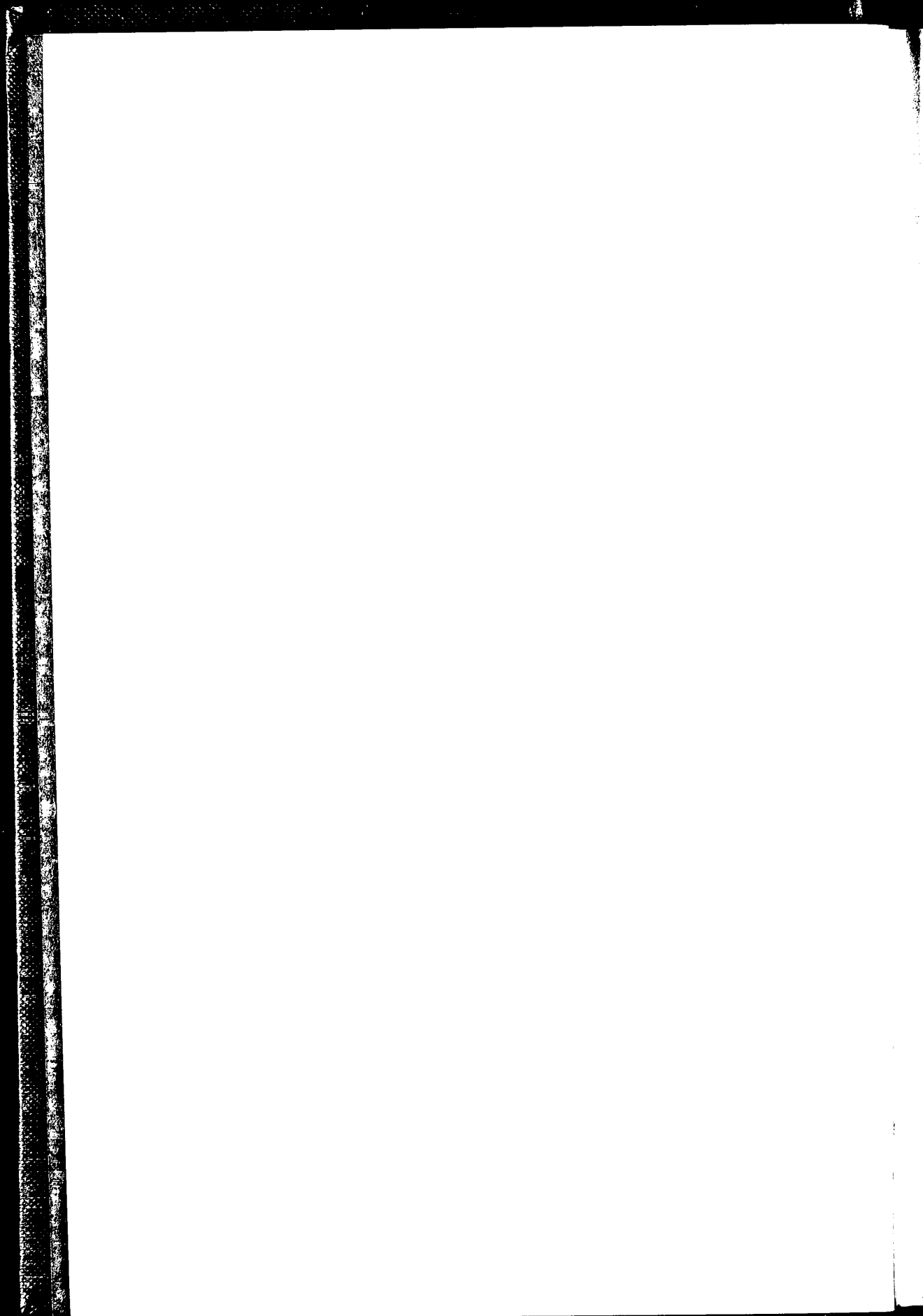
INTRODUCTION TO THE KING'S FUND HISTORICAL SERIES

Lindsay Granshaw's history of St Mark's Hospital, London, is the second book to appear in the King's Fund historical series, the first being *The making of the National Health Service* by John Pater. The purpose behind the series is to document the development of health and social services, particularly (but not exclusively) in the United Kingdom.

St Mark's celebrated its 150th anniversary in 1985. To commemorate the event a conference was held in London which was attended by more than 1,000 delegates from 45 countries – impressive testimony to the special position this relatively small hospital has established for itself, nationally and internationally, in colo-proctology.

St Mark's is the only colo-rectal hospital to survive in Britain; thus, it is unique. But it is also a particularly distinguished example from a class of hospitals that developed in the nineteenth century in London and elsewhere to combat specific diseases, or to specialise in a field of work. Many have not survived. Others have been (or will be) absorbed into general hospitals. Nevertheless, there is something to be learned by studying how the special hospitals came into being and why they flourished. St Mark's perhaps presents the best single example in the world on which to base such a study.

Robert J Maxwell



Acknowledgements

My debts in writing this history are enormous. Various organisations including the St Mark's Hospital Research Foundation, the Special Trustees for St Bartholomew's and St Mark's Hospitals, the St Mark's Association, the American Society of Colon and Rectal Surgeons and the Dyers' Company helped to support me as a Research Fellow in the Unit for the History of Medicine at University College, London, and I wish to express my gratitude to them.

Archivists, librarians and many others have given me much patient help in my research. I wish in particular to thank Miss Janet Foster, Archivist to the City and Hackney Health Authority, the Librarians and their assistants at the Wellcome Institute for the History of Medicine, Commander Anthony J Boyall, Clerk of the Dyers' Company, Brigadier K D Gribbin, Secretary-General of the Cancer Research Campaign, Mr David Innes Williams, Director of the British Postgraduate Medical Federation, Major Trevor Tudor-Williams, Registrar of the Medical Society of London, Mary Nicholas, Archivist at the Medical Research Council, Mr P Merritt, Secretary to the City of London Club, and Dr David Parker, Curator of Dickens House. I also wish to thank the librarians of the Medical College of St Bartholomew's Hospital, the British Library, the Guildhall Library, the Royal College of Surgeons of England, the Public Record Office, the Greater London Record Office, the Royal College of Nursing, the General Nursing Council for England and Wales, the Royal Society of Medicine, Bath City Record Office, Bath City Reference Library, and the King's Fund Centre, King Edward's Hospital Fund for London.

Past members of the staff of the hospital were very generous with their time, and I found that their reminiscences brought life to the history. I would like to thank the late Mrs Lucy Anderson, Dr Donald V Bateman, Miss E J Cable, Mr C Devereux, Professor J C Goligher, Miss T James, Sir Francis Avery Jones, Mr George Lamb, Mrs Constance Leak, Mrs Constance Lucas, Mr O V Lloyd-Davies, Sir Hugh Lockhart-Mummery, Sir Clifford Naunton Morgan, Mrs Katherine Eva Russell, Mr Henry R Thompson and Miss Irene Tonks. Interviewing past members of staff took me back as far as 1910, but through descendants of those associated with the hospital I was able to reach back to the time of Frederick Salmon. I would like to thank those who have helped to fill in the history of the hospital and its specialty, including Mr Robert Copeland, the late Mr Rupert S Corbett, Mr George Cunningham, Mrs Ruth Davies, Mr David Gabriel, Miss Anita Goldberg, Brigadier Michael Gordon-Watson,

ST MARK'S HOSPITAL, LONDON

Mr David Roy Balfour Park, Lady Caroline Parks, Mr William Relph, and Professor Harold Rodgers. Other help has been given by Dr Leon Banov, Professor Bryan Brooke, Mr Alexander Brown, Mr Kenneth L Chapman, Lady Diana Cooper, Professor Maurice Ewing, Mr Leslie Le Souëf, Mr Christopher Loyd, Mr John E Masterman, Mr O J Masterman, Mrs Beatrice Sizmur Mahoney, Dr Roger Rolls, Miss Sarah Whitfield, and Professor Bernard Wood.

Many current members of staff at the hospital have given me a great deal of help and I am especially grateful to Mrs June Baker, Dr Clive Bartram, Dr H J R Bussey, Mr Michael Henry, Miss A Herlihy, Dr Leon Kaufman, Professor J E Lennard-Jones, Mr J P S Thomson, Mr I P Todd, Dr Ian Verner, Dr Christopher Williams and Mrs J Wood. Others have dug out papers and answered questions which often required some research on their part. Some of them got their revenge by asking me seemingly simple questions which then required a week's research of my own – for example when I was asked precisely how many patients had been treated at the hospital since its foundation. The information was, so I later discovered, to be included in a cabaret song!

Several of those already mentioned kindly agreed to read parts of the manuscript, especially on the medical material, and I am very grateful to them for their help. I owe particular gratitude to Professor Goligher for reading all three chapters on the treatment of colo-rectal disorders and to Professor Lennard-Jones for guiding me through the gastroenterological material. I would also like to thank Dr Bussey, Miss Cable, Sir Francis Avery Jones, Mr Lloyd-Davies, Sir Hugh Lockhart-Mummery, Mr Thomson and Mr Todd for their help with sections of the manuscript. I am especially indebted to Dr Donald Bateman for his careful proof-reading of the typeset manuscript. That it reached this stage owes a great deal to the efforts – at weekends and in the evenings, and when they themselves were snowed under with work – to those who converted my handwritten script into a finished, word-processed draft: Miss Jill Grimsey, Mrs Maysuri Patani, Miss Anne Campling, Mrs Mary Groves, Miss Janet Holland, Miss Julie Forster and Miss Tracy Saul.

Most of the photographs in the book were reproduced at St Mark's by the medical photographer, Miss Jill Maybee, whose speed I appreciated greatly and who took great trouble to convert old photographs into copies which were of the highest quality. I am also grateful for photographs, and permission to reproduce them, from the Illustrations Department at the Wellcome Institute Library, the *Nursing Mirror*, the City and Hackney Health Authority Archives and the Guildhall Library.

Many others have assisted with my task, and I would particularly like to thank my sister, Lucy, for transcribing some of the taped interviews and assisting me with a study of the nineteenth century governors, and my

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Above all, I owe a tremendous debt of gratitude to three people – Charles Webster, Basil Morson and John Northover. They encouraged me, they gave most generously of their time and patience, even when in the middle of their own projects, and they seemed certain that the book would indeed eventually appear. It owes much to them that in fact it did. They are not, of course, responsible for errors that remain in the text, but besides their tremendous encouragement they also did much to ensure that other mistakes were removed.

It has been very challenging to write both for historians and for those working in medicine – sometimes the latter group seemed a little surprised at what I saw as my task as a historian and the historians meanwhile were not exactly reverential about the subject matter of the book. I hope that, in the end, the present work will interest both groups.

Lindsay Granshaw
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London

Contents

Acknowledgements	vii
List of illustrations	xii
Preface	xv
I Introductory	1
II Outsider and entrepreneur	7
III The infant charity	16
IV Charterhouse Square to City Road <i>Salmon's hospital, 1838-1858</i>	29
V Circumscribed only by its too narrow means <i>Financial constraints 1859-1875</i>	49
VI An old and valuable charity <i>St Mark's, 1876-1896</i>	63
VII The afflicted poor <i>Patients at St Mark's in the nineteenth century</i>	78
VIII She shall scour the Wards . . . <i>Nursing at St Mark's in the nineteenth century</i>	95
IX Diseases of the rectum in all their baneful varieties <i>Nineteenth century views</i>	107
X The New St Mark's <i>1896-1918</i>	160
XI St Mark's Hospital for Cancer <i>1918-1948</i>	185
XII An established specialty <i>Colo-rectal surgery at St Mark's, 1900-1948</i>	218
XIII A jewel in the National Health Service?	279
XIV The field diversifies <i>The management of intestinal disease at St Mark's, 1948-1985</i>	313
XV Profession or vocation? . <i>Nursing at St Mark's, 1900-1985</i>	385

CONTENTS

XVI	The expansion of the hospital class <i>Patients at St Mark's, 1900–1985</i>	412
XVII	A study in specialism	428
	References and notes	436
	Appendix I: Details of staff and patients from census data	486
	Appendix II: Hospital staff, 1835–1985	490
	Index	503

List of illustrations

Frederick Salmon	<i>facing</i> 16
William Taylor Copeland	17
James R Lane	48
Peter Y Gowlland	48
William Allingham	49
Alfred Cooper	49
D H Goodsall	112
Herbert Allingham	112
The New St Mark's, 1896	113
Women's ward, 1896	113
Differentiating between types of 'prolapse': paintings by P Y Gowlland, 1862	144 & 145
The Reverend Dr Arnold Oxford	176
J P Lockhart-Mummery	177
St Mark's in the 1920s	208
Proposed extension, 1927	209
Programme for Greyhound Ball, 1927	209
W B Gabriel	272
Cuthbert Dukes	272
Wooden 'egg' used by Charles Gordon-Watson during perineal excision	273
H J R Bussey mapping gland involvement in rectal cancer specimen, 1950s	273
The outpatient department in the 1950s	304
One of the operating theatres in the 1980s	304
St Mark's today	305

LIST OF ILLUSTRATIONS

Marking W B Gabriel's final operating list, 1958	368
Patient with colostomy appliance, 1905	369
Ileostomy appliance, 1980s	369
Nurses and patients on roof of St Mark's, 1920s	400
B Ward (later Salmon Ward) in 1928	400
Sitting room in the nurses' home	401
Matron Cable and a probationer, late 1940s	401

IN TEXT

Martin van Butchell (1735–1814?), a travelling rectal specialist	5
From the <i>Illustrated London News</i> , 14 August 1852	39
Poem dedicated to Frederick Salmon by G J Hutchings (1860)	93
Salmon's operation for piles	123
Instruments devised by surgeons at St Mark's	126 & 127
Goodsall's rule showing the relationship of external and internal openings of a fistula	133
Pages from the souvenir programme, Charity Matinée, 1902	167
The Strauss sigmoidoscope with Lockhart-Mummery's modifications	221
Diagram of a blind internal fistula, showing muscle arrangement, according to Goodsall and Miles (1900)	231
Diagrams of muscles surrounding anal canal, according to Lockhart-Mummery (1914), showing contradictory muscle arrangements	232
Diagram of surgical treatment of haemorrhoids according to Milligan, Morgan et al (1937), showing the muscle arrangements of the anal canal	240
Dukes' classification of the stages of rectal cancer (1936)	256
The genealogies of Lockhart-Mummery's first three polyposis families	269
Nurse training certificate, 1929	392

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- Diagram of a blind internal fistula, showing muscle arrangement according to Goodsall and Miles: from D H Goodsall and W E Miles, *Diseases of the Rectum and Anus* pt 1 (London: Longmans, Green and Co, 1900), p 93.
- Diagrams of muscles surrounding anal canal according to Lockhart-Mummery: from P Lockhart-Mummery, *Diseases of the Rectum and Anus* (London: Baillière, Tindall and Cox, 1914), p 185.
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Preface

Dr Basil Morson, the pathologist at St Mark's Hospital, first suggested that a history of the hospital should be written and that it should be published to coincide with the hospital's 150th anniversary in 1985. After discussions with Dr Charles Webster, Director of the Wellcome Unit for the History of Medicine at the University of Oxford, it was decided that a historian should undertake the task and I was appointed in 1980.

I was given two major advantages in writing the history of St Mark's: it was agreed that as a historian I should have complete editorial control (and I am grateful that this was respected) but I was also given free access to hospital records and papers, and as much help as I could have wanted from the staff at St Mark's, past and present. From the time of my appointment I was also able to attend courses and seminars organised at the hospital for visiting doctors, as well as to observe practice.

I regarded my task in writing the history of St Mark's as twofold. I wished to show the development of a special hospital, in its social context, but also to describe the evolution of its specialty. The two elements go hand in hand, but the medicine is often ignored in histories of hospitals, while the institutional settings tend to be forgotten in accounts of medical ideas and practice. I looked at the specialty of colo-proctology in its relation to the hospital, but since St Mark's played a key role in its development in Britain, the scope is perhaps somewhat wider. I have also been concerned that the all-important recipients of medical care in the hospital, the patients, should not be overlooked, as too often happens in hospital histories. Nurses, too, tend to get short measure, but it is particularly important that the history of their work is included. For one thing, it is the nurses who figure most prominently in the daily care of the patients from the patients' point of view. Moreover, the hospital developed at a time of great change within the nursing profession, a factor which had its own impact on St Mark's. I have therefore organised this book so that narrative chapters which describe chronologically the general changes at the hospital over a fifty or hundred year period are followed by more analytical chapters which return to look at each period again, but concentrate on changes in surgery and medicine, nursing or among the patients.

The history of St Mark's is both unique and typical. It is, after all, the only colo-rectal hospital to survive in Britain. But its history is also typical of many other special hospitals, established in great numbers in the nineteenth century by men like Frederick Salmon, the founder of St

ST MARK'S HOSPITAL, LONDON

Mark's. Its subsequent development – even the part it played in its specialty – was largely typical. At every stage in its history similar developments can usually be seen at its counterparts in other specialties. In that respect, therefore, the history of St Mark's serves as a case study of the development of medical specialisation.

CHAPTER I

Introductory

St Mark's Hospital was founded in 1835 as the Benevolent Dispensary for the Relief of the Poor Afflicted with Fistula, Piles and other Diseases of the Rectum and Lower Intestines. Despite its lengthy title it was a tiny outpatient clinic, with no beds, in a house in Aldersgate Street in the City of London. From the beginning, when it was established by Frederick Salmon, a surgeon from Bath, it was a specialised institution. It never deviated from that, although from the early twentieth century its special interest extended from rectal diseases to include problems of the rest of the bowel. Rectal complaints were not diseases which could easily attract public attention, and yet the hospital recruited a host of loyal supporters. It steadily expanded, and, as the Fistula Infirmary, took a few inpatients from September 1835, moved in 1837 to Charterhouse Square and then settled in the 1850s on its present City Road site, just outside the old City of London boundaries.

When the dispensary was established, Princess Victoria was 16: she was to undergo two more years of intensive training before she became Queen. Political revolution, despite constant fears among the ruling classes, had passed Britain by, but society nevertheless seemed in turmoil. Parliament had bowed to political pressure and introduced a Reform Act in 1832; it was seen as a landmark in enfranchising the nation and removing rotten boroughs, even if in reality it made little difference. It seemed for a moment to silence critics from all social levels.

A more active measure, aimed at the poorest classes, was the 1834 Poor Law Reform Act. It was designed to curb abuses in the old poor law system, but also to ensure that people turned to the workhouse only as a last resort. The Act set the tone for much social legislation in the nineteenth century, containing as it did a very strong moral element: charity should be given in such a way that few wished to turn to it. The determination that charity should not be granted as a right, and that only the 'deserving' poor should receive it, was also a feature in the running of the voluntary hospitals. Those who were considered to be inappropriate applicants for charity could be sent to the workhouse infirmaries which developed after 1834.

Many in the upper ranks of society feared the political precedent set by the French Revolution, believing that it encouraged political unrest in Britain. However, it was the industrial revolution which caused the greatest changes, both in social and political terms. People began to move from the countryside to the cities, breaking down communities, but not

necessarily – at least in the immediate term – improving their lot in their new lives. In the middle and upper ranks of society, too, there was social disturbance. A *nouveau riche* class, supported by the new industries, sprang up, but was resented by the older established families. Both groups sought to define their status, with the new group attempting to emulate the upper classes through lavish expenditure and philanthropy. In the middle orders of society, because of the need to reestablish hierarchies, increasingly narrow definitions were used to clarify the membership of professions, including medicine. Although this was an era in which *laissez-faire* was the acclaimed economic model and in which entrepreneurs abounded in all walks of life, many occupations sought increasingly to defend or instate monopoly powers.

Urban living had a considerable impact at all social levels. London grew massively in size in the nineteenth century. From its earliest days it had been a great port and trading centre. By the eighteenth century its trade was highly developed, and so too were the industries, both luxury and basic, that supported it as a centre of government and a large consumer market. In the nineteenth century, while other areas in Britain were developing their industrial strength, London grew rapidly as a commercial and financial centre, and as the centre of imperial government. By the mid-1850s its population was over two million, and this had risen to five million by the end of the century. Migration into the city was steady, and its areas became increasingly distinct, in social terms, from one another.

When the Fistula Infirmary was established in Aldersgate Street, the City of London did not exclusively consist of commercial and financial institutions. Many merchants in the early nineteenth century lived above their premises, but as railway lines were developed, merchants began to move out into the suburbs. The artisans and labourers were not as quick to move: the service industries which employed women largely remained in central London, as did many of the occupations in which the men were involved. Transport was not sufficiently easy or cheap for the labouring and lower middle classes to live on the outskirts of London. However, as the financial and commercial operations in the City grew, other concerns were pushed outwards to its borders, and the artisans and unskilled labourers followed. The district of St Luke's, which included City Road, entertained some of the displaced population. Slightly to its north, Islington expanded rapidly as well. City clearances for railways, for new buildings, to widen roads, or to check overcrowding and bad sanitation, all served to increase the overcrowding in neighbouring areas. There was great pressure on housing in the second half of the nineteenth century, and while a massive amount of jerry-building took place in Islington, Hackney and south of the river, London's inner ring coped by crowding

INTRODUCTORY

more into existing tenements. It was not until the late 1880s and 1890s, as the railways extended and cheap transport ran to the suburbs, that this pressure on housing began to be relieved.

At all levels, London was a commercial city. This was as true in medicine as in any other activity. Medicine was far from a monolithic practice in 1835: all kinds of practitioners and sellers of drugs competed for customers. Much health care then, as now, was in the hands of individuals, their families and friends. When it seemed appropriate to look further for help, individuals would probably turn first to patent medicines or to mixtures of drugs sold over the counter at the chemist or apothecary's. At a later stage or for more serious problems, they might consult medical practitioners, but their choice of doctor would depend largely on availability and cost. In London, the rich and the powerful used the practitioners associated with the Royal College of Surgeons, the Royal College of Physicians and the Society of Apothecaries. Poorer patients would seek help from practitioners who had not necessarily passed examinations, although they might have served an apprenticeship. Some were general practitioners, some specialised in particular parts of the body, or in particular remedies, some practised from apothecaries' shops, and some had other employment in addition to medicine. In attempts to systematise medicine, as well as to restrict entry into what seemed to many in it an overcrowded profession, elite practitioners associated with the Royal Colleges condemned as quacks all types of specialists and those who had not undergone conventional training. This had little immediate effect, however, on the so-called quacks' clientele.

Besides turning to local doctors or drug sellers, the poor could also attend the voluntary hospitals or dispensaries which treated outpatients. Hospitals in 1830 were very different from their counterparts today. They were mostly small institutions which served only the poor. The middle and upper classes were treated at home: the hospital was largely a place of last resort for those who could not afford to pay a general practitioner. Frequently patients tried other practitioners first before coming to the hospital. Hospitals tended to be more social than medical institutions, with little active intervention into patients' ailments. They were supported on a voluntary basis: patients did not pay for their treatment, but the better-off who were charitably-minded made donations which kept the hospitals running and also acted as governors of the institutions. Surgeons and physicians gave their services free, contributing a small amount of their time in return for experience, status, fees from students and vitally important contact with the well-off philanthropists who might be future private patients. Hospital posts might be unpaid, but they were much sought after because they assisted advancement.

Governors intended the hospitals to treat the 'deserving poor': the

really down and out or those who were not considered morally upright were not 'deserving' and were therefore not welcome. Many other social and medical categories were also excluded: those who were judged to be infectious or those with 'incurable' diseases, for example, were not eligible for treatment at general hospitals, and nor were children, or women during childbirth. Lunatics were also excluded, and drunkards and those with venereal disease were sent away as inappropriate recipients of charity.

By 1835, London was well-endowed with hospitals and dispensaries: by the end of the century numbers had so multiplied that there was frequent talk of a need to merge them. There were a few general hospitals, and many more outpatient dispensaries. St Bartholomew's (1123) and St Thomas's (1207) had origins in the monastic hospices of the Middle Ages. Five other general hospitals were founded in the eighteenth century: Westminster (1719), Guy's (1721), St George's (1733), The London (1740) and The Middlesex (1745). In the first half of the nineteenth century Charing Cross, University College Hospital, King's College Hospital and St Mary's were added to the list.

Special hospitals grew at a far more rapid rate. There was a mere handful in 1750, but migration to the city meant that practitioners could draw upon large patient numbers in order to specialise: the demand for specialist services was almost overwhelming. Moreover, doctors increasingly needed to secure an institutional base, a factor which served as an incentive to establish hospitals. In the second half of the eighteenth century at least six lying-in (maternity) hospitals were established, together with the Lock Hospital for venereal disease, a smallpox hospital and a lunatic asylum. Largely, therefore, these hospitals catered for groups of patients not admitted to the general hospitals. In the first decade of the nineteenth century three eye hospitals, including the institution at Moorfields later known as the Royal London Ophthalmic Hospital (1804), and two institutions for vaccinating against smallpox were established. This was followed between 1810 and 1820 by other establishments including another eye hospital, a hospital for asthma and consumption, later the Royal Hospital for Diseases of the Chest (1814), and an ear hospital. A trend towards hospitals for the treatment of particular diseases as well as particular parts of the body was beginning to develop. It was from 1830 that a significant expansion in the number and range of special institutions can be seen. The 1830s saw, besides the Fistula Infirmary, the establishment of the Hospital for the Cure of Deformities (1836), the Metropolitan Institution for Diseases of the Ear, Throat and Vocal Organs (1838) and the Dispensary for Scrofula and Diseases of the Chest (1839) and a handful of other institutions. In the 1840s and 1850s the trend became even more marked, with the foundation of two hospitals for

INTRODUCTORY



D^r VAN BUTCHELL.
FISTULÆ and PILES

*By the Help of God — We ERADICATE. Having WIT enough — to heal those Complaints
MY small Fee must be — Twelve heavy Guineas: Large Six Score Thousand: — We mean sp. Cent
On Five Years Profit: — Put it in Roultrous. of an Hundred each — clear from Ten full Guineas — go to — none.
London Pub^d by P. Roberts 28 Middle Row. Holborn M. Van Butchell*

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Martin van Butchell (1735–1814?), a travelling rectal specialist

consumption, including the Brompton Hospital (1841), the North London Infirmary for Diseases of the Eye (1841), the Cancer Hospital (instituted 1851), and several hospitals for skin diseases, diseases of the chest, orthopaedics and ophthalmic problems. By the early 1860s, there were in London at least seven hospitals for consumption or diseases of the chest, six for the eye, four for the skin and three treating orthopaedic problems, with other institutions treating a range of problems from diseased and ulcerated legs to paralysis and epilepsy.¹

Most of the nineteenth century special hospitals were founded by medical men, unlike the majority of general hospitals which had usually had lay origins. They were relatively easy to establish: the practitioner rented part of a house in an area from which the middle classes were moving, such as the City, Holborn or Marylebone, and installed a few beds in the care of a residential 'matron' and perhaps a house surgeon. There was greater difficulty in securing support and ensuring the expansion of the institution, but many of the special hospitals, unable to attract the aristocratic support given to the general hospitals, turned instead to businessmen in the City who were often very happy to see their names among those of other philanthropists in a successful hospital's list of subscribers. With the number of new institutions established in London, patients soon had a wide variety from which to select: this also applied to philanthropists in choosing the objects of their charity and as the multiplicity of special institutions competed for subscribers, many failed for lack of financial support.

It was against this background that Frederick Salmon founded St Mark's Hospital. London was expanding rapidly, with a steady influx of country-born workers and families losing their traditional sources of medical care. Living conditions were crowded and insanitary, fostering endemic and epidemic disease. However, the medical profession in London, jealously guarding its privileges, did not take kindly to the establishment of new institutions. It was largely Salmon's inability to gain a secure foothold among elite practitioners that encouraged him to turn against those whom he had previously sought as colleagues, and to establish his own hospital. The history of his life and career shows how an entrepreneurial, ambitious medical man, who did not come from elite medical circles, sought to establish himself and his specialty in the changing social and medical world of early Victorian Britain. The history of the hospital itself mirrors that of other successful specialist hospitals and the growth of specialised medicine.

CHAPTER II

Outsider and entrepreneur

Frederick Salmon was born in Bath in 1796, the son of Henry Salmon, an attorney. His father seems to have been reasonably well established, practising in 1787 from Westgate Street, a central and fashionable address for professionals. In the early nineteenth century Henry Salmon moved to Ladymead, and then to Green Park Place, acting as a commissioner for the King's Bench and for Pleas and Exchequers.¹ From the last third of the eighteenth century, Bath multiplied in size rapidly as it became a fashionable resort for those seeking the waters. Royal visits to the city were frequent, bringing the nobility in their train and all who sought to serve them: traders, lawyers, clergymen, doctors. It was a profitable place in which to work, especially if the closed ranks of Bath's guilds and professions could be breached.

Henry and his wife Denne had at least nine children, with the christenings of four boys and five girls being recorded in the Bath Abbey Registers between 1788 and 1809. Frederick was their sixth child, christened at the same time as a younger brother on 16 May 1798. The records indicate that three sons, Edward, Frederick and Henry, and four daughters, Harriet, Caroline, Louisa and Denne, survived to adulthood. Henry Salmon himself died at the age of 72 in 1827, while his widow far outlived him, settling in Bathampton and dying at the age of 90 in 1853.² Well before his death, Henry Salmon placed his three sons in potentially promising careers. As a practising attorney himself, he had succeeded in joining the guild system by which Bath's craftsmen and professional groups strictly regulated the numbers of their peers. In order to practise in a number of professions, candidates were required to be apprenticed to an accredited practitioner. On completion of the apprenticeship, the candidate was given the freedom of the City of Bath with the right to participate in city government, thus perpetuating the guild system. Henry Salmon apprenticed his eldest and youngest sons to his own profession, while Frederick was apprenticed to a surgeon-apothecary.³

In the early nineteenth century apothecaries were not simply drug sellers: they were medical practitioners. In 1800, 17 apothecaries or surgeon-apothecaries were listed for Bath, with a further 11 who started work as apothecaries and were subsequently described as 'chymists'. In 1815 the Apothecaries Act was passed which required that any medical man prescribing or dispensing drugs should hold the licentiate of the Society of Apothecaries. In order to qualify for this licence, a candidate had to take certain medical courses and attend hospital practice for six

months. After the passage of the Act, it became increasingly common for those who initially sought the licentiate to seek the membership of the Royal College of Surgeons as well, thus making themselves 'general' practitioners, able to practise both medicine and surgery. The Royal College of Surgeons demanded additional courses and that candidates should attend a hospital for a year. Henry Salmon paid a fee to apprentice his son for the requisite seven years 'to learn the Art of a Surgeon and Apothecary' from Joseph Hume Spry (c 1778–1859).⁴ Frederick was only 15 when the indentures were signed on 27 November 1811 but his father chose well. The Sprys were firmly established not only in their profession but also amongst Bath's city governors; by the 1820s, and probably before, they also had strong links with London. Moreover, JH Spry's father, Joseph, had acted as surgeon-apothecary to Lord Nelson during an illness he suffered at Bath in the winter of 1781–1782. Joseph Hume Spry became a freeman of the City of Bath in 1802, having served an apprenticeship to his father. In 1808, he was elected as a member of the Common Council of the City of Bath; by 1829, he had become the longest serving member and was duly chosen to serve as Mayor. Before the passage of the Apothecaries Act, Spry was listed in the Bath Directories simply as an apothecary, but subsequently he listed himself as a surgeon-apothecary and in later life claimed an MD as well.⁵

While apprenticed to Spry, Frederick Salmon spent two years in hospital attendance at the Casualty Hospital in Bath, probably as a pupil of James Norman, surgeon to the hospital until 1817. (In later years he dedicated a book to James's son, George, who took over his father's position as surgeon to the Casualty Hospital on his death.⁶) Salmon also had a connection with William White (1762–1826), surgeon to the City Infirmary and Dispensary, who had a very successful practice in the treatment of rectal as well as other diseases. Like Salmon's father, White worked in the Westgate Buildings. Frederick Salmon credited White with the direction his own medical specialisation later took.

In early life I was acquainted with that excellent surgeon, obtained a knowledge of his opinions, and was induced, from a high confidence in his character, to follow the path he had pointed out. Experience soon taught me of the important benefits to be derived from such a course.⁷

White was one of only a handful of surgeons in Britain in the first two decades of the nineteenth century to write on rectal disease: in 1812 he published *Observations on the Contracted Intestinum Rectum*, which was subsequently revised and reissued three times between 1815 and 1822 as *Observations on Strictures*, a subject in which Salmon later showed great interest.⁸ Salmon wrote that he was 'happy to express my acknowledgements' to White

... for the professional information afforded me by his excellent treatise upon Stricture of the Rectum, a work which more particularly drew my attention to that subject.⁹

Many years later, in its obituary of Salmon, *The Lancet* recorded that he received his preliminary education in Bath,

... at a time when diseases of the rectum were in great vogue; hence, perhaps, the turn given to him in after-life to this branch of surgery.¹⁰

Frederick Salmon qualified for his licentiate of the Society of Apothecaries in 1817. He was given the right to practise 'in the Country', that is, not London, having served over five years of apprenticeship to Spry, attended two lecture courses on anatomy and physiology, two on the theory and practice of medicine, one on chemistry and one on materia medica. Single courses in these subjects sufficed the Society, but some duplication was necessary for Salmon to gain the qualification of the Royal College of Surgeons.¹¹ Salmon showed no signs of settling down to practise in Bath. At about that time he moved to London: Joseph Hume Spry was now also practising in Charterhouse Square, very close to St Bartholomew's. In October 1817 Salmon entered St Bartholomew's Hospital as a pupil of John Abernethy (1764–1831) for six months. He paid six guineas to 'walk the wards' after him, together with 92 other pupils, including two house surgeons.¹² His London training was necessary so that he could qualify to practise there as well, if he so wished. John Abernethy, a member of the Council of the Royal College of Surgeons, held an important place in London's medical elite. However, Salmon was probably more influenced by William Lawrence (1783–1867), Abernethy's former demonstrator of anatomy and at this time an assistant surgeon at Bart's. Lawrence was of a sufficiently reforming slant of mind, at least in his early career, for Abernethy to condemn him as

... one of the party of modern sceptics, co-operating, in the diffusion of their noxious notions, with a no less terrible band of French physiologists for the purpose of demoralising mankind.¹³

In 1818, Salmon was admitted as a member of the Royal College of Surgeons, having attended two courses of lectures and demonstrations in anatomy, and a year of hospital practice. In the autumn of 1820, Salmon became Abernethy's house surgeon, paying the senior surgeon at least £8.15s 0d for the privilege.¹⁴ To become house surgeon at St Bartholomew's was the first rung on the ladder towards higher positions within the hospital, or towards appointments at lesser institutions elsewhere. Many medical men advertised themselves simply as having been a house surgeon at a particular hospital, and Salmon did likewise in his books. It

was also a position which was often earmarked for the friends and relations of the surgeons and physicians, as these were schooled to follow in their elders' footsteps. Salmon would therefore have had to have made a strong impression on Abernethy – through merit, money, influence or all three – to be appointed.

Between 1821, when he ceased to be a house surgeon at St Bartholomew's and 1835 when he established his own hospital, Frederick Salmon demonstrated great ambition to achieve the highest ranks in the profession, but failed to do so. The medical profession in London did not operate on a system of meritocracy but on patronage. Those with influence ensured that their relatives and friends succeeded them in important hospital posts and in their practices: those who did not have well-placed connections found it far harder, or impossible, to break through the closed ranks of the elite practitioners. Those who came from the provinces had greater difficulty, too, than those from London. Salmon had a few advantages: Bath surgeons often had better connections than those from other provincial towns, and Spry was able to assist Salmon in London. In 1822 Spry made a donation to St Bartholomew's in order to become a governor, and around the same time also became a governor of the nearby Aldersgate Street Dispensary.¹⁵

Around St Bartholomew's as around the other general hospitals, a whole medical industry had grown up. Many medical men, surgeons, physicians, apothecaries, and no doubt unqualified practitioners, resided and practised in the vicinity. Aldersgate Street and Charterhouse Square were particularly favoured locations. There were also many drug sellers and instrument makers serving not only the main hospital but also those who gathered around it. In addition there was the Aldersgate Street Dispensary and the Aldersgate School of Anatomy. The Aldersgate Street Dispensary had been founded in 1770, as one of the first of its kind by Joseph Lettsom, who in 1773 founded the Medical Society of London.¹⁶ Neither was initially favoured by the elite practitioners. The Dispensary, as its name might imply, dispensed drugs – and advice – to outpatients rather than treating inpatients. St Bartholomew's, like the other large hospitals, had a contradictory relationship with the medical industries going on around it. Men from Bart's often held additional appointments at the Dispensary or the School, and students passed easily between them all, collecting their credits at different institutions. However, it was often claimed that dispensaries provided poor medical care and that schools of anatomy led young medical students into dens of iniquity.

Frederick Salmon remained in the area around St Bartholomew's for the rest of his working life. In the 1820s he competed four times to be elected to the Aldersgate Street Dispensary. The manner of these competitions came to a head in 1824 and was subsequently at issue again

in 1833. The Dispensary, like other hospitals and dispensaries, was supported by voluntary contributions from subscribers. In return for these subscriptions, donors received several benefits. Their names would be issued in a public list, they had the right to recommend patients for treatment and they became governors of the institution. This would entail certain powers over the running of the hospital but most crucially it often meant the right to choose its surgeons and physicians. Since such posts were highly prized because they assisted professional advancement, the position of the governors could be one of great power. At the very least they could be expected to be 'canvassed' for their support. In the early nineteenth century governors frequently received payment for their vote. It was often the accepted practice that a rash of governors would be created just before the election of a new member of staff, at the expense of the candidates. The institution was likely to turn a blind eye to this, since it enhanced its revenues considerably. On the other hand, less well-off newcomers to the profession increasingly criticised such practices as corrupt.

The first time that Salmon applied to the Aldersgate Street Dispensary, in 1820, he and the eventual winner, Mr Lloyd, were the only candidates. He stated that he at once called on Mr Lloyd and 'told him that he would not lend himself to the money-vote law'.¹⁷ He failed in 1820 and again shortly thereafter. In 1824 he conducted himself differently. Salmon claimed that it was his opponent, Mr Ellerby, who began by buying votes; others claimed that Salmon himself did. Salmon maintained that he went at the outset to Ellerby and said to him:

I am informed that you mean to make votes on this occasion. I am in a condition to do so too. If you make them, I will; and if, after having been a candidate already at two elections, I am, with such a claim, to be again opposed, I will pay £10,000 sooner than withdraw.¹⁸

Six hundred new governors were created in 1824, with Salmon paying out at least 200 guineas. His competitor paid a higher sum, and Salmon was not elected.¹⁹

Frederick Salmon then toyed with the idea of returning to Bath. He returned to the city in 1824 to claim his citizenship and his right to practise there on having completed his apprenticeship to Spry. A 'surgeon-oculist' named Salmon was recorded as practising from 37 Henrietta Street in the Bath Directory of that year.²⁰ However, he soon returned to London. In 1827 there was a rumour that John Abernethy might retire as surgeon from St Bartholomew's. As a former house surgeon of Abernethy, Salmon immediately contacted him for his support. Abernethy icily replied that he had no intention of resigning and it would be better if Salmon remained quiet. Salmon then became extremely agitated because another of Abernethy's former house

surgeons, Frederick Skey, put himself forward as possessing Abernethy's blessing. Salmon immediately announced his candidacy to the president and governors of St Bartholomew's, sending a copy of the letter to *The Lancet*. It then emerged that Abernethy had made a contract with Skey giving him support in return for the promise of a future position for Abernethy's young son. (Joseph Hume Spry, as a governor of St Bartholomew's, was involved in the exposure of this incident.) Thomas Wakley, the radical reforming editor of the newly established medical journal *The Lancet*, was up in arms over the matter. Wakley had already made Abernethy the butt of much criticism of the nepotistic and corrupt state of medicine, and the affairs of the Royal College of Surgeons. In the furore that followed Salmon's name was never mentioned: he was clearly not a front runner for any position at St Bartholomew's.²¹ Salmon had served to expose corruption, but he had not benefited from his efforts.

However, in 1827 another vacancy occurred at the Aldersgate Street Dispensary. After the 1824 fiasco, the medical staff had insisted on a change in the rules, to prevent the buying of votes. Thus in 1827 Salmon merely canvassed the governors, received 315 votes and was duly elected as surgeon.²² He had been living and practising at 30 Bucklersbury, off Cheapside, a road mostly populated by solicitors, bankers and merchants. In 1828 he moved to a central City position at 12 Old Broad Street, off Threadneedle Street. Again he was not living in a road of medical men, but rather of merchants, stockbrokers and lawyers.²³ Salmon was well placed to attract a large clientele of businessmen and bankers who could be just as influential in providing new contacts and, later, philanthropic aid as the gentry of the West End of London.

By the late 1820s Salmon was specialising in the treatment of rectal diseases. He lectured on the subject to students at the Dispensary and he also sought to establish his reputation in the area by publishing books and articles. He began where William White had left off, with work on stricture and related problems. His first book was entitled *A Practical Essay on Stricture of the Rectum* and was published in 1828. It proved successful: it went into a second edition in the same year, and third and fourth printings in 1829 and 1833. A second book, *Practical Observations on Prolapsus of the Rectum*, came out in 1831. Salmon also contributed to *The Lancet* on stricture of the rectum and the anatomy and functions of the rectum.²⁴ All his publications date from the period 1828 to 1834. After the establishment of the Fistula Infirmary there was no longer any need to demonstrate his special knowledge of rectal diseases through print.

In 1833 Salmon was invited to give an Oration to the Medical Society of London and chose to lambast the Royal College of Surgeons in terms which the Medical Society of London surely enjoyed and which the

College would find hard to forgive.²⁵ The demand for reform in the medical system had rumbled on for some while. The Apothecaries Act of 1815 had been passed with some hope of lessening the exclusive power of the Royal Colleges. In fact, it simply strengthened the Society of Apothecaries' position without weakening the Colleges. Through *The Lancet* Wakley argued that the Colleges should become more democratic in the selection of their leaders, and Salmon followed his lead.

Speaking only a few months after the first Reform Act had been passed, Salmon referred to the general demand for reform of British institutions:

There are, we believe, few persons of any reflection, who are not satisfied that the government of some of our national institutions requires almost entire reformation; and fewer still who do not consider that nearly all of these are capable of improvement.²⁶

The College of Surgeons, he continued, was particularly liable to such criticism. Supposedly dealing with 'the health of the community', its organisation had been 'productive of high and lucrative advantage to the select few, who, from time to time, have formed the members of the Council.'²⁷ The Council, in effect self-elected, was not fulfilling its proper role: it had no provisions for 'promoting the art and science of surgery' and nor was it protecting the public or its own members by preventing 'the uneducated' from practising surgery.²⁸ Salmon did not argue that the College should admit all who practised surgery. He wished to widen its concern to include men like himself who had proved themselves through examination: he did not want quacks or the unqualified to join the College's ranks, even though he castigated the College for drawing 'invidious distinctions in the profession'.²⁹ Salmon was later criticised because specialism was seen as resembling quackery; however, he never doubted that he was anything other than a regular practitioner. He argued for meritocracy: 'character, talent and education', he maintained, should receive their 'just reward'.³⁰

To be asked to give an Oration to the Medical Society of London was a great honour: it was probably through the link between the Dispensary and the Society that Salmon received his invitation. However, his association with the Dispensary came to an abrupt end that year in a way that Salmon could not have foreseen, nor could avoid. All the medical officers resigned on a matter of principle. Ironically, the controversy was over the reinstatement of precisely the sort of election in which Salmon had tried to buy his way into the Dispensary. In wider terms it concerned the respective influences of the lay governors and the medical staff over the operation of such institutions and over the critical question of which group should control medical appointments. There was increasing discontent in the profession, as hospitals and dispensaries became steadily

more important to medical careers, over the power of lay subscribers. The senior physician at the Dispensary, Henry Clutterbuck, later complained that the governors had established a system of 'espionnage' in the shape of a house committee to surveil the medical officers, which frequently brought 'angry collision' between the two groups.³¹ Moreover, the governors were threatening to forbid the lucrative teaching which the medical staff undertook at the Dispensary. The crisis came to a head when the governors argued that the old system of electing officers should be reinstated: new governors should be able to vote within a few days of making their first donations, thus opening the system to abuse when elections occurred. One governor argued that the old system must be readopted since 'their funds were not so flourishing as formerly'.³² The treasurer, who came under attack from the medical officers because as a druggist he supplied the Dispensary but as treasurer he audited and paid his own accounts, complained of the conduct of the medical officers 'in turning round on their patrons'. Another governor maintained that the medical men should not 'be enabled to nominate their successors'.³³ The old system was reintroduced, and the medical officers promptly resigned. One of them quoted Cato:

When vice prevails and impious men bear sway,
The post of honour is a private station.³⁴

Salmon stated that he resigned 'for the sake of the institution, of his own character and with a view to uphold the dignity of the profession'. The governors did not react with regret: one immediately moved that 'in future no medical man do sit in the committee of management', a resolution which was promptly carried.³⁵

There was instant uproar over the episode in the medical profession, with the medical officers of the Dispensary becoming heroes overnight. Tributes flowed in from all over Britain. The reaction of the medical practitioners of Sheffield was typical:

Gentlemen, we hail this example, the first practical inroad on a protracted and systematic abuse of medical charities, as the harbinger of a general and efficient reform in those charities; we hail it, as the forerunner of an approaching day ... when the neglected objects of science and the aims of general utility and benevolence shall happily be united ³⁶

The *Medical Journal* declared that

... we are satisfied that the time is at hand when the respect due to our profession will be duly estimated, and when interested tradesmen,

clerks, and shopkeepers – men of narrow ignorant minds – will, as governors, be divested of their insolence and impertinence to their superiors.³⁷

The Westminster Medical Society addressed itself to the question, but in its debate, the 1824 contest between Salmon and Ellerby again raised its head. Dr John Epps argued that Salmon had formerly been happy to participate in corruption under the old law.³⁸ The accusation did not easily go away. One of the former Dispensary physicians, George Birkbeck, wrote to *The Lancet* in defence of Salmon. Epps responded by pointing out illogicalities in Salmon's earlier exploitation of the law and his later apparent rejection of it. Others wrote that Salmon had initiated the vote-buying in 1824.³⁹

Frederick Salmon was in a difficult situation by the Christmas of 1833. He had possessed more advantages than some – initial assistance from his father who had apprenticed him to a well-placed surgeon-apothecary, pupillage to the eminent Abernethy, and a house surgeoncy at St Bartholomew's. However, he failed to secure the vital patronage of the most highly placed men to ensure a brilliant and lucrative career in London medicine. Some of his attempts to secure his position had been relatively successful: he was becoming known as a rectal specialist through the publication of his books. Even here, however, his reputation was under threat from a publicly-conducted controversy in the medical journals in 1832–33 with another rectal specialist, James O'Beirne. Moreover, he depended on being able to teach students who might then forward patients to him. The loss of the much sought after position at the Aldersgate Street Dispensary was therefore a great blow. The other medical officers went out in a blaze of glory and fame, but Salmon had damaging accusations levelled against him. Moreover, statements issued in the course of the dispute made it unlikely that any London dispensary, operating as they mostly did under the old system which allowed the creation of votes, would gladly welcome him.

Frederick Salmon had, however, steadily built up a practice in the City of London. If he were to secure a hospital appointment again, the establishment of his own hospital, dedicated to rectal diseases, was a course which could be the most effective way of achieving it. He could draw upon his City friends for help in this matter. He had always shown himself to be enterprising and ambitious: he now turned these talents to the foundation of the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum.

CHAPTER III

The infant charity

A number of special hospitals had already been established, but Frederick Salmon could expect little besides antipathy from the medical profession towards his own project. However, it was more important to be able to attract wealthy patrons than to win over the doctors. He also needed to attract patients – to demonstrate the need for a special hospital. The general public – both patients and philanthropists – showed little sign of despising these new institutions. In two years Salmon enlisted an exceptionally impressive array of supporters for his new hospital: without them the project could never have been launched.

Medical practitioners held mixed feelings towards special hospitals. The leaders in the profession frowned upon them, especially those that concentrated on types of diseases rather than particular groups of patients. The patient was generally regarded 'holistically': the body was regarded as a whole, interacting with its environment. When afflicted by disease, patients lost their 'wholeness' which needed to be restored for them to recover. Under this system, treatment only of the afflicted part of the body was not sufficient. To treat patients within a special hospital therefore seemed inappropriate. Equally importantly, the establishment of special institutions disrupted the pattern of medical care. Moreover, specialisation was often associated with quackery, as so-called quacks tended to advertise special cures or treatments for particular diseases.

These concerns seemed to have little effect on potential philanthropists. The benefactors whose support Salmon enlisted fell into two main categories – merchants, businessmen and bankers from the area of the City of London where Salmon practised, and those with whom he traded, either as a surgeon requiring instruments and other necessities or as an increasingly well-off householder. Many of the first group were members of the City of London Club. Founded in 1832, the City of London Club was a dining club for businessmen where they could meet friends and establish contacts. Potential members had to be recommended by several who already belonged to the Club and subscriptions were costly. In 1833 the Club took up residence at 19 Old Broad Street, a few doors away from where Salmon practised. Most of its members were City businessmen – merchants, bankers, stockbrokers and lawyers. However, amongst its founder members were two medical men, Frederick Tyrrell, who had jointly founded the school in Aldersgate Street and was a surgeon at St Thomas's, and Frederick Salmon. Gaining admission to the Club was probably the secret of the success of Salmon's Infirmary. A number of



Frederick Salmon



William Taylor Copeland

THE INFANT CHARITY

those on the committee of management of the Club for 1832 appeared again as subscribers to Salmon's Infirmary in 1835: at least eight of the thirty committee members, together with one trustee, an auditor, the treasurer and about twenty-five other founder members of the Club were amongst the founding benefactors of the Infirmary and many others subscribed later.¹

One of the founder members of the City of London Club was William Taylor Copeland (1797–1868) who served as Lord Mayor of London from 1835 to 1836. Securing Copeland as the hospital's first president was possibly Salmon's most important achievement in his plans for the new hospital. It helped to enlist the support of other City merchants and the City companies or guilds; it also meant that Salmon's Infirmary was immediately placed on a similar footing to the Aldersgate Street Dispensary, which called upon successive Lord Mayors to chair its Annual General Meetings, and of the City hospitals such as St Bartholomew's and Bethlem which also claimed the patronage of the Lord Mayor. Copeland was a member of the firm of porcelain makers, Copeland Spode, who were based in Stoke-on-Trent. Like many wealthy merchants of the time, Copeland showed due interest in philanthropic causes and in addition to his presidency of Salmon's Infirmary in 1835, he supported the North Staffordshire Infirmary, was treasurer of King's College Hospital between 1839 and 1857, and president of Bethlem and Bridewell Hospital from 1861 until his death.² He was also a member of parliament although he seems not to have made a mark there: 'You may sit in the House of Commons night after night for years,' wrote one commentator, 'and you will never know from any word you hear in debate that there is [such] a person in existence . . . He must be there, because the name appears in the division-lists, and ever among the Tory rump; but he is lost amid the numerous nobodies who chat and sleep, and listen and snore in the House . . .'³

He was not always a Tory however: when representing an Irish seat he seemed to be even more radical than Daniel O'Connell. Although Copeland's critic remarked that, 'beyond his pots and pans', he was 'vain, shallow and uneducated',⁴ others described Copeland as having a 'just pride in his occupation as a tradesman, who felt that the honours of citizenship were worthy of the ambition of those who live in a country which has been built up by commerce.'⁵ Copeland was alderman for Bishopsgate ward, in which Salmon established his new Infirmary. Salmon later recounted how he made a direct approach to Copeland. He waited on the Lord Mayor and told him of his plans 'for the benefit of my suffering fellow-creatures'.⁶ Copeland replied that he would

. . . consider the matter; for though I have a great regard and respect for

you individually, I will not interfere till I am satisfied of the utility of such an institution. If you call in a few days I will give you my answer.⁷

Salmon did so, and found Copeland amenable, having apparently consulted 'his own sentiments' and those of some 'eminent members' of the medical profession. It is more likely, however, given the opposition which the profession expressed towards the Infirmary, that he limited his consultations to business friends.⁸

Two of Copeland's close friends, John Masterman and Sir John Pirie, may have had the decisive influence on him. Masterman (1781–1862), born into a Quaker family, was treasurer and one of the principal founders of the City of London Club and 'an intimate friend and neighbour of Copeland's'.⁹ He was a banker, heading the bank of Masterman, Peters and Mildred of Nicholas Lane, Lombard Street, and also served as an alderman and, later, member of parliament for the City of London. He was a director of the East India Company, and involved in lucrative ventures in supporting the building of railways. Masterman made a ten guinea donation to the Fistula Infirmary and was made a vice-president of it. He subsequently showed sufficient interest in the Infirmary to become its treasurer. John Pirie, an alderman and later Lord Mayor himself, was a merchant ship broker and ship owner, and was involved in at least one joint venture with Copeland and was sufficiently close to him for Copeland to name a son after him. Pirie also served as president of St Thomas's Hospital from 1842 until his death in 1851. The web of links between those who supported Salmon was intricate: once Salmon had enlisted the support of a few key people, others followed. Thus an early subscriber to the hospital was Jasper Capper, linen draper to Queen Victoria, and a cousin of Copeland (a connection which was reinforced when Copeland's only daughter married into the Capper family).¹⁰

The most important men whose support Salmon attracted and who gave donations ranging from ten to twenty guineas to the hospital were elected as vice-presidents. By the end of the first year, there were fourteen vice-presidents including two earls, three judges, two baronets, the son of a baronet, the heads of three major banks, a member of parliament and an alderman of the City of London. Heading the list was Henry Lascelles, the second Earl of Harewood (1767–1861), a Tory whose family made their fortune from the slave trade. He was the brother-in-law of another vice-president, Thomas Gage Sebright (1802–1864), whose sister was also a particularly generous donor, and whose father had been a fervent Whig.¹¹ Another supporter, the second Earl Digby (1773–1856), a descendant of the seventeenth century natural philosopher, Kenelm Digby, seems to have shown far more interest in the army than medicine, but nevertheless supported Salmon.¹² Thomas, first Lord Denman

(1779–1854), was renowned both as a philanthropist and a reformer. He was the grandson of a doctor and the son of a surgeon and accoucheur. He trained as a lawyer, and defended the leader of the Luddite riots in 1816. He entered the House of Commons in 1819 and consistently spoke in favour of reform, in particular the abolition of the slave trade. He drafted the first Reform Bill, and was made Lord Chief Justice in 1832.¹³ Lord Denman was closely associated with another judge who also served as an Infirmary vice-president, Joseph Littledale (1767–1842).¹⁴ The third judge in this group was Mr Justice Pattison, of the solicitors' firm Pattison, Wigg, Gurney and King. The Gurneys, a reforming family, were also linked by marriage to John Masterman and themselves later gave money to the hospital.

The three bankers are of interest. Lewis Loyd was by 1835 the head of Jones, Loyd and Co, of 43 Lothbury. His bank was one of three in the early years which served as a conduit for funds for the Infirmary. Loyd was born in Carmarthen, but became the pastor of a small dissenting chapel in Manchester. There he met his future wife, the daughter of a merchant and banker, John Jones. Loyd joined his father-in-law in his bank, which moved to London in 1808. When he died in 1858, Loyd left three million pounds.¹⁵ John Deacon was a director of Williams, Deacon and Co, in Birchin Lane, while the third banker was Henry Hoare whose family had been in banking since the seventeenth century. Three of the other vice-presidents – Lord Digby, the Earl of Harewood and Joseph Littledale – held accounts at Hoare's bank. Over the succeeding years other members of the Hoare family became benefactors of the hospital, including Henry Arthur Hoare (died 1873), and three partners of the bank, Sir Henry Hugh Hoare, 3rd Baronet (died 1841), Charles Hoare (1767–1851) and Henry Merrick Hoare (died 1856).¹⁶ Other vice-presidents of the hospital included David Barclay, who was then MP for Sunderland, Lieutenant-General Sir Henry Maclean and Sir Francis Ommanney, a City merchant.¹⁷ As was often the case among merchants and bankers early in the Industrial Revolution, Whigs and dissenters tended to predominate among those who assisted Salmon in his new establishment. However, a stronger influence was simply that of family and business connections between these supporters.

Many of the 300 governors of the hospital whom Salmon had recruited by its first year had City addresses: at least sixteen lived or worked in Old Broad Street, seven in New Broad Street, seven in Cheapside, four each in Aldersgate and Mark Lane, three each in Bucklersbury and Lombard Street. Several subscribers came from such neighbouring streets as London Wall, Great Winchester Street, Throgmorton Street, Threadneedle Street, Broad Street, St Paul's Church Yard, Bishopsgate and Liverpool Street. When an address in the country, or a notable part of

London, was given for a benefactor, investigation usually reveals a connection with the Old Broad Street area of the City. No doubt Salmon wished to indicate the wide geographical reach of the hospital in terms of financial support, but it was through City connections that such subscribers came to be associated with the Infirmary.¹⁸

Some supporters evidently hoped that the hospital would bring business their way: amongst the early benefactors were four chemists or wholesale druggists, five surgical instrument makers and a bougie maker, at least two of whom – and probably all – Salmon already patronised. Eight booksellers, publishers and printers also gave money.¹⁹ The publisher who printed Salmon's works, Whittaker, Treacher, Arnot and Co, was among the early subscribers, as was also the printer who produced the first *List of Subscribers* and subsequent *Annual Reports*, William Henry Cox. Interestingly, given the opposition to special hospitals voiced by the mainstream profession, 12 doctors, most of them surgeons, were also supporters. They either lived near the hospital or practised in the less fashionable areas of London: there were no elite physicians or surgeons among them. There was, for example, Dr Ashwell, who practised nearby in Devonshire Square, and Dr McKellar from Battersea. Dr Thomas Blundell, a physician of 39 Lombard Street in the City, also brought in the support of two female relatives living in Ormskirk, Lancashire. Presumably he originated from that area, which did not augur well for him to become a high flier in the closed world of medicine. Surgeons supporting the Infirmary included William Burman, who practised at 122 Jewry Street in Aldgate, and who originated from Birmingham, Joseph Robertson Raines, of 92 Aldersgate Street, William Coward of 4 Gloucester Terrace, Hoxton, and other surgeons from Kennington, Paddington, Lisson Grove and Vauxhall. These medical men probably hoped to be able to refer patients to the Infirmary and perhaps to benefit from their connection with its well placed subscribers.²⁰

Among other supporters were shopkeepers and merchants with whom Salmon and the other subscribers probably conducted their personal business, including three butchers, a grocer, a fishmonger, a wax and tallow chandler, a French bread and biscuit maker, two tailors, a hatter, a jeweller, a horse dealer and a saddle maker. Some shopkeepers may have hoped to increase their trade by becoming known to the hospital subscribers. Among other groups giving money to the hospital were four clergymen, five agents, most of them acting for railway companies, three auctioneers, a brass founder, a local publican and – curiously – a merchant described as a human hair manufacturer. Two other donors are of particular interest. One gentleman gave on behalf of the Provident Institution, and there was a donation received on behalf of 'The Inquest of Broad Street'. In both cases, clients or charges of these two bodies

would probably have expected to benefit from the link with the Infirmary.²¹

Frederick Salmon also drew in the support of members of his family. He had married Clara Breese, possibly the daughter of a clock maker, with whom he had three sons, Frederick Breese, Percy Howell, named after John Howell who became the treasurer of the hospital, and William Mayer, who was possibly named after Joseph Mayer, a generous subscriber from Hanley in Staffordshire. His wife and all three children had become official contributors by the mid-1840s. Salmon's sister-in-law, Emma Breese, lived with the family, and duly subscribed to the hospital together with her elder sister who lived in Peckham Rye. Salmon's mother and two of his sisters, both unmarried and living at home in Bathampton, also gave to the hospital, and so did his brother, Edward, and two other relatives from Bath.²²

Certain names of importance for the future of the hospital appear in the first list of supporters. Howell, a close friend of Salmon and a beneficiary in his will, played a prominent part in securing support for the hospital. He owned a warehouse in Regent Street, and several of his employees were persuaded to subscribe to the hospital. His wife and son were also benefactors.²³ Another early subscriber was WG Bolton, of Austin Friars, a solicitor whose partner, Samuel B Merriman, later played a very important part in the hospital's history, as also did his descendants. Their firm not only gave legal advice to the hospital until the establishment of the National Health Service, they also played an active part in the hospital's affairs, well into the NHS period. In many instances, more than one member of a family subscribed to the hospital, and subscribers enlisted the support of other relatives and friends.

With his first task – gathering influential supporters – underway, Frederick Salmon set about establishing his institution. He rented a room in a terraced house, 11 Aldersgate Street, within the City of London, and close to St Bartholomew's Hospital. (In 1836 Salmon made a donation of £50 to St Bartholomew's to become a life governor, thus establishing a stronger connection with the institution.)²⁴ Patients making their way to Bart's, to the Aldersgate Street Dispensary or to the numerous medical practitioners in the vicinity would therefore become aware of the existence of the new Infirmary. In the same street around that time were over a dozen medically-associated practitioners and enterprises, including two surgeons, a surgical instrument maker, two wholesale druggists, four chemists and druggists, one apothecary-surgeon, one surgeon and chemist, one medical bookseller as well as the Dispensary and the School of Anatomy.²⁵

Salmon's Benevolent Dispensary opened early in 1835. From 1 September it began to take inpatients, being able to accommodate seven at a time: it then adapted its name accordingly to become the Infirmary for

the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum. It soon became known as the Fistula Infirmary. Salmon held a surgery for women on Tuesdays at 12.30 and for men on Fridays at the same time.²⁶ Treatment was free, but patients in voluntary hospitals supposedly needed admission tickets. Those who subscribed to hospitals were given certain privileges, including the right to distribute a number of admission letters per year. In this way, the well-off could provide for their servants and employees, as well as ensure that hospitals only treated the 'deserving poor'. This system was beginning to break down by the mid-nineteenth century, with patients securing treatment even without these letters. However, it was still sufficiently strong for the founder of one general hospital, The Royal Free, to insist that there should be 'free' admission: that anyone could be admitted, without a governor's ticket. This right of the governors came under increasing challenge from medical men, as they endeavoured to increase their control of the hospitals and of the type of afflictions treated. Special hospitals, since they were generally founded by medical men, usually established from the first that the medical staff should control admissions. Governors, after all, could not be relied upon to recommend the right patients for the right hospitals. Thus, although the subscribers to the new Infirmary were given rights to issue admission tickets to patients, their prerogative was nullified by the following rule:

FEMALES are admitted either with or without recommendatory Letters, by presenting themselves at the Infirmary MALES are admitted in a similar manner ²⁷

In its first year the Fistula Infirmary treated 131 inpatients.²⁸ Those who appeared to be incurable would usually be sent away without being counted. There was, it was argued, little the hospital could do, and it would be better to free a bed for a more amenable case.²⁹

By the end of the first year, patterns at the new hospital were beginning to be established, many reflecting those at general hospitals, but interpreted differently. Every subscriber of one guinea, and the majority of those who gave to the hospital fell into this category, was entitled to be an annual governor and recommend two outpatients for treatment in that year. Those who gave ten guineas as a single gift were entitled to recommend two outpatients a year indefinitely. Those who gave this amount and also gave a guinea a year were also entitled to a ticket for one inpatient each year. A subscriber of twenty guineas would become a life governor, entitled to recommend places for two inpatients and four outpatients every year. As it has been seen, these rights were largely meaningless, although possession of a governor's admission letter would probably place a patient at the head of a queue. However, governors had

other rights as well. An annual subscriber was entitled to one vote in any meeting of governors, while a subscriber of two guineas annually could have two votes, and so on, in proportion, for every additional guinea contributed. Those who gave lump sums were also treated accordingly: a donor of ten guineas held a vote for life, and one giving twenty guineas held two votes for life. Guarding against the creation of votes to secure an election, it was ruled that no governor could vote on an appointment or have a voice in the management of the Infirmary's affairs, until he or she had been a governor for six months.³⁰

As additional incentives for assistance to the hospital, not necessarily as a direct donation, certain individuals could be rewarded as honorary governors for life. For example, believing that executors could often have some influence over the minds of those making their wills, the first-named executor of a testator making a legacy of at least £50 to the hospital could be made an honorary governor. Any clergyman who preached a sermon in aid of the Infirmary would also become an honorary governor.³¹ There is little evidence that this served as a great incentive to clergymen: the first such gentlemen to become life governors did not appear until 1853, and seem to have contributed the appropriate amounts to have earned their places.

To vest majority power in lay governors was risky, as Salmon had learned to his cost at the Aldersgate Street Dispensary in 1833. He protected himself against this by the multiple family subscriptions, usually of ten guineas – thus buying a vote for life – of the Salmons in Broad Street and in Bath. With friends like John Howell also buying several subscriptions and urging his employees to do likewise, Salmon could hope to have a majority of like-minded votes at his disposal at most times.

Besides annual and life governors, the hospital also had its president, vice-presidents, treasurer and secretary. In the first rules, the Lord Mayor was named as president, provided that he was willing to accept the position. He was given the position *ex officio*: William Taylor Copeland did not commit all his successors to being president of the hospital although, in fact, only one subsequently refused the position. Vice-presidents were to be elected by the committee of management, but in effect comprised those who were highly placed both socially and financially and could thus be expected to render the Infirmary significant services in publicising its good works. The treasurer, who supervised the funds of the hospital, and the secretary, who summoned meetings, took minutes and oversaw the hospital's affairs, were both elected by the governors from among their number; they acted in a voluntary capacity.³² Their amateur and honorary status is reflected in the fact that there were few records of minutes and financial statements for the first 20 years of the hospital's existence.

The general affairs of the hospital were managed by a committee of 12 elected governors, in addition to the other officers, including Salmon, all of whom could attend meetings *ex officio*. One-third of the members of the committee of management retired annually, so that all served for three years, but there was some continuity from year to year. Retiring members were eligible for re-election. However, drawing again on his experience at the Aldersgate Street Dispensary, Salmon insisted that no person who supplied the Infirmary with goods should be eligible to be a member of the committee. It was not intended that the committee of management should concern itself with the day-to-day workings of the Infirmary: in its first few years it met only quarterly.³³ At most general hospitals, however, the equivalent of the Fistula Infirmary's committee of management met every month, with a full meeting of all governors held quarterly. In comparison, therefore, Salmon was relatively under-supervised. This was a feature of special hospitals, where the medical staff had far more freedom to develop their work than elsewhere.

The committee of management had the power to make new rules or alter existing ones, but these then needed to be confirmed at the annual meeting of all the governors. These were generally held in April, at the London Tavern. The procedure for elections was carefully arranged. Only certain privileged people could vote by proxy: the president, vice-presidents, nobility, judges, members of parliament and the treasurer. There was to be nothing in the rules to dissuade such influential people from lending their support to the hospital. Ladies, too, were not expected to attend, and neither were governors residing more than ten miles away, of whom there were few. The canvassing of governors was allowed, but with an equal opportunity to all: three weeks before any contested election the names of all governors entitled to vote could be sent to the committee and to all candidates.³⁴

Since the hospital depended for its finances on what governors subscribed, it was essential that those who made an initial subscription should be urged in subsequent years to renew that subscription: a collector was therefore appointed. He was chosen by the treasurer and obliged to give security of £200 against any expropriation of the hospital's funds. When he collected subscriptions he issued recommendatory letters to the governors. He was given a 5 per cent commission to encourage efficiency on his part. One of his chief duties was to help organise the anniversary dinner, for which governors paid large amounts and which, at other hospitals, often proved to be an effective way of fund-raising and enrolling new subscribers.³⁵ The income of the hospital in the first donations from mid-1835 until the end of 1836 was £670. For a small establishment in its first year or so this compared reasonably well with the income of the Aldersgate Street Dispensary which was around

£1,000 a year at the time.³⁶ Of the 300 founding governors, 217 took out a one guinea subscription. As a due reward, those who had given ten or twenty guineas were asterisked in the *List of Subscribers*.³⁷ It was easy, therefore, to pick out the names of those who had been particularly generous.

The internal affairs of the Infirmary were placed firmly in the hands of the surgeon. The governors had the right to elect the surgeon, but a certain standard of medical training was laid down. He had to be a member of the Royal College of Surgeons of England, Edinburgh or Dublin.³⁸ This provision is of particular interest: it was a rule applied in general hospitals which was much disputed by medical reformers since, in effect, it granted monopoly powers to those institutions. Any aspirant for desirable positions in hospitals had to come to one of the cities to qualify, according to the rules laid down by the Colleges. However good a provincial training a medical man might have had, those within the Colleges still controlled entry into the profession. It is therefore of some interest to see that Salmon, when it came to his own hospital, deviated from the recommendations of the reformers and maintained this requirement.

The surgeon was not necessarily expected to take a daily interest in the hospital – in fact, if he appointed a suitable deputy, he could be away for as much as a month. However, he controlled the entire surgical and medical management of the patients, and was able to make whatever changes in the running of the Infirmary he considered 'conducive to the health, comfort, and well doing of the patients'.³⁹ Any complaints against him were to be referred to the committee, but also to him, and only if very serious would they be taken to the governors as a whole.

While the surgeon was the director of the hospital and decided upon the treatment of the patients, it was the surgeon's assistant who carried the burden of work. He was appointed by the surgeon alone, with the governors having no say whatsoever in his selection. He had to attend the hospital on any day on which an operation was performed, and on the subsequent night. He generally cared for the patients, cupping and bleeding them as directed by the surgeon, and compounded and dispensed medicines according to the surgeon's prescriptions. He was responsible for the diet of the inpatients, keeping a diet book which registered the daily consumption of every patient. Outpatient prescriptions were issued by him, together with instructions on how they were to be taken or used. As well as overseeing the patients and their treatment, he was responsible for ensuring that no losses or waste occurred. He had to make certain, for example, that medicines delivered to the hospital were of the highest quality, and that no instruments, utensils or other

property from the dispensary were 'wasted, spoiled or embezzled'.⁴⁰ He also had to keep an account of all stores entrusted to the matron. He was supposed to keep a record of all the patients, their recommendatory letters and the dates of their discharges so that he could submit the information to the committee of management at their quarterly meetings. Above all, he was at all times the servant of the surgeon:

He shall, in no case, save of sudden illness or emergency, prescribe for, or visit any patient, compound or administer any Medicine, without permission of the Surgeon, under whose directions he shall, in all cases, be especially bound to act, and for whom he shall immediately send in every case of moment, difficulty, or danger.⁴¹

The housekeeping as well as the nursing within the Infirmary was in the hands of the matron or upper nurse. When the Infirmary was established, there was provision for only one nurse working under her. The matron also maintained discipline among both patients and any other staff employed to cook or clean in the Infirmary.⁴²

At the end of the first year, the Infirmary issued its first publication, the forerunner of its *Annual Reports*. It was entitled *List of Subscribers to the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum*. Its title reflected its main purpose: to attract further donations. The *List* and subsequent *Annual Reports* were not designed to convince the medical profession of the value of the hospital's work or even to inform potential patients of what the hospital had to offer. Instead they aimed to encourage the charitably-minded to part with their money. The hospital could not otherwise hope to continue. The list of subscribers, together with the amount they donated, and appropriate asterisks, gave due public notice of their generosity. The *List* also included the rules of the Infirmary, starting with the rights to be gained by making annual subscriptions, and a 'Report of Cases', designed to demonstrate the usefulness of the Infirmary to the sick poor.

The first *List* began, however, with an exhortation from Frederick Salmon in which he sought to demonstrate the importance of giving to his new Infirmary. He also endeavoured – less directly – to counter medical opposition, which had clearly been voiced. He wished preferably to acquire medical approval, but at the least to reassure governors that the Infirmary was a worthwhile, professional institution. Addressing himself to such potential benefactors Salmon wrote:

Human suffering, in whatsoever form it may appear, will always be an object of interest to the benevolent mind; whether clothed with the hideous aspect of aggravated disease, or presenting itself in a less obvious manner, it claims alike the compassionate regard of all who have the will and the power to do good.⁴³

THE INFANT CHARITY

Those who were making their fortunes in the City of London would not doubt that they had the power to do good: to do so would throw uncertainty on their level of income. To suggest, therefore, that they might lack the will to use that power was an effective way of stirring them into action. However, Salmon now had to demonstrate that his hospital catered for a particularly dreadful type of human suffering, which was not looked after elsewhere, in order to persuade benefactors to favour him rather than one of the myriad other worthy causes. It was the very secrecy surrounding rectal complaints to which Salmon referred in justifying his Infirmary:

... it may be justly remarked, that while those descriptions of suffering which are exposed to common observation demand with irresistible force the sympathy of the humane and charitable, it is [a] matter of deep lamentation that diseases of the severest kind, which secretly impair and undermine the constitution, and involve a degree of personal distress appalling to be contemplated, pass too often, comparatively, without regard, because they do not, and cannot obtrude themselves upon the public notice.⁴⁴

Frederick Salmon was always anxious that the type of cases treated at his Infirmary should be known: he insisted upon a full title specifying the nature of these diseases. However, he did not specifically mention them in his address. His 'infant charity', now submitted to the 'fostering care' of the British public, was especially designed to alleviate such secretly and seriously impairing maladies. Picking up a theme from his earlier published works he declared:

... it may with truth be said, that there are none more afflicting or distressing to bear, or which are productive of more serious consequences.⁴⁵

Salmon argued that little medical attention had been given to the problem:

... it may be doubtful whether there be any branch of medical knowledge for the acquisition of which less facility has hitherto been afforded.⁴⁶

Since few doctors offered adequate treatment, quacks were often only too eager to fill the gap – a point which helped to put a distance between Salmon's treatments and quack medicine:

... there is only too good reason to believe, that the afflicted poor having, in many instances, sought in vain for relief, have abandoned themselves to the unprincipled empiric, who, after exhausting their

scanty means, has consigned them hopelessly to a miserable existence, or a premature grave.⁴⁷

Unlike quacks, Salmon's Infirmary did not charge for its treatment. Moreover, 'fistula doctors' were well known for producing incontinence, whereas Salmon warned carefully about this problem. Salmon claimed that the Infirmary was far more than merely useful 'in the limited and ordinary sense of that term'. True, it relieved those poorer members of the community who suffered from 'extreme bodily affliction'. However, he also claimed that it could help to detect latent disease which, if undiscovered, would be fatal. Whether he was referring to cancer, tuberculosis or perhaps syphilis is unclear: certainly he felt that if detected sufficiently early treatment might be effective in such cases. More probably, however, he meant stricture which, he believed, could result in disastrous consequences if untreated.

Salmon also strongly justified medical specialisation – within accepted medical norms. The advantage of catching complaints before they had progressed too far showed, he argued, 'of what high moment it is that particular complaints should be made the subject of individual, though not exclusive professional study'.⁴⁸ He implied that he was not arguing for total specialisation, which was, after all, reminiscent of quackery. The specialist should also have a general medical knowledge – he should not be 'exclusive' in his approach. Another feature which characterised quacks was their reluctance to reveal their secrets to others, since that threatened their livelihoods. It stood in contrast, therefore, that Salmon declared the Infirmary 'freely thrown open to the medical public'.⁴⁹ He was emulating the general hospitals in this respect, and indirectly encouraging students to take up the opportunity 'of studying the Diseases of the Rectum in all their baneful varieties'.⁵⁰

The final test of the hospital was patient demand. The hospital had begun only as an outpatient facility. Shortly afterwards provision was made for the reception of inpatients, but only in very small numbers. Already by January 1837 this needed to be expanded: queues were apparently beginning to form for treatment. It was also reported that the Infirmary was now caring for cases which required 'incessant vigilance', as well as patients from 'distant homes'.⁵¹ By the end of 1836, then, the new Infirmary had successfully been launched. Its income was healthy, a large number of city merchants were giving it support, and patient demand was strong. The next task was to find accommodation which would best suit a growing institution.

CHAPTER IV

Charterhouse Square to City Road

Salmon's hospital, 1838-1858

The *List of Subscribers* for 1838 struck a note which was repeated throughout the hospital's history. The hospital's services were much in demand and 'extensive benefits' had been conferred on the 'poorer classes of the community', but the hospital lacked sufficient money to give assistance to all who sought it.¹ However, Salmon always dictated an aggressive, expansionist policy, often beyond what seemed feasible with the funds available. Over the next 20 years, Salmon drove it forward, recruiting subscribers, raising money, searching for larger premises. As the founder and the only surgeon, apart from his series of young assistants, it was very much Salmon's hospital. His treatments were used in it, his policies followed. However, a group of the governors was also developing an increasing interest and pride in the hospital: it was gaining its own momentum.

Borrowing money from the treasurer, in the summer of 1837 the Infirmary moved to 38 Charterhouse Square, renting a house with space for 14 beds. With its close proximity to St Bartholomew's Hospital, at least ten medical men practised in the Square. Although Joseph Hume Spry no longer practised there, his son was at number five in 1836. Charterhouse Square was also on the edge of Smithfield Meat Market. An apochryphal story passed down through Salmon's descendants records that the operating table in the new hospital was a butcher's table from the Market.²

The Infirmary was still, of course, a very small institution, but in their appeals for funds the governors stressed both the importance of its work and the demand on its resources. When the Infirmary was opened subscribers had had to rely

... on the assurances of its Founder, that, in addition to the various noble Charities for which the Metropolis is distinguished, such an Institution as this was pressingly called for.³

However, 'in proportion as it has become known, the more numerous have been the applicants'.⁴ By the end of 1837, 351 patients had been treated at the hospital. However, patients frequently arrived at the hospital 'with their constitution so impaired, as not only to preclude recovery, but often to prevent any alleviation of their diseases.' Such patients, it was maintained, often came at too late a stage because they had been 'ignorant

of where relief adapted to their peculiar complaints might be obtained' and submitted instead 'to serious impositions from empirical practitioners'.⁵

There were signs that the hospital was beginning to take its place in London medicine, despite continued disapproval from the leaders in the profession. It was those who were beginning to climb the medical ladder who paid it some attention. The first recorded surgeon's assistant, Thomas Hayes, for example, was well qualified: he was already a member of the Royal College of Surgeons, even though there was nothing in the Infirmary's rules requiring this. Hayes, like Salmon, denoted himself FRCS: the fellowship in its modern terms was not established until the 1840s, but it was often the practice among those who were licensed by the College of Surgeons to call themselves fellows rather than simply members.⁶

Sustaining an Infirmary with inpatients was far more expensive than running an outpatient facility. In 1838 the total expenditure over the previous 16 months amounted to £900, with the board and maintenance of the patients, including washing, coals and candles, amounting to almost £150. In addition, the under-nurse was paid almost £20, the matron 25 guineas and the surgeon's assistant 60 guineas. In comparison with general hospitals dispensing costs seem quite high, with almost £75 spent on drugs and over £25 on surgical instruments. Mr Brough of Bartholomew's Close, bougie and catheter maker, was clearly benefiting from his subscription to the Infirmary: the £25 was for bougies. One generous item of expenditure was just over £8 on a 'record, on vellum, of [a] vote of thanks to the Surgeon'.⁷ A large proportion of the £110 paid out for rent and taxes was probably the cost of renting the new house. Donations and subscriptions only met two-thirds of the total expenditure. With a little brought forward from the previous year and interest on £400 already invested in stock, this left a deficit of almost £150 which was made up by Howell. His loan was soon paid off: the Infirmary received the first of its large legacies in 1840 – £1,000 from Thomas Richards – and moved into the black again. By 1840, reflecting the larger number of patients in Charterhouse Square, the board and maintenance of patients had almost doubled in cost, but the amount spent on 'drugs, leeches and instruments' had somehow been halved. More servants were employed at the hospital, and the position of the surgeon's assistant had also changed: he was now termed 'house surgeon', in line with the title generally used in other hospitals, and his pay had increased to £100.⁸

By the early 1840s, various aspects of the hospital had been changed or regularised. The *List of Subscribers* for 1841 recorded the first elected committee of management, although a committee had operated in some form before. The proviso in the rules to protect the hospital from exploitation by its tradesmen seemed to have been forgotten. On the committee

was a butcher from Threadneedle Street and a chemist and druggist from High Holborn. Most were founder members of the hospital, and amongst them were two lawyers, a wine and spirits merchant, a corn and flour factor and an architect. The chairman was the solicitor from Austin Friars, William Bolton. The Lord Mayors were dutifully serving as presidents of the hospital, continuing the tradition begun by William Taylor Copeland, and thus helping to ensure that it persisted as an obligation on each year's incumbent. A new collector of subscriptions, W H Harben of Chalk Road, Pentonville, had been appointed. The first collector had been based in the Haymarket, with easy access to the West End gentry; the new appointment served to recognise that the majority of subscribers were based in the City, more readily accessible from Pentonville.

Launching the hospital was one task; maintaining support was equally formidable. The committee of management began to issue the *List of Subscribers* (preceded by a short annual report), on a regular basis from the early 1840s, stressing within their report the large numbers of patients treated. It was stated in 1841 that

... up to the present period ... nearly 1,500 poor have sought the benefits of the Charity, and the progressive increase of applicants, the number waiting to be received into the House, several of them from distant quarters, supply incontrovertible evidence of its usefulness and necessity.⁹

It was already seen as necessary to exaggerate the numbers treated, although not on the scale of later years, when there were many more special institutions competing for patrons. The records indicated that in fact 1,350 patients had been treated, although this number itself was inflated by an element of the common hospital practice of double-counting: patients on the books on 31 December were counted once and again on 1 January, with both sums being added to the grand total. In some hospitals patients were registered anew every six weeks, thus inflating the numbers apparently treated, but at the Fistula Infirmary this was not the case, at least in the early years.

Frederick Salmon was always anxious to reassure potential benefactors that the medical profession was coming to terms with his Infirmary. In a passage which bears his distinctive mark, the committee of management reported that they were

... highly gratified in being enabled to state that the Infirmary is daily better appreciated by the medical profession, many of whom have become its supporters, and recommend it to the afflicted poor.¹⁰

Certainly patients were coming to the Infirmary, but whether by referral or of their own accord is unclear: general medical approval had not yet

been granted to the hospital. Subscribers might even doubt the point, it was reiterated so frequently. In 1844, for example, it was noted that the hospital

... is daily more appreciated by the Medical Profession, many availing themselves of the opportunity of attending the practice, open gratuitously to the experience and observation of all.¹¹

In fact such points seemed not to worry benefactors: their numbers continued to grow at an impressive rate. By 1841 there were 523 subscribers. (The hospital was, however, quick to record names and slow to drop those who died or lost interest.) The social status of the benefactors was also increasingly impressive, which in turn helped to enlist further support. The Archbishop of Canterbury and the Bishop of London lent their seals of approval by each making donations of ten guineas, becoming life subscribers whose names could be included in the *List* indefinitely. Both had special funds to support hospitals, provided that these did not have a Catholic or, worse still, a Dissenting slant. Approval of the hospital came from another important quarter: the Corporation of the City of London, which made a donation of £100 in 1839. The city guilds, too, were gradually being persuaded to support the hospital. The Worshipful Company of Clothworkers had by 1841 given 20 guineas, the Drapers outdid them with £25 and the Grocers did better still with £50. Important individuals such as Sir Moses Montefiore, the Earl of Beverley, the Duke of Buccleuch, the Earl of Manvers, and Benjamin Bond Cabbell, a barrister, Fellow of the Royal Society, future MP and wealthy landowner, were among new subscribers to the hospital. The Rothschild family joined other bankers in making the first of many donations, ten guineas. Even the proprietor of the *Morning Post* became a life subscriber with a ten guinea gift.¹² Among others who subscribed to the hospital by the mid 1840s were the proprietors of the Athenaeum Club (Salmon was not a member but no doubt many of the benefactors of the hospital were), Lord John Russell who became Prime Minister in 1846 and was also a member of the City of London Club, and Lady Trevelyan.

The bankers, businessmen and lawyers who were numbered among the first subscribers continued to enlist the support of their friends, relatives, business colleagues and acquaintances. Thus Mr D B Chapman's donation was brought by Sir Francis Ommanney. On the death of J G Crickitt, a proctor, his wife paid her own life subscription. Bonamy Dobree, a merchant from Old Broad Street and an original life subscriber, later brought in a relative as an annual subscriber, as also did Edward Jones, a wine and spirits merchant of 28 Mark Lane. On the death of George Sandeman, a merchant from St Swithin's Lane, his son took over the duty

of donating to the hospital. When Mr Soames retired, his son, a broker based at the Baltic Coffee House, began to make donations to the hospital. The daughter of Mr and Mrs Wallen, of 11 Spital Square, followed her parents in making a donation. Increasingly, new subscribers came not in ones but in twos and threes, from the same family or the same firm. Thus two brokers, William and Edmund Collard, also from the Baltic Coffee House, John and James Fisher, lace manufacturers at 12 Watling Street, James, John and George Holgate Foster of Foster Brothers, merchants in Moorgate Street, and Edward, Jeremiah and H Harman were a few of the new subscribers who came in as family groups.¹³

Some of Salmon's private patients also made donations to the hospital. Such patients would never have been actually treated in the hospital: that was only for the poor. One example was Charles Dickens, who moderated his customary jaundiced attitude towards the medical profession and their institutions and became a governor in 1844, with a donation of £10. Salmon had operated on him in 1841 for fistula. Dickens wrote at the time to a friend that he had been very ill for a week and that

... last Friday Morning was obliged to submit to a cruel operation, and the cutting out root and branch of a disease caused by working over much which has been gathering it seems for years. Thank God it's all over and I am on the Sofa again – rather lean but filling the Doctor – with boundless astonishment notwithstanding.¹⁴

Another friend of Dickens called on him the night of the operation, which was performed, of course, without an anaesthetic, and recorded in his diary:

I suffered *agonies*, as they related all to me, and did violence to myself in keeping to my seat. I could scarcely bear it.¹⁵

Dickens gave Salmon's explanation that the fistula was 'the consequence of too much sitting at my desk'.¹⁶ He wrote to Salmon that

... all manner of queer pains were floating about my illustrious person: now twitching at the calves of my legs – now sticking shadowy pins into the soles of my feet – now entertaining themselves with my knees – now (but not often) shooting through that region which you have made as tender as my heart – and now settling in the small of my back
....¹⁷

Dickens was not an easy patient, objecting to the routine Salmon had laid down for him:

Salmon don't agree with me – by which I mean that the Surgeon of that name, orders me to Windsor next Saturday, and won't let me dine

with you on Sunday; objecting to chairs for another week; and laying stress on sofas. What can I do but say ... 'to hear is to obey'? Upon my (not actually eyes, but you can supply the term) be it.¹⁸

Despite his tribulations, Charles Dickens felt tremendous gratitude to Salmon. Sending him a copy of *Master Humphrey* (which was to be followed subsequently by other volumes), Dickens expressed 'a spontaneous and most heartfelt emotion ... of gratitude'.¹⁹ No doubt it was justified: he was never troubled by the complaint again.²⁰ Dickens' patronage of Salmon may have reflected his general interest in practitioners slightly out of the mainstream: Dickens' doctor friends tended to be unorthodox.²¹

Wealthy patrons and private patients were not the only groups to support the hospital. Hospital patients, too, expressed their gratitude by forming an Auxiliary Society in 1839. As the committee of management put it:

An association so formed, while it reflects peculiar credit upon its members, confers a noble distinction upon the Infirmary itself.²²

The committee of management called it 'this unprecedented Association of relieved patients': certainly it was a rare phenomenon among general hospitals, although a little more common among special institutions.²³ By 1841 the Auxiliary Society had contributed £35 to the hospital in monthly subscriptions. In 1843 it raised almost £70, a significant contribution to the Infirmary's income of around £1,400.

In 1844 further changes were introduced in the Infirmary's management. The honorary secretary, Ogden, relinquished his position to the solicitor, Samuel B Merriman.²⁴ John Masterman, now an MP, replaced Howell as treasurer; at the same time, it was decided that the hospital's funds should be placed with his bank, thus dispensing with the services of the three other banks.²⁵ Two new positions were created at this time: those of the honorary physician and the honorary chaplain. Both were included, *ex officio*, on the committee of management. The appointment of the physician was Salmon's idea. He strongly recommended it to the committee of management who in turn put it to the governors in April 1845, although John James Furnivall MD, of 3 Weymouth Street, had already been appointed. The physician's task was to visit the hospital, if required by Salmon, to assess the health of patients pre- or post-operatively or to diagnose tuberculosis. Fistula was frequently associated with tuberculosis and, in further recognition of this, in 1844 the hospital took out its own subscription to the Hospital for Consumptives so that patients could if necessary be referred there.²⁶

An appointment which probably had more effect on the hospital was

that of the chaplain. The appointee was Reverend G Taylor MA, of the appropriately religious-sounding Angel Court, St Sepulchre's. Most hospitals were at pains to stress their moral aspect: they were supported by philanthropists who wished to ensure that their chosen institutions assisted the spiritual as well as the physical health of patients. It would also have reassured those who distributed the funds of the Archbishop of Canterbury and Bishop of London, and may have been requested by them. It had, after all, taken the hospital ten years before arranging to have a chaplain, and it was a feature which tended to be regarded as less important where the medical staff played a large part in a hospital's affairs.

No sooner had the hospital moved to Charterhouse Square than the committee of management declared that 'more houseroom is pressingly needed'.²⁷ In the 1840s it was concluded that the hospital needed to buy a site or building, and thought was given to the problem, but without coming up with an appropriate place. In 1849 the governors were offered a new site by Benjamin Bond Cabbell, provided that the Infirmary's title was changed to St Andrew's Hospital. The hospital was often known in the 1840s as the Charterhouse Square Infirmary, which obscured the nature of the diseases it treated. Raising money for the treatment of rectal diseases was not the easiest task, and debate over the offer focussed initially on the suggested change of name. Frederick Salmon clung to the old name: he wished to make sure that the hospital continued to specialise, fearing that it might not if its name was changed. He also wished to ensure that both the public and medical profession knew what the hospital specialised in. Special hospitals founded from the middle of the century, however, tended to be given saints' names, veiling their special nature and sounding more like the older general hospitals. In the end, it was not the name which became the stumbling block, but certain conditions in the plan.²⁸

Cabbell offered a piece of land on the east side of Little Saffron Hill, in the parish of St Andrew's, Holborn, on a 1,000 year lease at a yearly rent of five shillings. However, there were several conditions to the grant, one of which laid down the maximum size of the hospital and restricted any expansion. Secondly the hospital, for the entire 1,000 year lease, had to be termed Saint Andrew's Hospital for Diseases of the Lower Intestine, and could not be designated by any other name. Moreover, if the hospital were not completed within a period of five years from June 1849, then the lease was void and the land returned to Cabbell. If the building was used for any other purposes than a hospital, again the lease was void. Cabbell also insisted that the governors of the Infirmary must agree to the conditions within two years and that £2,000 must have been raised by then towards the new hospital.²⁹

A meeting was called to the London Tavern in September 1849 to

consider the proposal. Most of the governors saw only the promise of a valuable grant of land. Like the Lord Mayor, who chaired the meeting, they were impatient of any qualms regarding the conditions. Mr Alderman Hooper, who moved that the grant should be accepted, remarked: 'I came here in the full expectation that there would be perfect unanimity on this resolution.' The suggested change in name, he thought, should be immaterial: 'I am not one who is fastidious with regard to names'.³⁰ Frederick Salmon suggested as a first measure that perhaps the change of name might be delayed until the new building was erected. To put up 'Saint Andrew's Hospital' in front of the institution in Charterhouse Square

... would do nothing but confuse the poor people who now resort to it; but if you give five years notice of the alteration, and thus make the change of name, so to speak, gradual, people will become acquainted with the alteration. Were you to do so now, you would, I fear, frustrate the objects of the Charity.³¹

John Masterman commented that 'Mr Cabbell was rather particular in specifying the change of name'.³² He thought that they should not quibble: if they were not wary, they would lose the grant.

Although Salmon was clearly not satisfied, expressing concern also about the £2,000 they needed to raise, he bowed to the feeling of the meeting, and the resolution accepting the grant was passed. Alderman Hooper then praised Cabbell for his munificence.

His name and his good deeds are spread through the length and breadth of the land, and are well known, individually and collectively, to every class in this kingdom.³³

The grant, he believed, was worth between three and four thousand pounds; it had been given without solicitation, Cabbell having ascertained the needs of the Infirmary and discovered the attempts made by its committee of management to obtain a new site. As John Masterman said, in moving a resolution to thank Cabbell,

It has been well known that the premises occupied for years past by the Infirmary have been very deficient, in proportion to its usefulness.³⁴

Another commentator remarked that Cabbell 'is known as one of the most distinguished benefactors of the human race'.³⁵ The ward which the Lord Mayor represented included the parish of St Andrew's and the new hospital would be on its boundaries. Hooper commented that it would be of great satisfaction to the Lord Mayor to have presided over the establishment of such 'an honour and ornament' to his ward.³⁶ Salmon,

in his turn, used the opportunity to reaffirm the link between the hospital and the City.

It would not become me to speak of the benefits which this Institution has conferred; but it does become me to say, that a vast proportion of those benefits are attributable to the countenance the Charity has enjoyed . . . from the magistracy of the City of London. It has been to it a tower of strength . . .³⁷

There had been more applicants that very day at the Infirmary 'than would fill the rooms, the yard and the apothecary's shop'. Should such a state be allowed 'in a land of benevolence, burdened as it is with what may be called the curse of the world – money?'³⁸

Picking up Salmon's point, the committee of management immediately made an urgent appeal for funds. It was the time of famine in Ireland and distress over the Corn Laws at home, but, they argued, there were many philanthropic individuals who required only to be informed of the needs of the suffering poor to make generous grants. Within a month, they had raised almost £700. However, Frederick Salmon and Samuel Merriman remained concerned about the conditions of the grant. They ensured that the complete minutes of the September meeting were published with the appeal for funds, detracting from its cogency and making sure that Salmon's opposition to the conditions of the grant was appreciated. (The £700 had been pledged before their publication.) Thereafter, between October and April, the sum was not even brought up to the £1,000 mark. By April 1850 Salmon and Merriman had persuaded the committee of management of the danger of accepting Cabbell's offer. An appeal was made to Cabbell to try to persuade him to abandon or relax the stringency of his conditions, but to no avail. The committee decided that the problem of changing the name was nothing in comparison with the need to complete the new building by June 1854.

If it trench, but one day, upon the limits of the allotted period, not only will the £2,000, but whatever might be expended beyond that sum, be lost for ever to the Charity by the building becoming, *ipso facto*, the property of Mr Bond Cabbell.³⁹

If the matter had concerned a private enterprise, the committee concluded, they would have proceeded: they now felt it wrong to risk the trust funds of a charity.

A difference between Salmon and his business supporters emerged over this episode. To the latter, the deal had its risks, but they were risks worth taking. It was Salmon and the hospital's solicitor, Samuel Merriman, who held them back. Merriman took some of the heat out of the issue by

investigating the possibilities of other sites: he soon discovered one site in particular which was 'unfettered by requirements which place in jeopardy the funds belonging to the Charity'.⁴⁰ Once again, active fund-raising was set in motion: it was argued that only one in twenty of the cases presenting themselves to the hospital could be admitted because there were only fourteen beds.⁴¹ The committee appealed to

... those who, of a nobler nature, with a purer pride, will deem it no hindrance to their journey, or derogation to themselves to ... assist in pouring into the wounds of their afflicted fellow creatures the oil and wine of a more than Samaritan compassion and benevolence.⁴²

In 1843 Merriman had been admitted as a liveryman to the Dyers' Company, and it was through this connection that the new site became available. The Dyers' Company had long supported almshouses, including one in City Road. In February 1850 there were complaints about vibrations coming from a steam engine used night and day for cleaning rice at mills behind the building.⁴³ The almshouse inmates were terrified and unable to sleep: one old man was so alarmed by what sounded like the cracking of timber, that he ran out of the almshouse 'fearing that some mischief was about to happen'.⁴⁴ Another inmate declared that 'the place is always upon the shake' and the Company investigator reported that everything 'chattered and vibrated'.⁴⁵ The Dyers' Company approached the owner of the rice mills, Mr Dixon, to try to lessen the problem with the engine. He showed interest in buying the site, and the Company offered it to him for £2,000. Dixon came back with an offer of £500, which the Company rejected, and began litigation against him for nuisance.

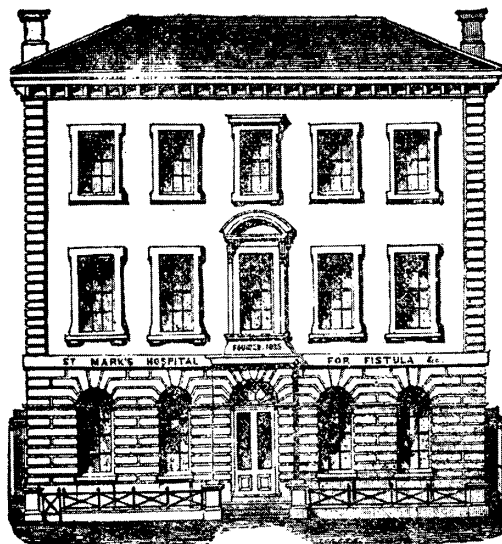
In the meantime, Merriman recommended to Salmon that the City Road site might be a suitable position for the new hospital, despite the steam engine, and the committee of management wrote to the Dyers' Company on 1 June 1850 to enquire about it.⁴⁶ On 8 June the steam engine was stopped by Dixon, which allowed the Dyers to offer the site without its nuisance. Merriman wrote that, 'on the understanding that such nuisance no longer exists', the Fistula Infirmary was willing to buy the site for £1,500.⁴⁷ The Company stated that they would settle for £1,750, but Dixon started his machine up again, which threw the negotiations into doubt. The Dyers' Company, wishing to clinch the deal, said that a similar offer for the site had been received – there had been one other offer, but only of £1,000 – and refused to promise that the nuisance would be abated. Merriman did not answer, and the Company began to get agitated. One of its members had several interviews with Merriman in the late autumn of 1850 and procured an unwritten agreement, with £1,750 agreed as the price.⁴⁸ The deal was put to the Court of Chancery

CHARTERHOUSE SQUARE TO CITY ROAD

and agreed in August 1851, with the transaction being completed on 5 March 1852.⁴⁹

That summer the old almshouses were pulled down, and on 12 August 1852 the foundation stone for the new hospital was laid. *The Illustrated London News* recorded the moment:

The first stone of this institution, one among the most needed and serviceable of the numerous charities which adorn the metropolis, was laid on Thursday last, by the Right Hon. the Lord Mayor, President of the Hospital *ex officio*.⁵⁰



ST. MARK'S HOSPITAL, CITY-ROAD: THE FIRST STONE LAID ON THURSDAY LAST.

From the Illustrated London News, 14 August 1852

The new hospital was given a new name: St Mark's. The debate over whether to call the hospital St Andrew's in 1849 had borne fruit. It was far easier to appeal for funds under a name like St Mark's than under 'Fistula Infirmary'. Salmon may have been only too familiar with considering rectal problems, but his supporters were not. The new hospital was in the District of St Luke's but there was already a St Luke's Hospital. The name of St Mark's had already been chosen by 1852 but, as at other special hospitals, there was no indication as to why this particular saint was selected. However, Salmon had won his point that patients must not be confused, and that the specialisation of the Infirmary should be clear. Therefore the new building was inscribed across its façade 'St Mark's Hospital for Fistula &c.'.

The plan for the hospital showed a three-storeyed, classically-fronted

ST MARK'S HOSPITAL, LONDON

building in very similar style to the houses being constructed in the area. It had an air of dignity and proportion which reaffirmed its status. On the day that the foundation stone was laid, the committee of management, the hospital's officers and their wives were entertained to 'an elegant *déjeuner*' at the Mansion House by the Lord Mayor. At two o'clock they adjourned to the City Road site where:

... the proceedings were opened by an appropriate prayer, composed and delivered by the Rev. George Taylor, honorary Chaplain, after which his Lordship went through the usual form in a truly mason-like manner.⁵¹

The Lord Mayor addressed those assembled 'in a simple and heart-stirring manner', setting forth the benefits which the Infirmary had already conferred. Cheers were given for the Queen, Prince Albert, the success of the undertaking, the Lord Mayor, the committee and officers of the institution.

The architect of the new hospital was John Wallen of Spital Square, already a governor of the hospital. It was intended that St Mark's should have 50 beds 'distributed through light and airy wards', which themselves contained not more than eight beds each. In its design, St Mark's followed current thinking about the best way to prevent infection. Sepsis was such a common problem in hospitals that its various manifestations were known as hospital diseases. It was not at all uncommon for a patient to enter hospital with one disease and leave with another. The prevalent explanation for the occurrence of infection was that it derived from miasma, pollution in the air which emanated in particular from rotting organic material, and was often associated with overcrowded conditions. This fitted the fact that smells and dirty conditions frequently accompanied infection, and it also explained why infections seemed more likely to arise and persist in the tenements of towns and cities. It was also thought that the very overcrowding of hospitals, like prisons, could engender disease. If this was the case, it became extremely important not to have too many patients in one ward. There was a strong belief in the importance of light and air, in particular good ventilation, for preventing infection. Thus St Mark's was built with light, airy, small wards, with large sash windows which would have been open much of the time.

Since the hospital had taken the name of St Mark's, it was decided that the new hospital should be officially opened on 25 April 1854, St Mark's Day. It was now faced with a substantial debt: it was necessary to raise a further £3,500 to complete payment of the building contract and to equip the hospital. Although it had been advertised that the hospital would house 50 inpatients, it opened with only 24 beds, and fluctuated between that and about 35 beds for many years. Until the return on

CHARTERHOUSE SQUARE TO CITY ROAD

investments was sufficient to cover the running costs for 50 beds, it seemed wiser not to rely on annual donations to fund such a number.⁵²

Despite these limitations, the opening of the new hospital, with its new name, represented a high point in the Infirmary's history. Since its foundation, it had proved to be a successful enterprise – both in filling a need, and in gathering support to finance itself.

Beds always full; eager applicants waiting, often for weeks, for their turn of admission; sufferings such as it is difficult to realize, borne in secret and in silence through years of inconceivable and all but hopeless misery; – *these* are the hourly scenes with which the charity is familiar ⁵³

The post of honorary secretary had so far been filled by a governor, but in 1853 the hospital's first paid secretary, James Fuller Whiskin, was appointed. He was of lower social standing, as the committee of management confirmed by describing him as 'Mr' rather than 'Esq'. Whiskin, who lived and worked at the hospital, overseeing the move from Charterhouse Square to City Road, was paid 50 guineas, and received board, lodging and extras such as coals.

It was a remarkable feat to raise sufficient money not only to run the hospital but also to buy another site and construct a new building within 20 years of opening the Infirmary in a small room in Aldersgate Street. Success bred success: once a number of prominent businessmen had given their support to the hospital, others followed. In 1853 a particularly important seal of approval was given to the hospital: the Prince Consort, Prince Albert, made a £25 donation towards the building fund. The governors now hoped to enlist the support of the aristocracy and gentry: the gift was, they hoped, 'an augury . . . of a more extended recognition of [the hospital's] claims by the higher classes of the community'.⁵⁴ Prince Albert had already shown interest in urban conditions and philanthropic causes: the two concerns overlapped in hospitals, and he patronised more than one, for example serving as president of St Thomas's Hospital. Thereafter St Mark's made frequent reference to its most elevated supporter. Despite Prince Albert's contribution, however, the hospital remained very much City-dominated. It flourished under such patronage, which was lucrative if not esteemed as the pinnacle of social acceptance. The committee of management in the 1850s referred to the 'hitherto increasing and continuing prosperity of the Institution'. They 'gratefully acknowledged its present prosperous condition' although arguing that the demand by patients was such that far more needed to be done.⁵⁵

In the 1850s, various methods were devised to draw distinctions between the various groups of benefactors, in the hope of encouraging

larger donations. Separate lists were drawn up of those who were life governors, honorary life governors, life subscribers and annual subscribers. At the bottom of the list were mere 'contributors', who had made single small donations, and who had no privileges within the hospital. These names were then removed from subsequent *Annual Reports* unless further gifts were forthcoming. With the building of the new hospital came the opportunity to make further rewards to loyal and generous benefactors: the naming of a ward – and later a bed – after them. It was decided that the principal ward in the hospital was to be named 'Copeland' after the first president, and to emphasise the City and mayoral connection with the hospital. The second was to be called 'The Founder' after Salmon, and others were to be named after distinguished benefactors. The hospital was also beginning to attract relatively large legacies with greater frequency. Since the legacy of £1,000 in 1840, there had been four other smaller legacies, but in 1851 Jeremiah Olive left £1,000 and the following year Thomas Dickinson left a similar amount to the hospital. Donations from those who had been assisted by the hospital also began to increase in number. David Blacklee, a former patient from Newmarket, collected 20 guineas from 107 people which he then gave to the hospital. The Auxiliary Society had by 1853 contributed almost £515 to the hospital.

Groups of workmen were also beginning to club together to make donations: their actions served as a kind of insurance policy in case one of their number needed treatment in the future. The first collective life governorship at St Mark's, with its implied rights of admitting patients, was bought in 1853 by the mechanics employed by Messrs Broadwoods, 'in grateful recollection of benefits conferred at St Mark's Hospital on many of their fellow-workmen'. The money was part of the profits from a 'Theatrical Production originated and supported by them at the Soho Theatre'.⁵⁶ The rest of the money was used to insure the life of their nominee so that the governorship in effect became perpetual. As cooperatives of workmen began to form, they concerned themselves not only with hours, wages and conditions, but also with other aspects of the welfare of their members and their families. There was considerable anxiety about the effect on a family of ill health among its wage earners. Treatment in hospitals or by other means which could lessen the amount of time spent away from work was therefore of great importance. The workers of Messrs Broadwoods were therefore buying an admission ticket to St Mark's.

The building fund served as a very useful means of raising money. Subscribers who had already made a series of donations frequently gave generously into the fund as well. Others, not already subscribers, were also persuaded to give. George Holgate Foster, who had made many gifts

in the past, anonymously contributed £3,000 towards the building fund, stipulating that his money should not be used for any 'useless ornament' on the outside of the building, or for the building itself, but for 'every comfort and convenience *within*'.⁵⁷

Despite such evidence of the success of the hospital, St Mark's continued to be plagued by medical opposition. Salmon argued that this was misplaced and hoped that it was declining. 'Can the necessity of a separate hospital for patients afflicted with these painful and peculiar maladies any longer admit of question?' he asked. 'Their multitudinous existence at once supplies the answer.'

No general Hospital can, by possibility, afford adequate accommodation for their numbers, or devote the time and attention which such cases demand, except at the cost of excluding others no less urgent, as well as of the host of daily casualties for which those Institutions were especially designed.⁵⁸

He thus tried to turn the tables on the general hospitals, arguing that they too were in a sense specialised – that they specialised in accidents and emergencies. He emphasised the usefulness of special study of diseases by referring to four female patients 'the aggregate of whose sufferings had extended over a period of not less than eighty years, all of whom were in a few weeks discharged entirely cured.' As always, Salmon stressed the educative, non-secret side of the hospital, distancing himself from those who protected their secret remedies.

Thrown open, as it ever has been, to the whole profession for inspection, enquiry and examination, it will be a School in which all may study; and whence all who are desirous may bear away the benefits of an experience drawn from the undivided labour and anxieties of years, and so become ministers of mercy and benefactors to mankind.⁵⁹

Salmon tried to imply that opposition was a thing of the past:

However much it may be deplored it is beyond dispute, that this most useful and sorely needed Institution, had for a long period to stem the tide of professional prejudice, as well as to encounter much and most undeserved ill will.⁶⁰

He could only hope that 'a more liberal feeling, the result of a truer estimate of its merits now prevails'.⁶¹ However, Salmon's desire to make the hospital a school for the study of rectal diseases was frustrated by the lack of professional approval.

Students can scarcely be expected to attend a school, however excellent, which professional authorities, in their exclusive policy, have as yet thought it wisdom to ignore.⁶²

In 1856 Salmon issued an invitation to the 'ablest surgeons ... to witness the mode of operation and treatment' pursued at St Mark's. He specifically invited to the hospital, representatives of the *British Medical Journal*, *The Lancet* and the *Medical Times and Gazette*, journals which regularly covered medical and surgical practice in London hospitals. Although the *BMJ* and *The Lancet* ignored the invitation, in 1857 the *Medical Times and Gazette* sent a correspondent to observe practice. It was the first professional mark of recognition of the hospital.⁶³ The reporter gave a detailed and measured account of the manner in which Salmon treated various rectal complaints, set against the background of the views of notable surgeons who wrote or taught on rectal disease.⁶⁴ In the same year, St Mark's received another note of recognition – the hospital's first legacy from a medical man, Sir Benjamin Outram.⁶⁵

The administrative structure of the hospital was increasingly manifesting institutional qualities. By 1857 the committee of management was meeting at least monthly, and more frequently when business demanded it. Reporting to it was a finance committee which devised schemes for raising money and monitored the financial affairs of the hospital.⁶⁶ The first extant minutes from St Mark's date from 1857, either indicating that they began to be systematically kept from then, or that more care was taken to preserve them, both of which argue for a more stable and institutionalised management of the hospital. On the medical side of the hospital, too, matters became more regularised. A full-time dispenser was employed to deal with the drugs and leeches for both inpatients and outpatients. The year 1856–1857 proved bad for many London charities: the Crimean war sapped some of the wealth of the country, deflecting it from other uses. St Mark's, however, was more prosperous than ever: on George Holgate Foster's suggestion, to absorb extra income, an Endowment Fund was created. By 1858, the Fund consisted of nearly £7,500, much of which came from a £5,000 legacy left by Foster himself, who died during the year. A further £1,000 came from a legacy from George Schacht, 'a foreigner' who had 'amassed by self-reliant industry an honourable fortune'.⁶⁷ New methods to raise funds were also introduced. In addition to annual festival dinners, which occasionally cost more than they raised, between 1855 and 1857 the secretary collected over £1,000 from advertising in newspapers. In 1857 a direct appeal to about 1,000 prominent and wealthy members of the public was made, signed by the treasurer and chairman of the committee of management, which also returned a reasonable sum.

Salmon's own practice had proved successful, enabling him to move in the late 1840s from Old Broad Street, although he kept his practice there, to 18 Lower Berkeley Street, Manchester Square. However, he passed his sixtieth birthday in 1856, and looked towards retirement. He suggested

that he should therefore be joined by two assistant surgeons who could be trained to take over from him.⁶⁸ Accepting the necessity of his retirement, the committee of management were glowing in their tribute to him. They spoke of:

... the faint foreshadowings of a time ... when the head and hand which have so long laboured in the cause of this Charity shall do so no longer, when both shall be at rest! But it is due to their unwearied and yet vigorous owner, that as the shadows lengthen on the dial of his day, some respite should be given him from his ceaseless toil.⁶⁹

They argued that he should now be given some assistance,

... lightening his load the more the nearer that his day draws onward to its close, unwearied in its usefulness and self-devotion to the cause of suffering humanity, as his valued life has been.⁷⁰

Devoted though Salmon might be to his hospital, he should be encouraged to pass on his responsibilities:

Reluctant as he may be to relax his labours we, at least, should bear in mind that it has higher duties yet, that there is a space betwixt the hospital and the grave, to which he may be looking forward, not only as a preparation for that resting-place, but also for the enjoyment of an honourable and well-earned repose.⁷¹

The strength of feeling of the committee towards Salmon could not be doubted, either in this tribute or in their subsequent decision to commission a picture of him to remain in the hospital:

... this Institution, so humanely conceived, and so benevolently carried on, 'through evil report and good report', so anxiously, so unweariedly wrought out, so nobly supported, and now so happily and prosperously completed, should possess ... the likeness of its Founder.⁷²

Such a picture was not required to 'perpetuate his memory', for that could never die 'while one stone of the Building shall remain'.⁷³ Rather it was to be commissioned so that

... when we, and that large multitude to whom he has been, under Heaven, the permitted instrument of so great relief, have passed away, their children and ours may 'look upon him as he was', and that the generations which succeed them may take note that we among whom he 'lived, and moved, and had his being', were in our day not wanting either to ourselves or them, but raised and left some monument of our regard for him, some record of the debt which science and his country owed him.⁷⁴

Former patients decided to make their own presentation, of a bust of Fredrick Salmon, which they gave to his wife.⁷⁵

The preparations for his retirement and his replacement by two assistant surgeons were guided by Salmon himself. The rules and regulations of the hospital were changed to establish a hierarchy of up to two full surgeons, with two juniors. The full surgeons conducted operations and looked after inpatients, while the assistant surgeons were responsible for outpatients. The full surgeons were to attend the hospital on two days each week to assess the eligibility for inpatient treatment of cases selected by the assistant surgeons. The latter also visited the hospital twice a week, on one day seeing male patients and on the other, female patients. In addition, they were required to assist the full surgeons, or to deputise for them in their absence, although such absences were strongly discouraged. The full surgeons retained the gift of the house surgery, taking turns to make their appointments. In March 1857 a committee consisting of Spurgin, the honorary physician, Salmon and three governors, investigated the testimonials of the two applicants for the new positions, Peter Yeames Gowlland and James Robert Lane. The committee of management made it clear that even if these two were judged to be satisfactory they must be approved by the governors at a public meeting.⁷⁶

Peter Yeames Gowlland was a Fellow of the Royal College of Surgeons, a former house surgeon at The London Hospital, currently acting as senior demonstrator in anatomy there, as well as having served as senior surgeon at the Islington Dispensary for almost seven years. Given his position at The London Hospital – he had even acted as assistant surgeon there for 14 months in 1855–6 during the absence of a surgeon – he was already well established. Gowlland, who practised in Finsbury Square, a favoured centre for medical practitioners serving the City, was the son of a captain in the Royal Navy and the grandson of a prosperous Canterbury merchant. He himself became a brigade surgeon to the Honourable Artillery Company, and was a member of the freemasons' lodge associated with it. Many of the surgeons from the mid nineteenth century were freemasons, and it is possible that freemasonry played a part in the web of connections between Salmon and his supporters.⁷⁷ Lane came from a medical background. His uncle, Samuel Armstrong Lane, established the Grosvenor Place School of Medicine and took a large part in the foundation of St Mary's Hospital in 1852. James R Lane was educated in his school and was elected as surgeon to St Mary's on its foundation. Lane, who also possessed his FRCS, had served as surgeon to the Pimlico Dispensary between 1848 and 1851.⁷⁸

The credentials of these two applicants were therefore considerably better than Frederick Salmon's own had been, which confirmed the new standing of the hospital. It was these credentials, and not expertise in the

treatment of rectal disease – which neither of them apparently had – that were crucial in their selection. Those who had a bright future within the medical profession now saw an appointment at the hospital as a step on the ladder to success. It clearly ranked in their eyes above dispensaries, and in parallel to the highest of the junior positions within the major hospitals. The very prosperity of the hospital, with its numerous lay supporters, would help to ensure that. A test for the future was the length of time such men would remain associated with the hospital and whether they would leave it on acquiring higher positions within the general hospitals. However, in the interim, both men promised to ensure that none of their other duties would interfere with those at St Mark's.⁷⁹

In May 1857 a special meeting of the governors voted unanimously to appoint Lane and Gowlland. By January 1858 the two new additions to the hospital had proved sufficiently satisfactory for the committee of management to decide that it was now time for Salmon 'to be relieved from the more active part of his professional duties'. He should attend the hospital only at his own convenience.⁸⁰ Salmon gave up his premises in Old Broad Street in 1857 and, although he maintained his home off Manchester Square, seeing some patients there, he now took a country home, Woodfield Cedars, Ombersley, Worcestershire. In January 1859, he resigned as honorary surgeon, but remained as honorary consulting surgeon and a permanent member of the committee of management. Lane and Gowlland became full surgeons.⁸¹

Salmon's retirement from the hospital was the most critical point in its history since 1835. St Mark's was his creation, and it remained to be seen whether it could survive without him as the driving force behind it. There was every reason to believe that it would, largely due to Salmon's own efforts. His ability to secure the assistance of the influential and wealthy in the City of London, brought in supporters with expertise in law, accountancy and business, as well as substantial funds. However talented Frederick Salmon might have been as a surgeon, it was his abilities as an entrepreneur that were crucial to this enterprise. It was a signal of Salmon's achievement that by the 1850s an alderman of the City of London, Thomas Kelly, left £100 to St Mark's on his death.

However, small special hospitals were far from gaining full medical acceptance, and St Mark's was now facing a new threat. The specialists were beginning to win their argument for specialised study and treatment but not for their institutions. Mainstream practitioners began to try to assimilate specialism into general medicine. Thus the general hospitals began to form special departments, at first to treat diseases of the eyes or ears, and then to take other specialist approaches. It was then argued that special hospitals were no longer needed. Many surgeons and physicians began to seek dual appointments – as Lane and Gowlland did – at both

ST MARK'S HOSPITAL, LONDON

general and special hospitals. St Mark's was not oblivious to this threat. The committee of management declared it 'gratifying to learn' that 'the mode of cure' practised in St Mark's 'is now adopted in other public charities' as well as in private practice. But they were worried that potential subscribers might think that St Mark's was no longer needed. It was therefore strongly stressed that in the general institutions, instances of rectal disease

... cannot be other than exceptional, and ... where attention is divided, it needs must be imperfect. HERE it is exclusive, concentrated and constant.⁸²

It was against this background that Gowlland and Lane, still guided by Salmon, undertook their work at the hospital.

James R Lane



Peter Y Gowlland

William Allingham



Wm Allingham



*Alfred Cooper
Jan 8 1898*

Alfred Cooper

CHAPTER V

Circumscribed only by its too narrow means

Financial constraints 1859–75

Frederick Salmon still took an active part in formulating the hospital's policy, continuing to argue for an increase in the number of beds, suggesting new ways of raising finance and trying to encourage members of the medical profession to take an interest in the hospital. Gradually, however, as his health failed, he spent longer periods away from London, and the hospital frequently found itself in straitened circumstances without Salmon's energy and single-mindedness to drive it on. However, Salmon had established a firm basis for the hospital and it never descended to a critical level.

Early in 1859 money was drawn from the Endowment Fund, since the results of applications to the public, as the honorary treasurer reported, had 'not been so satisfactory as he could wish'.¹ Despite this, a few months later Salmon managed to persuade the governors to increase the number of beds to 33. The running costs of the hospital were now around £2,000 a year, with about £500 of this coming from annual subscriptions, £600 from regular donations and the remainder from unpredictable sources. The committee felt that it was propitious to ask for larger contributions from the public: Britain was enjoying an economic boom.

Commerce, Trade, Agriculture, all, are flourishing to a most noticeable extent ... individual wealth is so abundant, that, fast as any new venture is brought into the market, so it but holds out a reasonable prospect of success, thrice the sum needed, though it be told in millions, is thrust into the hands of the fortunate projectors by Capitalists, eager to divest themselves of money of which the mere accumulation has become embarrassing ²

In order to tap this wealth, the governors began to put greater stress on the 'deserving' nature of the patients treated at St Mark's. The Victorian middle and upper classes were increasingly concerned about what seemed to be a growing problem of a large, irreligious, ill-disciplined working class. The committee of management was therefore at pains to stress that rectal disease was not simply a just punishment for sins, as venereal or even mental disease were considered to be. St Mark's treated

Disease the most loathsome and repulsive, suffering in its most afflictive form and aspect, the penalty of no sin, no crime, not even of excess; simple visitations from above, to which all are liable, and from which nor high nor low nor rich nor poor can claim or count upon exemption; with poverty and want, and all their lengthening train of woes and miseries superadded; yet with relief ever ready and at hand, circumscribed only by its too narrow means.³

In 1861, the committee of management concluded explicitly for the first time that their financial problems arose from the nature of the diseases treated in the hospital.

Unhappily, the diseases with which [the hospital] has to deal do not allow of their being entered upon in all their harrowing details in the columns of the public press; and a sense of mistaken delicacy too often damps the ardour of its otherwise most willing advocates.⁴

In an attempt to elicit further donations, the following year a record of all contributions made to the hospital was published in *The Times*, the *Daily News* and the *Standard*. Further appeals were made to City merchants and bankers as well as to 'the more influential at the West End not engaged in business'.⁵ It was also stressed that the hospital was run efficiently: the cost of caring for a patient for a month in 1864 was well under £5, which, the committee of management thought, reflected 'a vigilant and well-ordered economy' and the low cost of the relief that they could bring about.⁶

During the 1860s, Frederick Salmon continued to work to ensure the hospital's permanence. He loaned money when it was required, and he also reassessed its staffing. In 1864 he saw that, because of his declining health and the remoteness of his residence in Worcestershire, he would take a diminishing part in its affairs. As Lane and Gowlland developed increasingly successful practices, Salmon was concerned that the hospital should receive sufficient medical attention, and he argued that two new assistant surgeons should be appointed to enable the hospital to cope with its work, while allowing Lane and Gowlland to expand their activities elsewhere. Gowlland had shown greater interest in the hospital than had Lane. Lane's greater loyalty was to St Mary's Hospital and, after his appointment at the Lock Hospital, his private practice focussed largely on venereal disease. Gowlland, on the other hand, who had been appointed assistant surgeon at The London Hospital, resigned it in 1862, having acquired a large private practice in the treatment of rectal disease. Gowlland's resignation from The London was an indication that it was now feasible to build up a private practice based on an association with a specialist hospital.

Salmon's proposal to double the number of surgeons at the hospital met initial opposition from the committee of management, with some governors feeling that the hospital did not need further surgical staff, and that such an expansion would increase the influence of the medical side of the hospital, weakening the lay element. Although the committee of management eventually accepted Salmon's recommendation, they stressed, both in their minutes and in the *Annual Report*, that it was at his request that they were presenting the idea to the governors: at the same time they asked them to consider not allowing the medical staff to serve on the committee of management. They did not wish to seem as if they were personally attacking Salmon, and they argued that this policy should be carried through only after Salmon and the honorary physician, John Spurgin, had retired from the hospital. This move was contrary to the form in which Salmon had established the hospital but reflected current controversies over the respective extent of medical and lay influence in hospitals. In the general hospitals, members of the medical staff were beginning to gain representation on key committees which dealt with the running of the hospital, admissions, and appointments, rights which medical staff at special hospitals usually possessed from their foundation. A compromise was reached at St Mark's: the two senior surgeons continued to serve on the committee but the assistant surgeons did not. It was over this issue, and the opposition that Salmon encountered when making his recommendations, that one committee member, Henry R Briggs, resigned. He declared that he could not be a party to the unjust treatment of a valued friend of the hospital.⁷

Plans were set in motion for the selection of the two new surgeons. Candidates were required to send their testimonials to the hospital secretary, and the collector was instructed to take the opportunity of ensuring that everyone had paid their dues and could therefore vote. A sub-committee of three governors was appointed to sort through the testimonials, although when it met both Frederick Salmon and James R Lane attended as well.⁸ The five applicants were all judged to be fully qualified candidates: they were William Allingham FRCS, who had trained at St Thomas's, Edward Hunt Carter, who was already house surgeon at St Mark's, Alfred Cooper MRCS, who had trained at St Bartholomew's, Arthur Trehern Norton, who had trained at St Mary's and subsequently became a surgeon there, and John Sharman. They were interviewed and specifically informed of the rules for proxy voting: it was therefore assumed that they would canvass governors. The sub-committee clearly made it apparent that they favoured Allingham and Cooper because the three other candidates withdrew before the election day and Carter resigned as house surgeon.⁹

William Allingham (1829–1908) had begun by training in architecture

at University College, and had already showed promise in this career, receiving an honourable mention for his design of a building to house the Great Exhibition of 1851. However, he decided to change direction, and entered St Thomas's Hospital Medical School; he showed equal promise in his new vocation, winning practically all the prizes available before serving as demonstrator of anatomy and surgical registrar. In 1863 he set up his practice at 36 Finsbury Square, two doors away from Peter Gowlland. Subsequent to his appointment at St Mark's, Allingham rapidly developed a thriving practice in the treatment of rectal disease and then followed the drift of successful practitioners westwards, transferring to Grosvenor Street in Mayfair. He was surgeon to the Great Northern Hospital, to the Farringdon General Dispensary (often referring patients from there to St Mark's) and to the Surgical Aid Society, which he helped to found in 1862. His early career had been highly distinguished, and he later moved in the highest medical circles. In 1884 he became a member of the Council of the Royal College of Surgeons. Allingham held no appointment at a large general hospital with a teaching school, but this clearly did not impair his reputation: specialisation was beginning to make some headway in terms of professional acceptance by the last two decades of the century.¹⁰

Alfred Cooper (1838–1908) was the son of a barrister and Recorder of Ipswich, and was apprenticed first to the Norfolk and Norwich Hospital before entering St Bartholomew's. He then travelled to Paris, as did many ambitious young surgeons, and took a course in operative surgery. He joined the staff of the West London Hospital in 1867, and was also on the staff of the Lock Hospital: he therefore developed a dual specialty, like Lane, in the treatment of rectal disease and venereal disease. He established himself in practice in Jermyn Street, 'the basis of his fortune being laid by the skill and tact with which he attended the members of the numerous clubs in the neighbourhood'.¹¹ Cooper was a very active freemason, genial and fond of blood sports, and he took 'full advantage of the distinguished social opportunities which began to come his way'.¹² He became friendly with the Duke of Hamilton and through him was introduced first into aristocratic and then into royal circles.¹³

Immediately on the arrival of the two new surgeons at the hospital it was decided that outpatients should be seen on four days a week instead of only two. The drugs bill therefore increased and other expenses rose: the hospital subsequently incurred a temporary overdraft.¹⁴ The financial situation of the hospital by 1865 gave cause for great anxiety to the finance committee and the committee of management. One governor, William Eade, wondered whether the funds could be better invested, and enquiries were made of governors connected with the Stock Exchange. There was also the problem of the festival of St Mark's Day. Occasionally

the dinner brought a considerable bonus for the hospital, but usually it failed to live up to promise. That year it was decided to ask Charles Dickens if he would preside over it, rather than the usual host, the Lord Mayor. When Dickens declined, two members of the aristocracy were also approached, but refused. The festival proved so problematic that the following year it was decided that no dinner should be held at all.¹⁵

The finance committee made a detailed analysis of the expenditure of the hospital, comparing costs from 1851, before the hospital moved to its City Road site, with those in 1864. They found that although the total number of inpatients and outpatients had not quite doubled (bed provision had increased threefold), dispensing costs had multiplied almost five times with alcoholic stimulants (used to revive flagging patients) costing almost four times as much.¹⁶ The rise in costs seemed disproportionate, and in the first recorded incidence of such a request, the committee of management asked the surgeons whether some of these expenses might be reduced.¹⁷ In addition, one governor, Mr Hughes, made the almost heretical suggestion that the words 'and Other Diseases of the Rectum' should be omitted from the hospital's name, at least on the title page of the *Annual Reports*. As usual, Salmon reacted very strongly, and Mr Hughes 'in consideration of Mr Salmon's feelings' withdrew the suggestion.¹⁸

In the middle of these difficulties, a fresh financial blow struck the hospital: it was a disaster which seemed frequently to happen to voluntary hospitals, especially small specialist institutions. In 1865 it emerged that the hospital secretary, James Whiskin, had defrauded the hospital of more than £400 (at least a quarter of the hospital's annual income) and fled London for Devon to become 'a roamer'. At first his family would not pay the debt, and the committee of management decided to involve the police. Before they could start proceedings against Whiskin, the family offered to pay in order to avoid a scandal. However, nothing came of this promise, Whiskin fled the country and the hospital eventually abandoned hope of recovering its money.¹⁹ The collector was instructed to keep more detailed accounts, but the incident pointed to a recurrent problem in the management of voluntary hospitals. They depended on donations, rather than on a fixed and known income, and these came in an unsteady, unpredictable stream, in varying amounts, from a variety of sources, often anonymously. Scope for corruption was therefore wide. For example, patients who wished to give to the hospital usually made their donations, usually unrecorded, through the secretary. Some money had certainly been taken from the Auxiliary Society: although the amounts collected by the Society had increased steadily in the 1840s, they declined markedly in the 1850s and early 1860s, when Whiskin was embezzling funds. While the main authorities within the hospital were the lay governors, by

definition largely absent and involved in their own occupations, this problem would continue. The secretary and the matron found themselves, therefore, largely unchecked. The secretary had access to donations, while the matron handled the stores, both of linen and of food, and many hospitals found it difficult to put a check on fraud in these areas.²⁰

At various points, the procedure was tightened up. It was also decided that a member of the committee should be present each quarter to receive bills and give cheques to tradesmen. After one attempt at carrying this out, they abandoned the idea as too inconvenient, and began to use crossed cheques. It was agreed that any future secretary should give a bond of £600 against such an occurrence. However, some of the hospital's stock had to be sold to cover the secretary's embezzlement and Frederick Salmon came to the rescue to cover the remaining deficit with a loan. The committee of management was in a quandary over the fraud: should they advertise it in the hope of raising extra money to cover their costs, or keep it quiet lest potential subscribers thought that the hospital was badly run and that their money would be wasted? Initially they decided not to advertise the fact, but later changed their minds and put notices in the papers of their plight.²¹

With the implications of Mr Whiskin's activities now fully apparent, the committee of management decided to investigate other areas of potential embezzlement as well as making attempts to economise. The finance committee concluded that the suppliers of meat and bread should be changed: the hospital's business should be contracted out to the lowest bidder. Many of those who worked in the hospital, from the porter to the matron, were given provisions and fuel. It was concluded that the amount of food consumed was moderate: they apparently ate fourteen ounces of meat and eight and a half ounces of bread daily. However, it was decided that their consumption of alcohol – three and a quarter pints of beer a day each – was excessive. The matron blamed this on the dishonesty of the porter, implying that he was selling it. The committee of management decided that the matron and house surgeon should have a further £6 a year in lieu of their beer allowance. The policy of gradually substituting money payments for payment in kind, which was much easier to monitor but for that very reason was resisted, had been set in motion.²²

On 3 January 1868 an era in the hospital's history closed: Frederick Salmon died at the age of 71. His death did not go unmarked in the medical press. *The Lancet* recorded his establishment of St Mark's:

The step met with great professional opposition; but by indomitable perseverance, obtaining large funds from the public for the support of the institution, he ultimately succeeded . . .²³

The journal also noted that Salmon 'had a large share of private practice in

the diseases which he made his especial study'.²⁴ *The Lancet* had always been less sympathetic to mainstream medicine than the *British Medical Journal* and so it proved in Salmon's case. The latter cast a shadow on Salmon's motives for establishing St Mark's, and pronounced it to have been against the interests of his colleagues:

How far the course which he took was prompted by difficulties in pursuing an useful and honourable career in a general hospital, where his labours would have been more useful and more instructive, it is now difficult to say. It was, we fully believe, contrary to the best interests both of the profession and of the public; and the success of St Mark's Hospital was of unfortunate omen, and has since borne fruit in encouraging similar enterprises.²⁵

However, the journal grudgingly gave some credit to Salmon:

Mr Salmon acquired a good deal of influence in certain wealthy circles and we believe enjoyed a lucrative practice; his professional practice was necessarily one of considerable isolation; but he was not without friends amongst men whose friendship is a guarantee of a certain merit of character.²⁶

Despite leaving a considerable fortune, Salmon did not bequeath anything directly to St Mark's. He left his possessions to his wife, and then his children and their issue: if these failed, then half reverted to the hospital and half went to a charity for the widows and orphans of medical men. By this stage six governors of the hospital had each left over £1,000 to St Mark's in their wills: Salmon, however, had played perhaps a more useful part in urging such generosity and ensuring that it continued. He had nurtured the hospital long after he left it as surgeon, and had been the driving force throughout its history. It was a tribute to him that the hospital's progress was largely unshaken by his death. Some swerving on its course was, however, apparent. The *Annual Reports* which had been regularly issued were merged for a two year span. The governors of the hospital succumbed to financial pressure and closed a few beds, an action which Salmon had always opposed. Moreover, the first suggestion was made that some patients should be asked to contribute towards their keep – and possibly that there should be a ward for such patients.²⁷ Such a suggestion was very much against the voluntary tradition of the hospital.

The year 1868 saw another departure: James R Lane resigned as surgeon, having attended the hospital for a decade. The background to Lane's departure was the increasing condemnation of special hospitals being expressed within the medical establishment. In 1860 the *British Medical Journal* lambasted the new creations:

... it would appear that hospitals ... were effected solely on the behalf of suffering humanity Anyone who knows anything of the working of our metropolitan charitable institutions is fully aware how far this is from the real – and we must add ... the vulgar – truth.²⁸

Most of the new hospitals were originated through 'the energetic action of some individual'.²⁹ Most began as a dispensary: an energetic surgeon then 'makes up his mind to step to fame and fortune by means of bricks and mortar'.³⁰ First he must hit on some 'striking specialty' such as the treatment of 'inverted eyelashes'. A quiet house was taken in a side street,

... patrons and patronesses are canvassed for, and in an incredibly short space of time a goodly sprinkling of the aristocracy have been found to pledge themselves to serve suffering humanity and Mr_____, in the matter of inverted eyelashes.³¹

'Carefully got up statistics' would then prove that every tenth person was suffering from this terrible disease, with 20,000 cases treated a year, and the dispensary would need to be expanded into a hospital. Although inverted eyelashes could be treated 'in the old established hospital close at hand' this fact never seemed to be realised by the gentlemen and ladies

... who so obsequiously follow the lead of the ambitious Mr _____ who is determined that there shall be a building devoted to nothing but misplaced eyelashes and perhaps – but this is of course quite under the rose – to himself.³²

The journal saw no merit in such hospitals. They starved the general hospitals of the variety of cases which were so instructive to medical students; specialisation tended to 'destroy that unity of disease which the philosophic mind should always keep in mind'; and they squandered public funds.³³ Such hospitals, the journal maintained, 'will never furnish great surgeons, or advance the art beyond mere manipulative smartness'.³⁴

No sooner had the *British Medical Journal* issued this diatribe than news reached it that a 'hospital for stone' was about to be established.³⁵ A protest on the part of the British Medical Association against all special hospitals was immediately launched, although some of the BMA's members disagreed with its total condemnation of such institutions. One commentator who had himself roundly condemned special hospitals in 1854 had subsequently joined one: he maintained that he would 'give up his post tomorrow if he saw an indication of liberal reform in the greater institutions';³⁶ he held that the present opposition was selfish, exclusive and hypocritical. A main objection levelled at the general hospitals was that unless a young surgeon or physician had influence, he would never secure an appointment on their staffs. The general practitioners within

the BMA were particularly worried about the creation of special hospitals. As one critic, Dr Markham, put it: special hospitals were established for only one purpose – the self-interest of their founder. 'It was true that the gentlemen engaged in these hospitals got their names spread over all England, but in the meantime the profession was being ruined'.³⁷ Patients came from all over the country and no investigation was made of whether they could afford to pay a general practitioner and were therefore inappropriate recipients of charity. The only permissible special institutions, it was argued, were those which treated cases which were not admitted to general hospitals. One example was epilepsy: Brown-Séquard had moved from Paris to become a surgeon at the National Hospital for the Paralysed and Epileptic, Queen Square; however, he maintained that 'when cases of epilepsy were received into general hospitals, he would resign his situation at once'.³⁸

The subject continued to be much debated, with some arguing that medical knowledge had advanced to a stage where specialisation was necessary, others that special institutions were far more expensive in their care of patients than the general hospitals. The eventual foundation of St Peter's Hospital for Stone in 1864 once again brought condemnation from the *British Medical Journal*. It wondered whether the particular saint had been selected as a joke, given the derivation of his name. The hospital was also dedicated to the treatment of urinary diseases. 'Urinary diseases!' exclaimed the journal: 'all the medical world knows what they mean in the eyes of the enlightened public'.³⁹ Moreover, patients would be admitted without a letter of recommendation: with no questions asked, the journal expected that the hospital would not lack for patients. (Urinary diseases were frequently seen as synonymous with venereal disease.) 'The general practitioner is thereby robbed of his patients'.⁴⁰

Two years later James R Lane became involved in the controversy over St Peter's. In 1864 Walter Coulson, then surgical registrar at St Mary's, became surgeon at St Peter's. It was made clear to him that most of the surgical staff at St Mary's regarded St Peter's as 'useless and mischievous, an injury to the schools and an insult to the hospitals'.⁴¹ Coulson resigned his position at St Peter's and in 1866 was appointed assistant surgeon at St Mary's. However, he then resumed his position at St Peter's, and the other staff at St Mary's, including Lane, wrote to the medical press in protest. Coulson, in his response, pointed out that two of the St Mary's surgeons, one of them being Lane, were on the staff of the Lock Hospital and that in addition Lane was on the staff of St Mark's.⁴² Lane soon afterwards resigned from St Mark's. The *British Medical Journal* recorded that Lane had 'withdrawn' from the office of surgeon at St Mark's: 'The institution is one which finds small favour in the eyes of the profession now'.⁴³ However, the journal suggested that a candidate would be found

for the vacant assistant surgeoncy 'unenviable as the post may now be generally considered'.⁴⁴ Those at St Mark's decided otherwise: Gowlland became senior surgeon, with Allingham joining him as the second full surgeon. This left Cooper who was still only MRCS as the only assistant surgeon and the committee of management, 'understanding it to be the opinion of the medical staff' that 'under the present circumstances' the services of two assistant surgeons were not required, decided against appointing a second assistant surgeon.⁴⁵

The 1860s as a whole saw the establishment of at least 24 special hospitals, in addition to many special dispensaries, many overlapping with areas already provided for. It was therefore becoming essential in the competition for subscribers to demonstrate that one institution was more in demand than its rival. For example, in 1863 St John's Hospital for Skin Diseases was established near Leicester Square. In 1864 the National Institution for Diseases of the Skin was established in Gray's Inn Road, the British Hospital for Diseases of the Skin was set up in Great Marlborough Street, and in 1865 the City Provident Dispensary for Diseases of the Skin was established in City Road. These institutions respectively claimed to treat 12,000, 6,000, 5,000 and 3,000 patients a year.⁴⁶

While St Mark's remained the only hospital in its specialty, its position was relatively secure: however, in 1868 a new institution for the treatment of rectal diseases was established. It was clearly based on St Mark's, being entitled St Martin's Dispensary for Fistula and Other Diseases of the Rectum. It was established at 106 Long Acre, near Covent Garden, with one physician and initially two surgeons. All three were Scottish trained: the physician, William Pirrie, and one of the surgeons, William Heath Strange, trained in Aberdeen, while the other surgeon, James Swallow, had been at St Andrew's. Both Strange and Swallow had also later studied at St Thomas's. They were therefore probably from outside the London medical establishment, endeavouring to establish a toe-hold in London's medical practice. By 1870 Swallow had left, and was not replaced, and two years later the Dispensary moved to the High Street, Camden. The honorary secretary of St Martin's was based in Hackney, hardly the best place for raising funds either from the City or the West End. The founders of this special dispensary evidently could not give it the same secure base as Salmon had ensured, and it closed between 1877 and 1878.⁴⁷

However, in 1868, St Martin's must have seemed to pose a significant threat to St Mark's. It is not surprising, therefore, that the governors decided to alter the way that St Mark's counted its patients. The change was designed both to appear to increase the powers of subscribers and to inflate the numbers of patients treated. Any patient transferring from the inpatient list to the outpatient list or *vice versa* had to produce a new letter

of recommendation from a governor. Moreover, it was decided that patients should acquire new letters every two months and be counted afresh as new patients each time:

The committee having been informed that the registration of patients as practised at St Mark's differs from that at other hospitals and adds to the prejudice of St Mark's ... *It was Resolved*, with a view to the assimilation of the practice at Saint Mark's to that of other Hospitals, that whenever an outpatient shall have been on the books of the Hospital for two months and shall be certified by one of the Surgeons to require further out treatment He or She shall be nominally discharged and shall obtain a fresh letter of recommendation from a Governor ⁴⁸

The number of patients apparently treated at the hospital immediately rose by 20 per cent.

Despite these alterations, the financial position of St Mark's deteriorated. In 1868 a dinner dance was held, and advertised in *The Times*, *Herald*, *Post*, *Daily News*, *Daily Telegraph*, *Standard*, *John Bull*, *Illustrated London News*, *Saturday Review*, and *Mirror*. Despite this publicity, expenses exceeded the proceeds from ticket sales by almost £40.⁴⁹ The offer of an American group, The Black Diamonds of Louisiana, to give an entertainment on behalf of the hospital was declined as 'inappropriate', and it was also thought that it would be unseemly to make formal applications to clergymen to preach in aid of the hospital. Regular advertisements were placed in several of the main newspapers, including the *City Press*, on behalf of 'St Mark's Hospital for the Relief of the Poor afflicted with Fistula Etc', with no specific mention of 'rectal diseases'.⁵⁰ In 1869 the finance committee reported that the last three years had seen an excess of expenditure – now running at about £2,700 to £3,300 – over income of around £1,000 per annum. In order to curtail this, the number of beds was reduced from 34 to only 22, and the surgeons were once again asked to reconsider their expenditure on drugs. Peter Gowlland suggested that possibly the advertisement of the hospital should be altered further, not to mention fistula at all. He also wondered whether patients should be asked to contribute towards their treatment, or that the governors should be given more privileges.⁵¹

It was decided that the inclusion of the hospital's disastrous financial figures could only dissuade rather than encourage potential donors, and that the financial statement should therefore be omitted from the *Annual Reports*, with a note that 'no useful information' emerged from it and that it required 'extra trouble' to compile.⁵² The newly appointed house surgeon in 1870, David Goodsall, showed an early commitment to the hospital in its moment of crisis by agreeing to halve his salary, from £100

to £50.⁵³ However, in the 1870s there appeared a new and very generous donor, who went by the initials E.N. All that was known of the mysterious donor was that he was male. He began to make almost annual donations of £1,000. It was now over a decade since the hospital had received regular large sums, from George Holgate Foster. A ward had been named after Holgate Foster, and now E.N. too had a ward named after him.⁵⁴

In 1871 the committee of management, after a certain amount of dissension amongst themselves, decided that the hospital was recovering sufficiently for them to accept William Allingham's proposal that a second assistant surgeon should now be appointed. David Goodsall, reaping his reward for his earlier sacrifice, was duly chosen. David Henry Goodsall (1843–1906) was born in Gravesend. His father, a medical student at St Bartholomew's, died as the result of a fingerprick received when he was helping with a postmortem, leaving his family unprovided for. Goodsall was first apprenticed to a chemist in the City, later entering St Bartholomew's, with his fees waived since his father's fatal wound had been inflicted by a member of staff. To support himself during his studentship he served as an assistant to a surgeon practising in Finsbury Square, later becoming the assistant there of Peter Gowlland. With his help Goodsall became house surgeon at St Mark's in 1870. He was the first member of the staff at St Mark's to move from this position to that of assistant surgeon, beginning a tradition which held sway at other hospitals and which became increasingly accepted at St Mark's: assistant surgeons were recruited from amongst those who had already served as house officers. Subsequently Goodsall became a surgeon at the Metropolitan Hospital in the City, a hospital with which later surgeons at St Mark's were often connected. He also served on the staff of St Saviour's Hospital and was active in the affairs of the Medical Society of London. He re-affirmed his links with St Mark's by marrying the daughter of a governor, James R. Pike, an associate of Merriman and eventual Prime Warden of the Dyers' Company.⁵⁵

The medical establishment retained their animosity towards special hospitals, and in 1873 St Mark's became a specific target. The *British Medical Journal* picked out the advertisement by St Mark's in the daily papers, and condemned it for claiming that 'this hospital is the only one existing for the relief of a painful and distressing form of disease'.⁵⁶ This, it was argued, was a '*suggestio falsi*', not so much because of St Martin's but because general hospitals treated fistula. Despite this warning, St Mark's continued to claim that it was 'the only hospital in England for the relief of diseases of the rectum'.⁵⁷

With the increase in the number of hospitals, all competing for charitable assistance, their needs became increasingly well known. One reflec-

tion of this was the creation of the Hospital Sunday Fund. The collection from all churches was set aside on a particular Sunday once a year, the proceeds going to hospitals. The first such systematic collection was in Birmingham in 1859. It was not until 1874 that a Fund was formed for London, as the Bishop of London was opposed to it, since he had his own fund and he did not want money to be given to nonconformist dispensaries.⁵⁸ A governor of St Mark's reported that he had seen an article in a newspaper in 1872 which referred to a plan for a London version of the Hospital Sunday Fund. The committee of management recommended that the treasurer should consult with the treasurers of other London hospitals regarding the Fund's establishment and the subsequent distribution of the money. In 1874 the Hospital Sunday Fund raised £26,600, four-fifths of which went to hospitals with the remainder going to dispensaries. St Mark's received almost £290, a significant recognition of the hospital's status in lay eyes.⁵⁹

The St Mark's *Annual Reports* increasingly reflected the need to encourage potential benefactors. City companies which made donations received particular thanks, and any especially generous gift was mentioned. In order to strengthen the personal ties of subscribers to the hospital, individuals were frequently singled out in the reports. When long-standing donors died, their names were mentioned, which must have helped consolidate personal links between particular families and St Mark's. Gifts in kind were also acknowledged from the mid-1870s. In the report for 1875, for example, Mr Cyril Flower was thanked for the gift of 'a valuable airbed, expensively fitted with all the latest improvements', Mr James for a parcel of books for the patients' library, Miss Stewart Beattie for a collection of geraniums, Mr T Jones Gibb for a gift of fruit, and the Spitalfield Bible Flower Mission 'for a constant supply of small bouquets for each patient from the early Spring till late in the Autumn'.⁶⁰

During the 1870s, as the business of the hospital increased, its organisational structure was tightened. A secretary already experienced in hospital management was appointed in 1871. The governors, however, continued to wish to be actively involved in the functioning of the hospital. For some years two members of the committee of management had been delegated the task of making a regular visit to the hospital to check that all was well.⁶¹ In 1871 and in 1872 the visitors expressed dissatisfaction with the state of the hospital. A member of the committee of management, John Crawford, therefore urged

The importance of giving one of the officials chief control [over the hospital], and of making that person directly responsible to the committee for the proper management of the domestic arrangements, and state of the hospital generally . . .⁶²

ST MARK'S HOSPITAL, LONDON

Crawford also recommended that a permanent house committee should be elected to pay far more attention to the weekly affairs of the hospital. The committee of management agreed, and resolved that it should consist of the members of the finance committee, Crawford himself, Gowlland and Allingham. Its remit was somewhat more limited than Crawford had suggested, as was implied by the presence of the finance committee on it: the house committee was instructed 'to enter into contracts for supplies and to superintend the domestic economy of the House'.⁶³ It was, in other words, to form another check on expenditure in the hospital rather than necessarily to improve the arrangements within the hospital.⁶⁴

Salmon's retirement and death had their impact on the hospital's progress. However, the number of patients treated continued to increase, even though St Mark's suffered from the restrictions of limited resources: the governors therefore spent most of their time thinking about better ways of raising money and of improving efficiency. The creation of another institution treating the same disease did not, in the end, materially affect the hospital, although the burgeoning of special hospitals generally meant that St Mark's had to reconsider how best to compete for funds.

CHAPTER VI

An old and valuable charity

St Mark's, 1876-1896

In the last quarter of the nineteenth century the committee of management at St Mark's stressed that the hospital was long-established, in comparison with other special hospitals. They were faced not only with competition for benefactors but also a new threat to hospitals: their usefulness was fundamentally questioned, since they themselves seemed to be hotbeds of infection. The committee of management made strenuous efforts to find a new site and rebuild the hospital according to current notions of hospital design: they failed to achieve this, but instead added to the old hospital so that, in effect, it doubled in size.

A fierce debate raged in the 1860s and 1870s over whether hospitals were the best places in which to cure patients. Although St Mark's had been built on its City Road site with good ventilation in mind, its setting was traditional: it was in a densely populated section of London. The new notions of hospital design stressed that a good circulation of fresh air should ventilate all parts of the hospital, with wards separated from each other, and with plenty of space round the building. A favoured design was the pavilion plan, used at Lariboisière in Paris, and subsequently at the Netley Hospital near Southampton and the new St Thomas's on the Thames Embankment. Many proponents of reform took the argument further: they believed that hospitals should be removed to healthy places in the country, and built perhaps on a hill to allow good circulation of air. As a compromise between those who argued for removal, and the medical staff who wished to keep their institutions in the city, since that was where they carried out their private practice, Hampstead became a favoured place for the rebuilding of hospitals. It was set above the Thames valley and was thought to be airier and more salubrious than the city.

When Salmon was the only surgeon at the hospital, there were few complaints that 'hospital diseases' were a recurrent problem. Of course, it was largely after he had retired that this became a significant concern for medical practitioners and hospital governors. However, the evidence indicates that the problem became more acute with the appointment of other surgeons. Salmon's practice, both hospital and private, was in the treatment of rectal disease. Moreover he had no other hospital appointment. On the other hand, his successors often had wider practices, and they all held appointments at other institutions, often treating a range of complaints. Only one case of tetanus and no cases of pyaemia had occurred

in Salmon's treatment of piles at the hospital. However, in the spring of 1858, after Lane and Gowlland's arrival, there were four cases of tetanus after operations for piles. It was noted, in addition, that this was a year when there were many cases of tetanus in the London hospitals.¹ Although the incidence of infection occurring after operation was not high at St Mark's, it is quite possible that it was spread by the surgeons as they moved from one institution to another.

When such infections occurred, patients were usually discharged, the hospital disinfected, and normal routines resumed. However, in the 1870s concern about infection took a more concrete form. In 1871 the two governors who regularly visited the hospital reported that the wards were damp and cold: they feared that this was not conducive to recovery.² Further complaints were made in 1872, and a warming and ventilation sub-committee was established which recommended that 'warming apparatus' and a 'ventilating system' should be installed, less for the patients' comfort than to ensure that the environment would not breed disease.³ The committee of management explained to the governors at their Annual General Meeting that 'the tardy process of healing' could, in some instances, be attributed to 'defective ventilation, and insufficient means of warming the wards in cold weather'.⁴ The new system was to be tried first in Holgate Foster ward, and used elsewhere if successful. The hospital was repainted, also to help clear contamination, even though it had been closed for cleaning and painting only three months earlier.

Concern about the level of infection in the hospital persisted: in July 1873 the walls of all the wards were washed with 'disinfecting soap' and water, and the ceilings limewashed.⁵ In October a case of typhoid fever appeared amongst the patients in the hospital, and the committee of management ordered that the drains be thoroughly examined, to seek 'any cause likely to generate typhoid fever',⁶ basing their recommendation on the notion that miasma emanated from rotting organic matter which could 'generate' disease. They also recommended that the 'water fillers' be examined: it was increasingly accepted that water could carry infectious material. By January 1874, the 'sanitary improvements' were in place.⁷ The internal arrangements of the hospital were altered to allow 'much additional cubic space to each bed'.⁸ All did not progress well, however, as in the spring of 1876 Peter Gowlland complained that smoke was entering the ventilators from fireplaces in the wards and being spread around the hospital.⁹ That summer the committee of management and the medical staff reassessed the incidence of infection in the hospital and concluded that the alterations had not made a great difference. It was therefore decided that more radical measures needed to be taken and that the hospital should be moved to 'a more open and airy locality'.¹⁰

In January 1877, after rejecting a plan from an architect (an honorary

governor named Mr Oakley) to improve things further in the arrangement of the hospital, the committee of management resolved 'that the Corporation of London, and the Great City Companies be solicited to contribute to a fund of £20,000 to be raised for the purpose of building a new hospital'.¹¹ Members of the committee and the architect began to look for a suitable new site and a committee was set up to oversee the project. The new scheme was put to the Annual General Meeting: it needed some careful explanation since the hospital had only been on its current site for a little over 20 years and its full potential had not yet been realised, since it had never accommodated the number of patients originally envisaged. The committee reported that structural alterations had been made because 'patients in the Hospital did not recover from operations as rapidly as was possible'. Moreover, 'all the drainage and sanitary arrangements have been thoroughly overhauled'. However, the cubic space allotted to each bed was still not entirely satisfactory.¹² Mr Oakley's plans would require an additional floor and lateral extensions, at a cost of over £6,000, but only increasing the number of beds by six, once all the others had been given more space. The committee therefore recommended that

... it is expedient that a new Hospital be built, or that a sanitarium be founded, instead of expending a large sum on alterations of the present building.¹³

Sanitaria, to which hospitals could send convalescing patients, were becoming increasingly popular solutions for many institutions, and St Mark's already sent patients to convalesce at the seaside. However, this was a compromise and the committee of management made it plain that they would rather move the whole hospital.

As a first step towards raising the requisite money, it was decided that the list of vice-presidents of the hospital should be augmented by the names 'of prominent members of the aristocracy, and leading men of the professions'.¹⁴ During the year, there was little evidence that this was achieved, and in fact the hospital suffered the blow of a non-cooperative Lord Mayor. It had become a standard procedure for a deputation from the hospital to approach each Lord Mayor to request his patronage, and so far none had refused. However the Lord Mayor for 1877-1878, Thomas Owden, a merchant in the City and a member of the Innholders and Loriners Companies (neither of which contributed to the hospital) refused to be president, demanding at the very least a written invitation. The deputation found him 'discourteous and disagreeable' and they eventually decided not to pursue the matter, and the relevant *Annual Report* omitted to name a president at all.¹⁵ In the first year of the appeal, only one-tenth of the required amount of £20,000 had been raised.¹⁶ The

absence of a fund-raiser with the abilities of Frederick Salmon was marked.

Infection in the hospital continued to be a problem. Gowlland maintained that it was due to the 'decaying state of the specimens in the museum from which the preserving spirits had partially evaporated'. It was recommended that an iron building – which would not be able to harbour contamination – should be erected to house them on the roof of the hospital or to one side of it. It was hoped that thereby the 'unhealthy state of the hospital atmosphere' and its 'insanitary condition' would be cleared up.¹⁷ However, in the end the specimens were simply relegated to the basement where they became so 'dilapidated' that they had to be thrown away in 1883.¹⁸

Despite the failure to raise sufficient money, negotiations were under-way by early 1879 for a site

... which in point of healthiness will yield to none in the neighbourhood of London, and which will in point of convenience of access be acceptable both to patients, medical officers and subscribers.¹⁹

The new site was in Hampstead. However, no mention whatsoever was made of this site in the following year's report: the negotiations seem to have fallen through, perhaps because insufficient money was forthcoming. Moreover, by the late 1870s, as the germ theory was beginning to be accepted, the notion that hospitals needed to be in the country was beginning to be challenged: infection could be reduced by the use of antiseptic methods during operation. This change of emphasis encouraged the governors and staff to pursue another option in 1880: building on the land occupied by the rice mills at the back of the hospital, which now came on to the market.²⁰ The price was agreed at £7,100, but even this more limited venture was disapproved of by at least one governor who resigned from the committee of management, theoretically because he was too busy, but noting as he went that the committee had a tendency 'to attempt too much with limited means'.²¹ By taking out a loan of almost £4,000, the site was bought. Until the debt was paid, there could be no plans to expand the hospital, but it was hoped that eventually an adjoining building could be erected which would allow room for a total of a hundred beds: it was estimated that at least £10,000 would be needed for that purpose. In the meantime, the land was leased as before to the owner of the rice mills.²²

The hospital continued to be plagued by infection: a case of scarlet fever in March 1882 prompted the closure of the hospital for eleven weeks for cleaning, purifying and total repainting. Fifteen new iron bedsteads, designed not to harbour infection as wooden ones were considered to do, were ordered.²³ A year later the hospital was again closed,

this time for two weeks, for fumigation and the removal of 'sources of contagion' after a few cases of erysipelas had occurred. Walls and ceilings were washed and whitened.²⁴ Among the gifts to the hospital that year, which no doubt were put to good use and probably encouraged future purchases, were six two gallon filters and one hundredweight of disinfecting powder from Messrs Atkins and Co, of Fleet Street.²⁵

For the moment, plans for expansion were put in abeyance: funds were insufficient. Legacies and donations continued to be received by the hospital, but at unpredictable rates. The number of annual subscribers was slightly declining.²⁶ However, a significant number of City guilds were now contributing to the hospital and their donations formed a major part of the hospital's income, which now ran at about £3,300 a year. The guilds tended to be more generous when contributing towards a particular cause, and thus the creation of the Building Fund immediately secured about £700 from a total of 11 companies, and the Corporation of the City of London made a grant of £250. Some money was received each year from the Hospital Sunday Fund. By the mid-1870s this had been joined by another body raising money for hospitals, the Hospital Saturday Fund. Its origins were somewhat different from the Hospital Sunday Fund, and that was reflected in its purpose. Groups of workmen began by clubbing together, making a weekly contribution which was then passed to hospitals. It was hoped that when a particular workman became ill he would be able to receive treatment at a hospital to which his workmates had been contributing. After all, employers frequently contributed to hospitals in order to acquire admission tickets for their employees. Some hospitals did grant admission tickets in return for such subscriptions, but once the Hospital Saturday Fund was centralised, operating nationally and raising money on a penny-a-week basis from workmen, many hospitals became wary of their obligations regarding admission. In some respects the scheme could be interpreted almost as insurance, implying right of admission to the hospital. St Mark's first received a grant from the Hospital Saturday Fund in 1874 of £31 16s 4d. As time went on, the amounts grew – by 1886 the amount had doubled – but so too did the demands of the Fund.²⁷

In 1878 there was a note that the Hospital Sunday Fund had applied for admission letters. St Mark's had no printed letters, since patients were admitted according to the nature of their ailment and only assigned to governors to fulfil the rules. However, the hospital did not want to dissuade the Fund from making its substantial contributions, and admission letters were therefore specially printed.²⁸ Two years later, the Hospital Saturday Fund was making the same enquiries, to which the hospital replied that 'we do not issue letters but any patients recommended by them will be admitted if there is vacant accommodation'.²⁹ By the late

1880s, the medical profession was becoming concerned about the apparent rights the Funds claimed for admission. The *British Medical Journal* in 1889 argued that the Hospital Saturday Fund was in danger of establishing 'a moral if not a legal claim' to treatment.³⁰ In this area, hospital governors supported their physicians and surgeons. St Mark's received a letter from the secretary of the Hospital Saturday Fund in October 1892, stating that:

I am instructed to inform you that Mr Game of 165 Albany Road has been appointed to represent this Fund as an annual Governor of your institution.³¹

The committee of management did not care for such instructions. The hospital secretary responded:

I am instructed to say in reply that the committee has no power to recognise the appointment of a Governor by the Committee of the Hospital Saturday Fund.³²

With the Hospital Sunday Fund contributing larger sums to St Mark's, and with the more elevated social origins of those who ran it and contributed to it, the hospital was a little more careful in its dealings with this organisation. When in 1895 the Fund requested a deputation to explain why the administration of the hospital was so costly, a deputation was duly sent.³³

By the 1880s, the two Funds were not the only groups contributing to hospitals and expecting a return for their gifts. The vestries of parishes and church charities, responsible as they were for the poor of their locality, also felt that it was appropriate to make donations, to ensure that the sick would receive assistance. They gave to the voluntary hospitals even though workhouses nurtured the sick amongst the very poor, and this was becoming institutionalised from the late 1860s as the Metropolitan Asylums Board established hospitals in London. In the early 1880s, benefactors of St Mark's included the trustees of the United Charities of St Olave and St John, the parochial charities of St Giles, Cripplegate, the vestry of the United Parishes of St Lawrence, Jewry, and St Mary Magdalen, Milk Street, and the trustees of the parish estates of St Mildred, Bread Street.³⁴ Philanthropic individuals, too, grouped together to make donations to the hospital. In the mid-1880s, the East London Association for Promoting Life Governorships of Hospitals was formed, and began to forward donations of around 20 guineas to the hospital, making three such donations between 1885 and 1890. Another body formed in the late 1880s was the St James' Philanthropic Society, whose address was Sam's Coffee House, St James' Place, Aldgate. This had produced two donations of ten guineas each by 1890.³⁵ There was also a growth in the

number of workmen's self-help groups, seeking to insure themselves against the possibility of ill health. The employees of the City of London Brewery Company, for example, had established their own hospital fund, and in 1889 made their first contribution to St Mark's of five guineas. The employees of Messrs Thomas de la Rue had been making donations of a similar amount for almost a decade. The Drovers' Benevolent Institution also made a donation, of 20 guineas.³⁶

Legacies remained crucially important to the hospital. In the 1840s, there had been four legacies only, amounting in total to £1,355. In the following decade that number quadrupled, producing £8,880. The product over the 1860s dropped slightly, to £7,188, but 25 legacies were received. In the 1870s, 40 legacies produced just over £8,000 while in the 1880s the amount given rose dramatically to almost £18,000, the product of 36 legacies. As a notable recognition of the hospital's status, when the Earl of Shaftesbury died, he left instructions for a portion of his estate to be divided into 50,000 shares for charitable institutions of which he nominated 100 to St Mark's.³⁷

Salmon's sister-in-law and other relatives left money to the hospital, and in 1882 a legacy was received from one of Salmon's sons. Salmon had had three sons, one of whom died young. When William Mayer Salmon died in 1880 leaving a large amount of money to the hospital, his will was immediately contested by his brother Percy. William had left a legacy to his natural son, William Sizmur, and to Sizmur's mother, Fanny. The remainder was first to go to William Salmon's mother, Clara, and on her death, to St Mark's. (Frederick Salmon himself had specified that if his sons died without children the money that he left to them would then go to the hospital, and William Sizmur's illegitimate status may have complicated William Salmon's ability to leave him his whole estate.) The will had been written in 1869, and Clara had died in 1877. Percy Salmon contested the will claiming that William, who had been a civil servant in Bombay, had been suffering from sunstroke in 1869. Eventually the hospital decided to avoid litigation and to grant Percy £100 a year for life, together with a lump sum of £200.³⁸ The hospital received the legacy, paying Fanny and William Sizmur their portions, and retaining over £6,000 for its own use. The case did not rest there: Percy made other claims and after his death in 1893 his widow claimed his allowance, which the hospital refused. She did not give up at this point, and made frequent representations to the hospital for financial help, writing to its aristocratic benefactors and finally claiming that Frederick Salmon intended the whole hospital to revert to his descendants.³⁹

The committee of management constantly cast about for ways of encouraging regular subscribers. The amount of advertising undertaken was expanded. In 1879, for example, adverts were placed in *The Times*,

Daily Telegraph, *Daily News*, *Daily Chronicle*, *Morning Post*, *Standard*, *Morning Advertiser* and *Lloyds Weekly News*, mostly for three issues in a row.⁴⁰ It was stressed that the diseases treated by the hospital afflicted not only sufferers, but also their families. Many patients, it was emphasised, were either cured or sufficiently relieved

... to enable them to resume their labours: a matter of vital importance not only to themselves, but in very many instances to aged parents and young children who were dependent upon them for their daily bread.⁴¹

The hospital had reverted to the older, straightforward method of counting patients, but in 1876 Peter Gowlland once again pointed to the inflation practised both at special and general hospitals, presenting statistics which showed that the system followed at other institutions put St Mark's in 'an unfair position' when its admission figures were compared with those of other hospitals.⁴² The *Annual Report* of that year began as usual by noting the number of patients treated, but adding a new point: 'It should be borne in mind that at St Mark's the patients are only counted once, however long they may have been in the hospital'.⁴³

By the 1890s, St Mark's was competing not only with general and other special hospitals, but also with an increasingly successful competitor in the treatment of rectal diseases. In 1884 the Western Hospital for Fistula, Piles and other Diseases of the Rectum (renamed in 1886 as the Gordon Hospital after Major General Charles Gordon), was established at 278 Vauxhall Bridge Road, with ten beds, a consulting physician and two surgeons. Its staff from the first was relatively impressive. The 'physician', Francis Laking, was in fact a surgeon-apothecary, with royal appointments. He was also visiting apothecary to St George's Hospital where he had served as house physician. Samuel Benton, one of the surgeons, was on the staff of St George's Dispensary, held other minor hospital and dispensary appointments, and had served as house physician at St Bartholomew's. He had also written a book and several articles, including one on 'The management of haemorrhage after rectal operations'. His colleague, WT Whitmore, held three other appointments, and all three men held appointments with the Army.⁴⁴ A year after its establishment, the Western Hospital advertised in the *Medical Directory* listing, in addition to the staff mentioned above, an anaesthetist, a resident matron and a secretary. Most importantly, it had beds not only for the 'necessitous poor' but also 'private wards for paying patients'.⁴⁵ The Western Hospital thus started off on a different footing from St Mark's, and as such it reflected a change in attitude amongst the governors of the hospitals themselves. Special hospitals had always attracted patients above the class of the deserving poor, and one proponent of hospital reform, Henry Burdett, had suggested from the mid-1870s that hospitals should

be established specifically for paying, middle-class patients to avoid their 'abusing' the charity of the voluntary hospitals. During the 1880s and 1890s private nursing homes and hospitals were established, although with mixed reactions from the medical profession.

For a while, St Mark's ignored the newcomer, just as it had ignored St Martin's. By the early 1890s, however, this seemed no longer possible. The *Annual Reports* began to make implicit reference to the Gordon Hospital in defending their own case against it.

The Committee earnestly appeal to the benevolent public to assist this old and valuable charity, and in doing so would point out the fact that St Mark's Hospital was the first, and for half a century the only *Special Hospital* in the Kingdom for the treatment of Fistula, Piles and the other painful and distressing diseases of the Rectum ⁴⁶

Its old-established reputation meant that it was doubly useful: not only had it assisted patients, it had also taught other practitioners. The practice at St Mark's was

... freely thrown open to the medical public, an increasing number of whom, both native and foreign, avail themselves yearly of the privilege afforded of studying these painful diseases in all their varieties.⁴⁷

The St Mark's reputation was well-established both in the medical profession and among patients, it was maintained:

... patients from all parts of the Kingdom, as well as from abroad [have] been received within the wards, many of whom have become donors or subscribers in recognition of the treatment and benefit which they received.⁴⁸

Even though St Mark's was tacitly admitting the existence of its newer rival, it conveniently forgot the older predecessor: it was reiterated that St Mark's was the first and, 'until within the last eight years, *the only Hospital in the Kingdom exclusively devoted* to the treatment [of rectal diseases]'.⁴⁹

The reputation of St Mark's was perhaps higher overseas than in Britain: practitioners there were not in competition for the patients treated at St Mark's and they were not involved in the British controversies over specialism. It had been noted in 1870 that

... a large number of medical men, amongst whom may be named surgeons of the Indian army, natives of India studying surgery in this country, with surgeons from France, Germany, and America, have been frequent visitors to the Hospital, and have not only witnessed the operations, but have listened to lectures by your senior surgeon [Gowland] on the cases operated on, as well as on the general treatment of the classes of disease which are received into it.⁵⁰

Other information confirms this picture. In the text books of Allingham, Cooper, Goodsall, and Swinford Edwards, references were made not only to highly placed British surgeons, but also to foreigners. Although such references reflected well on the authors themselves, the evidence is far more plentiful than that in Salmon's books, and is corroborated by other information as well. Allingham mentioned such British establishment figures as Sir James Paget, Sir William Gull, William Ord and T Carr Jackson (whose son became a house surgeon at St Mark's) as his friends and associates. Allingham's book on the treatment of rectal diseases went through seven editions as well as being translated into French, Italian, Spanish and Russian and explicitly encouraged visitors to the hospital. The link in the nineteenth century between St Mark's and American surgeons was particularly strong. S G Gant frequently referred to the Allinghams in his text book on rectal diseases (Herbert Allingham wrote two chapters for his 1896 edition), J Marion Sims, a prominent American surgeon, attended Allingham's practice at St Mark's, and Joseph Mathews, who was the first president of the American Proctologic Society founded in 1899, stated in his text book of 1893 that he was deeply indebted to William Allingham, whom he had visited at St Mark's.⁵¹ The editors of the *International Encyclopaedia of Surgery*, published in 1886 in New York, asked Allingham to write about diseases of the rectum and colon.⁵² Moreover, a replica of St Mark's was established in New York City in 1879, initially under the name of The Infirmary for Haemorrhoids, Fistula and Other Diseases of the Rectum and subsequently as St Paul's Infirmary. Its founder, Charles Boyd Kelsey, stated in the Infirmary's *Annual Report* that it was 'founded on the same plan as ST MARK'S HOSPITAL in London', and in his description of the hospital Kelsey closely paraphrased Salmon's original address on the foundation of the Fistula Infirmary. Kelsey believed that St Paul's was the only hospital of its kind in America: however, it was not long lived, and the Infirmary closed at some time, probably in the mid-1880s.⁵³

In the standing of its medical and surgical staff, St Mark's showed increasing signs of being securely established. In 1879, the honorary physician, Arthur Leared, died. He was replaced by Francis de Havilland Hall (1847-1929), who was nominated by William Allingham and Samuel Merriman. Whereas Leared had trained in Dublin, Hall (the son of a doctor) had been a student at St Bartholomew's Hospital and had held house jobs there, and had acted as physician to the Metropolitan Dispensary. In the mid-1870s Hall became assistant physician in the throat department at the Westminster Hospital, becoming full physician in 1896. In 1881 he became a Fellow of the Royal College of Physicians, acted as a censor at the College and gave the Lumleian Lectures in 1913.⁵⁴

The same pattern of increasing prestige can be seen in the surgical appointments. In 1885 Peter Yeames Gowlland retired, having served for 28 years. Provisionally Alfred Cooper was appointed full surgeon in his place, while the hospital went through the formalities of advertising in *The Lancet* and *British Medical Journal*. That they were formalities was confirmed by the decision to fill Cooper's own position as assistant surgeon immediately. His provisional appointment was also mentioned in the advertisement. Not surprisingly, therefore, there was only one applicant for the position: Alfred Cooper. Cooper's meteoric rise amongst the aristocracy had continued. In 1882 he married Lady Agnes Duff, the third daughter of the Duke of Fife.⁵⁵ He was appointed by the Duke of Edinburgh as surgeon-in-ordinary and was present at the marriage of the Duke in St Petersburg as surgeon-in-waiting to the Prince of Wales. (He received the Order of St Stanislaus from the Csar.) He was knighted by Edward VII on his coronation in 1902, and he became a member of the council and subsequently a vice-president of the Royal College of Surgeons. It was noted in his obituary that 'he never professed to be highly skilful as an operator of the modern type' and that he was 'not among those who made use of learned societies' but that he was kind and able.⁵⁶ His younger colleague, Swinford Edwards, remembered that 'whether at a patient's bedside, at a Masonic banquet, or amongst the grouse, he was always cheerful and genial'.⁵⁷ Cooper's specialisation in venereal diseases as well as rectal afflictions proved very lucrative, and on his death in 1908 he left an estate valued at £14,250.⁵⁸ His carriage became well-known in aristocratic circles as the 'clap-trap' as it stood outside notable doors. It was this connection that his daughter-in-law, Lady Diana Cooper, always made whenever she met anyone who claimed to have known him.⁵⁹ It was his social abilities and contacts – the Duke of Hamilton presented him with 'a charming place in the Isle of Arran' and the Duke of Devonshire hosted a dinner for him when he was knighted – which proved so immensely useful to the hospital.⁶⁰ It was from the time of his appointment as full surgeon that St Mark's began to enlist the support of the nobility and even royalty.⁶¹

The competition to take Cooper's former position as assistant surgeon was not a formality. There were five candidates, two of whom possessed the FRCS. However, Frederick Swinford Edwards defeated his main rival, Waldeman Roeckel, by 234 votes to 135. Edwards (1853–1939) was the son of a solicitor, and had trained at St Bartholomew's, where he won several prizes and served as house surgeon and demonstrator of anatomy. He then became Peter Gowlland's assistant and house surgeon at St Mark's in 1876. In 1880 he became a surgeon at the West London Hospital and in 1881 joined the staff of the infamous St Peter's Hospital for Stone. Edwards was a freemason, and a founding member, together

with Alfred Cooper, of the Rahere Lodge at St Bartholomew's. He later held high positions within freemasonry. He frequently worked in co-operation with Cooper, like him specialising in the treatment of not only rectal but also venereal disease, in which they had a reputation for treating 'the smart young men of London'.⁶²

In 1888 William Allingham, having served for 24 years, decided to resign because 'my private work interferes with the conscientious discharge of my hospital duties'.⁶³ He had a second reason, too: his son, Herbert, was now twenty-six, and just emerging from his medical training. The surgical staff recommended that David Goodsall, now assistant surgeon, move up one step to become a full surgeon and that Herbert Allingham be appointed as assistant surgeon. The committee of management duly rubber-stamped the decision, despite advertisements being placed in the medical press.⁶⁴ Herbert Allingham (1862-1904) had entered St George's Hospital in 1879, served there as house surgeon in 1883-1884, and as surgical registrar. In 1887 he became surgeon to the Great Northern Hospital, where his father was also a surgeon, and joined him in practice at 25 Grosvenor Street. Like his father, he became a leading rectal specialist.⁶⁵

Goodsall's promotion and Herbert Allingham's appointment heralded some changes in arrangements at St Mark's: both were very ambitious that the potential of the hospital should be fulfilled. It was at this time that attempts were made to develop regular courses at the hospital for training students, an aim with which Salmon would have sympathised. Moreover, teaching was an effective way of encouraging referrals for private treatment. Several proposals were put to the committee of management by the medical staff. They urged that 'in view of the increasing usefulness of the hospital, it be more extensively advertised'. The committee of management was less certain and would not promise to do more than consider this. The medical staff also argued that a course of clinical instruction be given at the hospital, commencing in May 1889. The fee for three months should be three guineas, and that for six months, five guineas. The course should be advertised in *The Lancet*, *British Medical Journal* and at least one American journal. This request was rejected by the committee of management as 'against the original scheme of the hospital'.⁶⁶ Many lay governors of voluntary London hospitals were anxious that patients should not be used as clinical fodder: they should be treated in the best possible manner, and using them as examples might conflict with good treatment. Moreover, Salmon had stated that 'free access' to the hospital should be given to members of the medical profession. However, his aim was to encourage their visits, and the establishment of a school at St Mark's was in the same tradition.

The medical staff were not happy to let the matter drop: they described

their intended scheme in detail. The course should consist of 12 lectures given once a week during May, June and July in the board room of the hospital. The fees, at the discretion of the staff, were to be divided among the lecturers, who would bear any costs of the course. Eventually the committee of management capitulated, provided that the teaching cost the hospital nothing and that it did not conflict with the surgeons' responsibilities towards the hospital. The committee was right to be wary: the medical press immediately condemned the scheme as being a means for self-advertisement, since the surgeons associated with the hospital were listed in the information about the course.⁶⁷

Herbert Allingham did not remain as long at the hospital as his father had. He was appointed as assistant surgeon at one of the large general hospitals, St George's, in 1894 and resigned from St Mark's. With his father's and his own reputation in their special area well-established by their jointly-edited textbook, he did not need to retain his position at St Mark's. He later became surgeon to Edward VII's household, and then surgeon-in-ordinary to the Prince of Wales, later George V. Herbert Allingham did not outlive his father: he committed suicide in 1904, after the death of his wife, whom he had infected with syphilis contracted while operating.⁶⁸

By the 1890s, the demand of applicants for the position of house surgeon was strong. In 1896 Ernest Miles (1869–1947) was appointed to the position, on the recommendation of Swinford Edwards and David Goodsall. Several applicants for this position already possessed the FRCS, although the LRCP or MRCS was all that was expected of them. Most had trained in London, Oxford or Cambridge. Most of them went back to the provinces, gaining positions at local hospitals, and building up private practices. However, in the 1890s there were three highly qualified house surgeons from Australia, including Arthur (later Sir Arthur) Murray Cudmore, who returned home to hold positions at Adelaide Hospital and University. From then on, a number of Australians served at the hospital. (See Appendix II.) Another house surgeon who followed a notable career was Edward Canny Ryall, an Irishman who failed to gain appointments in the London teaching hospitals and therefore founded a genito-urinary hospital, All Saints' (there being few saints' names left to choose from).⁶⁹

In the 1890s the governors thought once again about expanding the hospital. In 1886 the site of the rice mills had been let to an annual tenant so that when the hospital wished to reclaim it, it could do so.⁷⁰ When the honorary architect, Mr Oakley, resigned in 1891, his replacement Mr Rowland Plumble, FRIBA, of Fitzroy Square, who already had some experience of designing hospitals, wanted to set a scheme in motion immediately. He therefore offered – free of charge – to draw up a plan to extend the hospital. The offer was accepted, and a plan was selected which

projected an extension costing £9,500.⁷¹ The matter now became urgent. A patient developed erysipelas after an operation in the autumn of 1893 and the medical staff were sufficiently concerned that it would spread to other patients that they discharged all who could be moved and refused to admit new cases. Within a month only six patients were left in the hospital.

Swinford Edwards and Herbert Allingham then reported on the sanitary condition of the hospital, concluding that Plumbe should make a thorough investigation of the drains and that Dr Emanuel Klein, bacteriologist at St Bartholomew's, should be brought in to analyse some cases.⁷² Klein took samples of rectal membrane from three patients. He reported that there seemed to be no evidence of germs or microbes present, yet ulceration had occurred: he concluded that 'the Wards per se have nothing to do with the causation of the ulceration'.⁷³ He was perplexed as to what had caused the ulceration. When surgeons such as Goodsall and Lockhart-Mummery later discussed this incident they argued that the problem was lack of aseptic precautions during operations. Despite Klein's conclusion that the ward arrangements were not at fault, the plans for the rebuilding continued apace. The budget was increased to £15,000 and a tender was accepted from Messrs Treasure and Sons. An agreement was reached with the tenants in Pickard Street that the new building should rise only to sixty-one feet, and that a boundary wall should be erected. On the City Road side was a congregational chapel, whose infants' schoolrooms would adjoin the extended hospital, and arrangements were made to ensure that these had sufficient light. All inpatients were discharged in autumn 1894.⁷⁴

The committee of management argued their case for rebuilding at the Annual General Meeting in 1895: 'strong representations' had been made by the medical staff, to the effect that the sanitary arrangements of the hospital were not 'in accordance with the requirements of modern knowledge' and that therefore radical alteration was required, including a new operating theatre on the top floor. The extension would also allow the hospital to improve accommodation for the nurses.⁷⁵ In January 1896, 'The New St Mark's' – double the size of the old hospital – opened for patients. Owing to a deficit, however, investments had to be sold, and the governors could not afford to open all the wards.⁷⁶

Shortage of funds had become a common problem among the London hospitals. Even the largest and best established general hospitals with large endowments closed wards in the 1890s for lack of money. It was at this point that the first attempt was made to coordinate the activities of the London hospitals, an aim long held by Henry Burdett. Burdett was the force behind the creation of the Prince of Wales' Hospital Fund for London, set up in 1897, Queen Victoria's diamond jubilee year. It was to

AN OLD AND VALUABLE CHARITY

be a charity which built up a large endowment, the interest of which could be used to assist the London hospitals. Unlike other charities, however, the Fund from the first expected to exert influence over hospitals' affairs – in terms of internal efficiency, or over relationships with another institution. In 1897 St Mark's received 50 guineas from the Fund. The governors were not happy with this amount, but it was partly because they did not receive what they saw as adequate grants from the Fund that it became increasingly influential in the first half of the twentieth century in the hospital's affairs.⁷⁷

As the nineteenth century closed, St Mark's was in a potentially strong position. It was well-established, much larger than most special hospitals, and attended by a staff of surgeons who were not only leading in their field, but also advancing socially in a way which was vitally important to St Mark's. It needed these advantages: as hospitals came under financial strain in the 1890s there was talk of concerted action to close small specialist institutions. Witnesses giving evidence to the Select Committee of the House of Lords on Metropolitan Hospitals (1892) argued that most were conducted for the special benefit of members of their staff, not because of a public need, and their growth should be checked.⁷⁸ Those at St Mark's ignored such criticisms and set about recouping their debt.

CHAPTER VII

The afflicted poor

Patients at St Mark's in the nineteenth century

The hospital had been established to relieve the sufferings of 'the afflicted poor': the patients in the nineteenth century, however, prove somewhat elusive to historical analysis.¹ Who they were, where they came from and what their experience of the hospital might have been like are all difficult questions to answer. Information can be pieced together about the governors and medical staff from hospital records; there are very few remaining records which even mentioned the patients. Most medical records from the nineteenth century, where kept, were thrown away at the beginning of the twentieth. The medical staff published their experience of particular cases, but they did not carry out statistical analyses which would have required keeping systematic records over a long period. The patients themselves left few records behind, although there were some grateful letters and a few complaints. However, some picture can be gathered from the scraps of evidence that do remain.

When the Fistula Infirmary was established in Aldersgate Street, the City of London was densely populated. By the time that the hospital opened on the City Road site, that population was moving outwards, crowding into the area around St Mark's and into Islington. Between the censuses of 1861 and 1881 the City of London's population more than halved from 113,000 to 51,000. Meanwhile, around Old Street, close to City Road, the numbers in each house doubled. In the district of St Luke's itself, which included the new hospital, there were house clearances, with 550 houses being demolished in the 1870s; however, most of the population stayed on, crowding into the remaining tenements. Some joined those from the central areas of London in moving a little further out: between 1851 and 1881, the population of Islington rose by almost 110,000. In the nineteenth century, many of the patients from St Mark's probably came from these areas.

The occupations of those living in the vicinity of the hospital changed slowly over time. Significant numbers at mid century were involved in retail, distribution, transport, storage and building, or the furniture, metal and engineering, printing and paper industries. Others were employed in the clothing or boot and shoe trades. About half of those living in the area would have been artisans, skilled labourers and lower class traders, with the rest mostly unskilled labourers. By the end of the century

THE AFFLICTED POOR

the number of Londoners involved in administration or clerical work was rising steadily, representing about eight per cent of those employed.²

The diet of the poorer classes was meagre in the nineteenth century, although it steadily improved as transportation and distribution developed and as legislation was gradually brought to bear to improve standards. Consumption of meat increased, but frequently the meat was partly decayed, of poor quality or infected. Attempts to improve standards were circumvented, not only by meat sellers, but also by their customers who sought lower prices. Bread and potatoes were staples in the diet, but flour was frequently adulterated with alum or thinned with sawdust. Milk and beer were watered down for the poorer classes and there was a danger that milk was contaminated with tuberculosis or other diseases such as typhoid. Butter, where used, was usually adulterated with animal fat or potato starch. Life expectancy during the nineteenth century reflected poor conditions, but also a gradually improving standard of living: between 1838 and 1854 for males it was around 40 years but by 1890 had risen slightly to 44. Women's life expectancy rose at the same time from 42 to 47. However, those figures are overall averages, and the poorer classes within the cities would have had shorter life expectancies.³ Overcrowding and insanitary conditions were typical of the area around St Mark's. Disease was endemic, with many complaints relating to poor conditions, spread easily in the overcrowded tenements or carried through the water supply. There were several epidemics of cholera, typhus and typhoid in nineteenth century London; there was a high incidence of tuberculosis (although this was declining by the end of the century), and venereal disease seems to have been widespread.

In the early part of the nineteenth century, patients usually turned to hospitals as a last resort. However, as the century progressed the number of outpatients rose sharply. The increase in popularity of the hospitals was an earlier development at the special institutions, as patients sought specialised care and where treatment was more likely to be at the hands of senior members of staff. St Mark's began as an outpatient facility, and its outpatient department always remained very important. Since recommendation letters from the governors were not essential, an attendance was not prefaced with a hunt for a governor to sign a letter. The patients queued for attention, which was given in 1835 from 12.30 on one day each week for each sex. Patients were sent away if they were deemed inappropriate applicants, a judgement based on their disease, rather than on their social status, unlike at general hospitals where a governor oversaw admissions. Each patient would be examined by the surgeon's assistant, who passed interesting or difficult cases to the surgeon. (The physician, when appointed, did not attend outpatients.) If a prescription was made out for the patient, he or she would present this to the

dispenser, who compounded the correct drugs (free of charge) or supplied instruments such as bougies. The patient was given a ticket allowing him or her to return if further treatment was necessary, either in the outpatient department or in the hospital; there was usually a waiting list for inpatient admission.

By 1845, the hours for outpatient registration had been extended. Women could attend between twelve and one on Tuesdays, with men being seen at the same time on Fridays. As a considerable extension of the system, it was also added that no patients would be refused 'admission' as outpatients if they applied between nine and ten in the morning. (Outpatients, too, were judged to be 'admitted' to the hospital – they joined its lists.) In order 'to avoid . . . inconvenience to sufferers', patients need not seek a governor's letter – an indication that nevertheless some had felt it worthwhile to do so – as they would be assigned to governors in alphabetical order on arrival.⁴ By the end of the 1840s, the official admission times were 8.30 am on Tuesdays for men and the same time on Fridays for women. As the hospital expanded the number of patients treated, hours were arranged to suit both the daily arrangements of the hospital and the patients' convenience to a greater extent. Patients were now assigned letters from governors who lived near them or to governors who were not using their right to admit patients.⁵ When the hospital moved to City Road, the admission hours were set half an hour later.⁶

In 1864 the medical staff proposed that the number of outpatient days should be increased from two to four, since there were now two assistant surgeons, William Allingham and Alfred Cooper. Each would take responsibility for one day's outpatients.⁷ Men were seen from 8.45 am on Tuesdays and Wednesdays, and women from the same time on Thursdays and Fridays.⁸ In 1868, Lane was not replaced on his resignation; there was only one full surgeon and outpatient days were therefore rearranged. On two days only new patients were seen while on the other two days the surgeons would treat outpatients already on their lists. Such patients were obliged to produce 'letters of recommendation for their admission to the Outpatients list' which would have been issued by the medical staff.⁹ A further alteration was made to outpatient days in the 1890s, when it was decided that there should be an additional session for men at 3.30 pm on Saturdays.¹⁰

When the hospital was opened, 25 per cent of its inpatients suffered from stricture, with 19 per cent suffering from piles and 17 per cent from fistula. Over the succeeding years, the number of patients presenting with fistula rose: the Infirmary's reputation for treating the complaint clearly registered among the local population. By the end of the century, fistula accounted for over 30 per cent of patients seen at the hospital. Cases of prolapse also represented a significant proportion of cases seen at the

hospital: in 1840 it was second in frequency to fistula, with more instances diagnosed than piles, although some may have been cases of 'prolapsed piles'. Patients with ulceration of the rectum, fissure, condyloma ani, and a few with malignant disease also presented at the hospital. The death rate in the hospital was always very low, partly due to the nature of the complaints treated, and partly because patients who did not seem amenable to treatment were usually sent home: the death rate ran at about 1 per cent in the 1840s, and had risen to 3 per cent by 1900 largely because more complicated operations were being undertaken.¹¹ Thus, the committee of management could happily report in 1838 that 'every operation has been attended with success' – there had been no operative mortalities.¹²

If the patient's condition merited it, the surgeon would assign him or her a place on the waiting list to become an inpatient. As at other hospitals, the patient was expected to bring sugar and tea, crockery and cutlery as well as nightclothes on admission to the hospital. In the mid-1870s, however, it was decided that it would be easier for the hospital to provide crockery and cutlery: a very careful tally was made when a patient left the hospital to ensure that no item had been stolen.¹³ In 1879, the hospital secretary was requested to obtain information on whether other special hospitals supplied tea, sugar and butter to the patients, but it was decided that these 'extras' should continue to be supplied from home.¹⁴ Once in hospital, the patients were washed, deloused, had their clothes and other belongings stowed in a cupboard beside the bed, and were assigned to their beds. From the 1880s, each bed was numbered, with the number painted on the wall at its head: a patient was then known by this number, rather than by a name. With the development of 'scientific' medicine, in which treatments became increasingly specific, it was felt necessary to identify patients in this manner so that nurses administered the correct medicine prescribed by the surgeons to the correct patients. At St Mark's it was the matron who requested this change.¹⁵ However, one move to reduce the depersonalisation of the hospital was made in 1892: on the board outside the hospital which gave admission times, 'males and females' was altered to 'men and women'.¹⁶

There were two main groups associated with hospitals, and in larger institutions in particular they hardly intersected. One consisted of the medical staff and the governors who ran the institution. The other was the group which spent most of its time in the hospital, the patients and nurses. For the patients, the nurses were probably the most important members of staff – the ones with whom they had most contact, and were socially the most similar. Many of the patients were not critically ill, and were therefore not necessarily confined to bed. The internal appearance of the hospital would thus have been much more varied, with much more

movement than today. In such circumstances, the governors were very concerned that discipline be preserved: just as they did not wish to help what they saw as the undeserving poor, so they wished to ensure that the deserving poor behaved appropriately in hospital, and better still received moral guidance while there. The patients were duly expected to behave themselves, or be ejected, whatever their ailment or stage of treatment. They were not allowed to bring alcohol into the ward, smoke, chew tobacco, play at dice or cards, or to gamble. There was to be 'no loose conduct or improper conversation' either amongst the patients or their friends, and neither were they to embezzle any of the hospital's property. Partly to avoid danger to themselves and partly to avoid high fuel bills, patients were not allowed to stir the fire or put on coals.¹⁷ Each year several patients were discharged for 'irregular' behaviour, and since only the cases of serious offenders were brought before the governors this indicated that the general level of disobedience was probably fairly high. Occasional misdemeanours which were regarded as particularly serious were recorded in the minutes. In 1871, one patient, George Webb, stole a cheque for a guinea,¹⁸ and in another incident a fight broke out between the hospital secretary and a Mr Collier, who was in the dispensary 'where he had no right to be'. The patient unsuccessfully summonsed the secretary for assault.¹⁹

It was to help ensure a moral atmosphere within the hospital that the governors appointed their Church of England chaplain. Despite the fact that there were many Catholic Irish in the East End, and that increasing numbers of Jews were moving from the East End into the City and thus into the hospital's neighbourhood, these groups were not catered for in religious terms. In fact, when a Jewish group offered to arrange an entertainment for the patients, they were turned away as unsuitable, just as the governors had declined the invitation from the black American entertainment group which offered to put on a charity performance for the hospital.²⁰ Once appointed, the Reverend George Taylor not only spoke to each patient individually, he preached both in the wards and in the outpatient department. In 1859, the governors decided to make Taylor a salaried officer, with a stipend of £50 per annum. Since this was as much as the matron herself received, the value then placed on the chaplain was apparent.²¹ When Taylor died in 1875, his replacement was probably a relative, Reverend C J F Taylor MA. It was noted at the time that another cleric, the Reverend Evan Jones, was also interested in the position.²² The new Reverend Taylor was supported by the committee of management two years later when he complained of disrespect from the male nurse on the men's ward. But he was seen as only a temporary replacement and the committee decided to advertise for 'a properly qualified clergyman' in the *Guardian* and *The Times*. However, Richard B

THE AFFLICTED POOR

Martin, a banker and the hospital's treasurer, argued that a local clergyman might fulfil the chaplain's function, indicating that already lower priority was being placed on the position, especially since the hospital was not flourishing financially.²³ Martin arranged for a friend of his, the Reverend N C Parr, to visit the hospital to assess its need. Parr declared that it appeared 'quite unnecessary' that there should be a chaplain at St Mark's. There was 'nothing like sufficient occupation' for one: the hospital servants were given opportunities to attend places of worship on Sunday and the construction of the hospital made it almost impossible to conduct services there since so few could be brought together.²⁴ One of the governors, Alderman Thomas Stone, who took a very active interest in this and other hospitals, frequently visited patients, reading them passages from religious texts. Parr declared that

I have no doubt that Mr Stone ... is an efficient visitor. He has had great practice and his whole life is a guarantee of his earnestness and devotion.²⁵

The best plan for the future, thought Parr, was to make an arrangement with a local clergyman to visit the hospital once a week to see patients and 'to celebrate Holy Communion for those who desire it', to deal with cases to which Mr Stone or the matron referred and to attend to any sudden emergency needing his ministrations. Occasionally he might publicly address all the patients in the larger wards. Parr agreed to come once a week in the meantime, and the committee concluded that, for the time being, a chaplain did not seem to be necessary. It was stated in 1879 that:

The Committee with pleasure announce the fact that the spiritual wants of the patients are well and amply cared for by the Samaritan Society of St Mark's Hospital, and by Thomas Stone, Esq, of Greenwich, all of whom kindly attend on stated days in each week for reading, conversation, and prayer.²⁶

The governors were, however, not entirely happy with this arrangement and when the Reverend N J Devereux BA, vicar of St Mary's, Britannia Street, City Road, offered his services gratuitously in 1882 as honorary chaplain, he was speedily appointed.²⁷ It was agreed that he would not have as full a task as the Reverend George Taylor: he would not, for example, preach to waiting outpatients. The committee of management therefore considered how much a pulpit might sell for, eventually accepting £3 for the one in the outpatient department.²⁸ The Reverend Devereux continued as chaplain for 14 years. In 1896 he asked for payment, but the committee of management rejected his suggestion and he resigned. The Reverend G H Perry, the vicar of nearby St Matthew's, was then offered and accepted the position; two years later he resigned, as

he had been appointed to St Luke's Church, which was responsible for the position of chaplain at St Luke's Hospital. However, he was succeeded at St Mark's by the new vicar of St Matthew's, the Reverend F Ford.²⁹

Besides being upright in their behaviour, and demonstrating Christian virtues, the patients were also expected to show a good example to their fellow sufferers. In the voluntary hospitals those able to move about were traditionally expected to help with the nursing of those less fortunate. At St Mark's, patients were employed to hold cotton wool to the wounds of patients who had recently undergone operation to stem the blood flow, and to take care of them in other ways. A visitor to the hospital in 1857 noted the 'extreme quietness with which the patients almost invariably submit to these painful operations', conducted without anaesthesia by Salmon.³⁰ 'The absence of chloroform is, indeed, scarcely noticed.'³¹ Salmon attributed this docility

... to the organization of the Hospital, by which patients who are recovering become the attendants on those more recently admitted, and are instructed to inspire them with confidence, and at the same time to impress upon them the absolute necessity, for their own good, that they should behave well, and assist the operator.³²

In the 1860s, about a third of the patients treated, whether as inpatient or outpatient, endured some sort of surgical procedure.³³

The patient then entered a daily routine which, for most of the century, consisted of breakfast at 8.00 am, lunch (mostly milk and soup) at 11.30 am, a further meal in the late afternoon, something in the evening and lights out at 9.30 pm. This routine was shifted an hour and a half earlier in 1891 because of increases in the amount of work that the nurses were now undertaking.³⁴ There was no reference to daily prayers held by the nurses for the patients, as was the case at most general hospitals. On alternate Thursdays at 4.15 pm two representatives from the house committee visited to make sure that all seemed well in the hospital. Besides Mr Stone's visits, occasionally a governor would visit the hospital to talk to the patients. One governor, Mr Fountain Tattersall, sought permission in 1882 'to read for the amusement of the patients'.³⁵

By the late 1870s quite a few of the patients entertained themselves during their stay in hospital by reading. The chaplain looked after a patients' library, and he inserted in the *Annual Report* for 1878 an appeal for more books:

Books of an interesting, amusing, or instructive kind, on religious or general subjects, assist the patients to pass the tedious hours of sickness more agreeably; and it has been found that they value greatly the advantages of the Library.³⁶

THE AFFLICTED POOR

After this request, books began to be donated in a steady stream by the governors. In 1879 several parcels of books and periodicals, including six volumes of the *Illustrated London News*, donated by its proprietors, were given to the hospital. (This was in addition to 16 bottles of champagne, for 'special cases of illness', from the kindhearted Mr Stone).³⁷ Besides the chaplain's appeal for books now regularly inserted in every *Annual Report*, the committee of management emphasised how grateful they would be to receive 'interesting books, recent annuals or other periodicals' without even specifying – as tended to be the case at other hospitals – that perhaps some should be religious.³⁸ In 1882, this secular trend was confirmed when the charge of the library was removed from the chaplain and placed in the hands of Mr Tattersall, who began to raise money for the purpose as well as requesting books.³⁹ Reading material flooded in. There were texts from the Religious Tract Society, but there was also 'a constant supply of comic papers from the publishers of *Funny Folks*', several years of *Punch* and *The Graphic*, and a monthly supply of periodicals donated by Mrs R B Martin, the honorary treasurer's wife.⁴⁰

Not all patients were able to read, or felt well enough to do so. Care was taken with those who were neither sleeping nor reading. Just as good ventilation seemed the cornerstone of a healthy hospital, so a good view seemed important for recovering health: in 1863 'plate glass was directed to be substituted for the present hammered lower panes' in the two main wards so that 'the convalescent patients might see what was passing'.⁴¹ This was despite the fact that the hospital was hard pressed for funds. Later, six trees were planted in front of the hospital, partly to improve its appearance, but also partly for the enjoyment of the patients. When the hospital was extended in the mid-1890s, a garden was developed at its rear, and it was suggested that acacia, plane, sycamore and laburnum trees should be grown in it.⁴² While convalescing patients were expected to take an interest in their surroundings, their sicker fellows were to be disturbed as little as possible. An asphalt covering was therefore laid instead of granite for the pavements around the hospital.⁴³

Internal changes in the hospital's arrangement focussed on cleanliness and good sanitation. In 1868 the governors sought the advice of the medical staff on whether earth closets should be installed for the patients, which was duly agreed, but by the 1880s these had evidently been removed in favour of water closets. In the last third of the century there were frequent references to cleaning apparatus of one kind or another – sinks, hip baths, full copper baths – and of course the routine annual cleaning and painting took place every summer, when all inpatients were discharged.⁴⁴

The mobility of many patients was confirmed by their tendency to leave hospital for a few hours. The problem did not seem as severe as at general

hospitals, where patients seemed frequently to leave, returning drunk or with additional food. At St Mark's the patients mostly secured 'permission tickets' from the house surgeon to leave the hospital for brief periods. However, in 1883 the matron complained that patients 'constantly have permission to leave the Hospital for a short time, and are in the habit of going out without her knowledge'. The system was tightened up so that specific times were given on the permission tickets.⁴⁵ Attempts to control visitors to the hospital seem mostly to have been more successful. There were strict hours for visiting – in the early afternoon – and in the mid-1880s it was laid down that no patient could receive more than two visitors at a time. Since such visiting hours did not easily fit in with a working schedule, many patients must have received few visitors.

One of the most important benefits of being in hospital was the reasonable diet with which the patient was served. In their diet plans, the surgeons were generous in their allocation of meat, vegetables and bread. A specific diet was part of the medical treatment of each patient, who according to his or her state of health would be given a milk-based or meat-based diet, or some combination of foods. It was therefore seen as a necessary expense, and butchers and other vendors competed for the hospital's sizeable contracts, with the governors carefully monitoring that quality and value were being obtained. However, it was also an area in which graft was easy; a contract could be regarded as patronage by an influential governor, and the hospital's servants could embezzle the food. In order to avoid this, servants were given their own provisions in addition to wages, and the matron was given the responsibility of seeing that the food reached the patients. Even though the surgeons prescribed specific diets, the governors frequently expressed concern at the amount the patients seemed to be consuming. In 1866, for example, the finance committee reported that patients were staying longer in the hospital, and that therefore they were on a full diet longer, pushing up costs. In particular, more porter was consumed. The house surgeon was summoned to explain the matter, but after further inquiry it was decided that it was the hospital employees who were drinking too much. Taking the average over a three month period patients were apparently consuming 1.5 lbs of meat (beef and mutton), 1 lb of bread and just over one pint of beer per day.⁴⁶ If this was anywhere close to the amount actually consumed, it was probably a significant improvement on what they were used to.

As the committee noted, the length of stay in hospital had increased rather than decreased by the 1860s, as more operative procedures were carried out. In the 1830s, for example, patients tended to be in hospital for between ten and twenty days.⁴⁷ In the 1870s, the committee of management reported that many patients spent at least a month in hos-

pital, although by the end of the century the average was 12 days.⁴⁸ Obviously, there would have been considerable variation between the different types of cases, although it is noticeable that at St Mark's the governors did not question lengths of stay, unlike at general hospitals where there was often a time limit – usually of six months, but towards the end of the century frequently of less – and the medical staff had to justify the case of any patient who stayed beyond this period.

When patients were discharged, some returned to their families for continued care or to return to work, but for others this was not easy or even possible. It was to help these that the Samaritan Society was established in 1868. Its proposer was Rose Gowlland, the wife of Peter Yeames Gowlland. Gowlland had been assistant surgeon at The London Hospital, where in 1791 a surgeon, William Blizard, had instituted a Samaritan Society to assist patients after they left the hospital, sending them to convalesce at the sea or in the country, giving them necessary surgical appliances, or making grants of clothes or money. Other hospitals, for example, St Thomas's (1852) and University College Hospital (1867), were creating Samaritan Funds by the mid-nineteenth century⁴⁹, and the Gowllands decided that a Samaritan Society was also required at St Mark's. The responsibility for such societies was usually placed in the hands of the wives of the medical staff, which in turn drew them into involvement with the hospital, and this arrangement was followed at St Mark's. It was established 'for the alleviation of some of the many distresses among the patients for which no provision can be expected to be made by the parent Charity'.⁵⁰ Its remit was extensive: it would assist in paying the rent and

... otherwise endeavour to relieve the families of those poor men who during ... their sojourn in the Hospital and subsequently, whilst recovering from their serious illness at home, are quite unable to provide for the adequate support of their wives and children.

– To pay for the suitable care of the children of those poor mothers who are obliged from their sufferings to become inpatients at the Hospital and whose families would otherwise be much (if not altogether) neglected.

– To replace the tools of those who from increasing ill health and inability to work have been obliged to part with them for the support of their families previous to admission ...⁵¹

The Society also undertook to send needy patients to the seaside 'for the benefit of bracing air', to provide patients with bibles on leaving the hospital 'whenever they are found to be without them', to supply tea and sugar to those who 'from their extreme poverty' were unable to provide these themselves and 'in many other ways to endeavour to relieve their

anxieties and sorrows'.⁵² There already existed a Ladies Visiting Committee, and, headed by Rose Gowlland, it now assumed the responsibility for the new Society.

The governors welcomed the new creation, commenting in particular that women patients 'too often' left the hospital prematurely because of distress about their families.⁵³ After a year of the Samaritan Society's operation, Mrs Gowlland reported that 14 patients had been sent to Ramsgate, for periods varying from two to five weeks, and two others were helped to visit friends. She quoted from four letters of thanks, including one which stated: 'I cannot find words strong enough to express my gratitude for your great kindness in sending me here, situated as I am without a home.'⁵⁴ Mrs Gowlland thought that the relief of families and care of children was the greatest assistance that the Society rendered. She spoke of the 'sudden brightening of suffering, care-worn faces' when help was given to families made even poorer 'by months of pain and weakness laid upon the father before coming into the hospital'.⁵⁵ She recalled how one poor man, on hearing of help to be given to his wife, 'just laid his head down on the pillow, and was so affected that he could not speak, and the visitor hurried away'.⁵⁶ The distress of some cases was clearly very great.

One poor woman, emaciated and suffering, said, when I asked her why she did not wean her baby, 'To tell you the truth, ma'am, I don't wean it, for I have not the money to buy the milk that I know it requires'.⁵⁷

In another case, a poor man said that he 'could not bear to eat his good meat dinner at the hospital; he was so wondering what his children had'. Another asked permission to collect the scraps of bread which were usually fed to the birds to give to his children.⁵⁸ The Society had also distributed many bibles, and tea and sugar had been given to particularly needy patients.

The new Society began to tap additional resources as subscriptions were made directly to it rather than through the hospital's funds. In 1872 the Merchant Taylors Company offered the facilities of its own convalescent home at Bognor Regis to the hospital, provided that the Fund bear the cost of the patients' transport there. Others, too, began to make specific donations, for example to support a bed in a convalescent home. Lady Agnes Cooper, Mrs Allingham and J F Tattersall all provided the funds to support a bed at the seaside or in the country.⁵⁹ In 1872 the Society's remit was extended slightly. Rose Gowlland had frequently encountered poor men suffering from cancer, 'the most painful type of incurable disease', who were depressingly aware that their families would soon be left without a main provider. She therefore sought to give them additional comforts – a small weekly allowance to permit them to have

THE AFFLICTED POOR

'the cup of beef tea, the arrowroot, the glass of wine, or any other little comfort which in such serious illness almost amount to a necessity'.⁶⁰ A typical example of an assisted patient was 'a most respectable and industrious' man with a wife and five children, the eldest of whom was seven, who had been forced to sell the tools of his trade to support the family during his long illness; he was now assisted by the Society with 'sufficient means to buy materials for making a fresh start in his trade'.⁶¹

The Society bought a waterbed in 1875 for the use at home of patients with cancer who found it very painful to lie in the same position all day. It redeemed clothes which had been pawned by patients and assisted those who sold their furniture to pay expenses. In the early 1880s the Society began to buy items for patients still in hospital. For example, it provided red flannel jackets for all the women patients: Rose Gowlland noted that this gave the patients 'an air of neatness and uniformity which is very pleasing'.⁶² By this time the Society's regular income from annual pledges was almost £50 per year, with an additional £60 or so in donations. They organised entertainments from the early 1880s which proved a useful source of funds, and in 1884 George Sturge of Sydenham Hill Road made a donation of stock worth £250 to serve as the basis of a permanent Samaritan Fund officially established in 1885.⁶³

That year Gowlland retired as senior surgeon, and his wife shortly afterwards passed her honorary secretaryship of the Samaritan Fund to the wife of the new senior surgeon, Mrs Allingham. Its committee of management once again consisted of the Ladies' Committee: Lady Agnes Cooper, Mrs Mary F Martin, Mrs Allingham, Mrs Constance L Haigh (whose husband was a member both of the house committee and the finance committee), and Mrs Ellen C Merriman, the wife of Mark and daughter-in-law of Samuel Merriman. The Fund sent 42 patients – almost 15 per cent of all inpatients – to the seaside or to convalescent homes in 1886. They also helped 54 other patients and their families (a further 17 per cent of patients). The committee now requested that the governors consider a plan which other hospitals were adopting – of having a small convalescent home specifically for the hospital. The committee of management concluded that this was not feasible, but an increasing number of beds was reserved in homes in Ramsgate, Southsea and elsewhere. The matron disbursed money to needy patients or their dependents. Christmas presents were bought for all inpatients, and colostomy belts were purchased for some patients from the 1890s. In 1897 the Fund even divided with David Goodsall and the Charity Organisation Society the cost of sending a patient named Milsom on a sea voyage.⁶⁴

The call upon the Samaritan Fund's resources indicated that many of the patients receiving treatment at the hospital were very poor. However, this was increasingly questioned in the last third of the nineteenth

century, at St Mark's and elsewhere. As hospitals grew in number and yet still could not cope with patient demand, with outpatient departments bursting at the seams, the middle and upper classes increasingly asked if their charity was being abused, and whether those who could in fact afford to pay for treatment were coming to the hospitals. General practitioners, whose incomes were far from secure, were particularly worried. While hospitals were regarded as dirty and dangerous, with the stigma of charity attached to them, few of those who could afford to pay for treatment seem to have come to the hospitals. However, by the last third of the nineteenth century their image was beginning to change: nursing was being reformed in a publicly visible way, doctors were spending more time in the hospitals, administration was tightening up, and medical intervention was increasing. The social change among patients occurred earlier in the special hospitals – in many respects they led the way. Patients turned to the special hospitals because they could receive special treatments for particular afflictions that they were not necessarily able to receive from other practitioners or from the general hospitals, however much the latter wished to monopolise special areas too. The special hospitals were more 'medicalised' earlier than their general counterparts and patients began to come to special hospitals from a greater distance at an earlier date. There was little evidence that there was much of a class shift at the general hospitals before 1900: most of the inpatients, at least, still seem to have been labourers in the 1880s and 1890s. In contrast, some special hospitals from the 1870s (and increasingly by the 1890s) opened specifically to treat paying middle class patients: the rival to St Mark's, the Western Hospital in Vauxhall, operated partly on this basis.

Throughout the nineteenth century, the poor formed the majority of those treated at St Mark's. There was talk of the 'emaciated beings' who came to the hospital, and 'hardship, privation, and poverty' which was 'aggravated a thousand fold by disease and suffering'.⁶⁵ However, a slightly better-off class of patient was there too. Many patients were able to read, indicating that they were not at the bottom of the social pile. Some were able to write as well: a relatively large number of letters was received from patients at St Mark's – larger than at general hospitals. The governors frequently wondered whether the 'right type' of patient was receiving treatment at the hospital. It was suggested that some patients might have exhausted their funds already in paying practitioners: frequently patients seem to have been afflicted by disease for a long period before they came to St Mark's. William Allingham, for example, mentioned treating at St Mark's a 'very respectable woman', a widow of 35, 'who had formerly been in good circumstances', but who had evidently run through her means in seeking treatment for tertiary syphilis.⁶⁶ Others were clearly not destitute. Almost every year the hospital would receive a

donation from a grateful patient, in addition to the money received through the patients' Auxiliary Society. In 1858, a former patient named Francis South gave £2, and in 1859 £5 was received from James Gradwell, 'formerly a suffering inmate of the Hospital'.⁶⁷ That was the equivalent of an average labourer's weekly wage. A letter came from a grateful patient, Mr D Hearn, in 1865 enclosing three guineas: it emerged that he was a clerk, with a salary of £160 a year, with a bank account, albeit arranged by his employers. At this date, the governors showed less concern over whether he was an appropriately low-classed patient than whether he was of a sufficiently high class to be named as an annual subscriber.⁶⁸

It was not long before the governors did become worried. In the *Annual Report* for 1873 a new 'Notice to Patients' was inserted:

The benefits of this Hospital having in some instances been received by those who do not belong to that class of persons the Institution was intended to relieve, it is ordered that all Applicants be refused Admission who do not belong either to the class of suffering poor or the industrious or labouring mechanic.⁶⁹

Since, however, few potential patients would have read the report, this warning was probably designed to reassure subscribers that their donations were put to deserving purposes. William Allingham recorded among the patients that he treated at St Mark's a draper's assistant, a porter at Tilbury station, a clerk, a police constable, an engineer and a gunner in the Royal Artillery. On the other hand, he treated privately a man whom he described as being in rather poor circumstances but who would not come into the hospital. The Census Returns give the occupations of those in hospital on one specific night in each decade (see Appendix I). Those in the Infirmary in 1841 were artisans, servants and labourers. By 1881 there is evidence of some social change among the patients as a group: for example, there were the keepers of small shops, including a bookseller, and also a schoolmistress, a commercial traveller and a commission agent. Gifts in kind from former patients, revealing them to be small shopkeepers or skilled craftsmen show that the trend towards better-off patients was continuing. Fruit and vegetables were received from greengrocers, meat from butchers, fish from fishmongers, chairs from carpenters, all of whom had been patients in the hospital.⁷⁰ In an incident in 1893, a well-off patient was turned away. Writing to her general practitioner, who had referred her to St Mark's, the secretary wrote:

The Committee think you will agree with them that an applicant in the position of Mrs Maynard should hardly enjoy the benefit of a Hospital established for the Suffering Poor.⁷¹

Some hospitals decided that since there seemed to be a demand for their services amongst the better-off, they should tap this and increase their funds at the same time by charging the patients a fee. This led to much controversy. Subscribers protested that they were acting out of charity, and did not wish to displace the poor or be associated with a business. General practitioners argued that the voluntary hospitals were creaming off patients who could afford to pay them. Doctors within the hospital usually felt that payments were inappropriate, because of the animosity of GPs and because it did not seem right for them to be serving on a voluntary basis if the hospital was charging fees. However, the committee of management at St Mark's, faced with financial problems, toyed with the idea frequently in the late nineteenth century. In 1896, the committee requested the medical staff to draw up a scheme for 'paying patients', with a table of fees.⁷² The plan was shelved, but three years later an attempt was made to screen patients, with the secretary requested to ask each one about their means.⁷³

It was the better-off who tended to come from farther afield, often referred by a general practitioner. There was the case of Mrs Maynard, who came from Chilbolton Down, Stockbridge, Hampshire. Many of the better-off patients who later became subscribers came from outside London: for example there were several fishmongers from Grimsby. Then there was the case of James Hooker, from near Alton in Hampshire, who sent £2 6s 0d in 1860 with a covering letter, explaining that it had been raised amongst the inhabitants of his village. He wished to 'express the gratitude I shall ever feel' to the hospital. At St Mark's, he claimed, 'the poor and afflicted meet with such kind and beneficial treatment'.⁷⁴ There were other examples, too, of where neighbours raised money to send a patient to St Mark's, as in the case of a man from Newmarket. A schoolmaster from Kent was sufficiently grateful to Salmon to dedicate to him a fulsome poem.⁷⁵ An interesting example of how well-developed the system of referral was already becoming by the early 1870s was that of 'a poor woman' who had been brought from Cardiff to St Mark's. She was then found 'ineligible for admission' on medical grounds. The secretary was instructed to find out 'whether a medical statement of her case had been called for prior to her being directed to come to London'.⁷⁶ In other words, it was seen as appropriate, even normal procedure, for there to be correspondence between a general practitioner and the hospital over whether a case should be sent to St Mark's, as increasingly was the case in private practice. Other evidence, too, indicates that patients were often referred by general practitioners or other hospitals to St Mark's. A two-tiered system of medicine was developing, even for the poor.

The sex ratio in the hospital showed that men outnumbered women by about two to one. This imbalance could have had several causes.

THE AFFLICTED POOR

Generally fewer women than men seem to have attended London's voluntary hospitals. Possibly they did not regard their medical needs as quite as urgent as those of the men, who would mostly have been the main wage earner, or they sought aid from other practitioners. Possibly it was more difficult for women than men to leave their families for treatment in hospital. Since St Mark's dealt with rectal diseases, there may have been a greater reluctance on the part of women to come to the hospital, with the embarrassment that this entailed: some would have gone to women's hospitals out of preference. Frederick Salmon reported in 1853 the cases of four women whose aggregate suffering spread over eighty years, before they turned to the hospital for help.⁷⁷

TO F. SALMON, ESQ.,*

Founder of St. Mark's Hospital, City Road, London.

F ortune is fickle—fame a fleeting toy,
R eward of skill few mortals e'er enjoy ;
E nvy detracts, and scandal vilifies,
D isease attacks and medicine defies,
E 'en strong men bow, for pain severely tries ;
R ejoice then sufferer, here you've found a friend,
I n very deed, he stoops,—to him attend,
C onfide in him, Heaven's blessing to ensure,
K eep up your heart, he'll work a perfect cure.

S oaring aloft this man of Science see,
A nd mark his care for poor humanity ;
L ong may he live t'enjoy the fame he's won,
M ay peace and quiet gild his setting sun ;
C n Heaven, his hopes be firmly fixed and die,
N or fail of his reward above the sky.

* The Author having been successfully treated for a painful disease, desires thus publicly to acknowledge his sense of the skill and kindness of the gentleman referred to.

Poem dedicated to Frederick Salmon by G J Hutchings (1860)

The age range of patients cannot be established for certain, although it would seem that most were between 20 and 40, reflecting the adult popu-

lation. However, children and babies were not unknown at the hospital, and their stories were often told in the *Annual Reports*: then as now the stories of young children could be relied upon to solicit funds even from the hardest of hearts. There was the account of a baby with rectal problems whose father had left the family, and whose mother was almost destitute. The Samaritan Society assisted the mother to move to the country, to join her own mother, and for a while the baby's health improved, but then, apparently after vaccination, it 'dropped' and died. The Society helped with funeral expenses.⁷⁸ Some tales had a more heroic ending: an infant 'only three days old, but whose days were even then numbered' (perhaps the baby had an imperforate anus) was brought into the hospital 'for the advice of your Surgeons'. The child was operated upon and 'restored to its parents with a fair prospect . . . of becoming a healthy child'. In another case, a boy of 13 was brought in from Essex, in such a bad state 'that death must have ensued in a few days. Your Surgeons operated on the boy, and his life was preserved.'⁷⁹

The individual patient's experience at St Mark's in the nineteenth century is very elusive. Governors reported after their visits that the patients were very contented, and certainly their diet was likely to be better than at home. Something of them as a group, in terms of social and geographic origins, can be suggested, together with the complaints from which they were likely to have suffered. In the earlier part of the century, they were likely to be the very poor, but this began to change over time. In hospital, when feeling a little better, they helped to nurse other patients, or they read or were read to. The keen interest of the governors in the well-being of the hospital often included concern about the health of both mind and body of the patients. However, in the end it was probably the nurses who represented most to the patients.

CHAPTER VIII

She shall scour the Wards . . .

Nursing at St Mark's in the nineteenth century

The image of nursing changed dramatically in the nineteenth century. The reality may not have been as different, but the altered image was vitally important: it encouraged the middle classes to see hospitals as places to which they might turn for their own care. The reformers of nursing in the second half of the nineteenth century – in particular Florence Nightingale – vehemently stressed the darker side of earlier nursing while arguing for reform. They pointed to real and imagined cases of drunkenness, dishonesty, immorality, corruption and laziness among nurses, suggesting that all were like that. The picture they drew at the end of the century was of clean, neat, disciplined, uniformed, kindly, upright nurses trained in the nursing schools. The popular image thus changed from Charles Dickens' drunken, slovenly creations, Sairey Gamp and Betsey Prig, to the pristine Nightingale nurses.

The quality of the nursing in the early nineteenth century depended a great deal on the way in which the hospital was administered. No doubt there were cases of very poor nursing, especially in poor institutions. Where lay governors showed an active interest in their institution, this was less likely to be the case. Where officers in the hospitals had a strong sense of responsibility, there, too, nursing was likely to be reasonably efficient. Matrons were usually respectable widows but the other nurses were generally recruited from the poorer classes, frequently from among the patients themselves, who were usually expected to help in nursing their fellow patients. A gradual change in the social origins of the nurses over the century had its effect on nursing. While the very poor were engaged in it, their attitudes would have mirrored those of the patients. Cleanliness was something ill-afforded in crowded tenements. Discipline, too, scarcely had a place there and poverty and low wages meant that the hospital's pay in kind was likely to be exploited. Nurses were not likely to be literate, either. Given that hospitals partly remunerated nurses with alcohol, governors could hardly complain about drunkenness. Hours were long, the work hard, and the conditions in which the nurses worked were not exactly the best. In these circumstances, *The Times* in 1857 thought that as a group nurses were maligned:

Hospital nurses have been much abused – they have their faults, but most of them are due to want of proper treatment. Lectured at by

Committees, preached at by chaplains, scowled on by treasurers and stewards, scolded by matrons, sworn at by surgeons, bullied by dressers, grumbled at and abused by patients, insulted if old and ill-favoured, talked flippantly to if middle-aged and good-humoured, tempted and seduced if young and well-looking, they are what any woman might be under these circumstances.¹

During the nineteenth century certain social and economic changes such as migration into the cities, late marriage and mechanisation of industries such as textiles meant that there was an increasing number of unmarried women seeking employment. Domestic service absorbed many of these, but some turned to nursing. There were strong parallels between the two occupations. Nurses were required to do a great deal of housework in the hospital, cleaning and looking after bed linen, while the matron was seen more as a housekeeper, paying attention to staff and stores, than as a manager of nursing. As the sanitation movement progressed, cleanliness and discipline were stressed both in domestic service and in nursing. In order to maintain that discipline, housekeepers in both areas emphasised morality as a key quality in those whom they managed. Literacy, too, improved, especially after elementary education was made compulsory in 1876. The demand for nurses expanded as new institutions were established, and as the number of inpatients grew. Moreover, as medical intervention increased, more nursing work was demanded, and hospitals increased their nurse/patient ratios.

Reforms in nursing were gathering speed in continental countries by the mid-nineteenth century as their medical systems were changing. The first systematic nurse training school was established at Kaiserswerth in Germany by Theodor Fliedner in the 1820s. In Britain, too, reforms were discussed and training initiated. Under the old system, matrons did not train nurses and there was no systematic instruction: nurses learned from each other and from the doctors. To a few reformers, this seemed too haphazard. In 1848 St John's House began training nurses under the supervision of a clergyman, and from 1856 pupil nurses attended King's College Hospital. However, the prototype nurse training school was established at St Thomas's Hospital in 1860. The Nightingale Training School was financed from the funds collected in gratitude to Florence Nightingale after the Crimean War.

Just as Nightingale had bludgeoned her way through officialdom in the Crimea – upsetting equally those who were doing a good job and those who were not – so she now took the cause of nursing reform into the hospitals. Although 'lady' probationers from the middle and upper classes, who paid for their training, were recruited into the school, Nightingale maintained that the best nurses came from social groups

more used to work. The daughters of small farmers or those who would otherwise expect to do well in domestic service and who were determined and patient seemed the most suitable as nurses. The Nightingale Training School gave probationers a year's training, after which they were expected to work in the charitable, not the private, sector. They followed a simple medical curriculum, but most of their work was on the wards, supporting the nurses there. They undertook some dressings and the administration of medicines, but they also spent a large proportion of their time in cleaning – patients, beds, wards, adjoining rooms. For Nightingale, cleanliness was fundamental to good nursing. Discipline, honesty, reliability and neatness were also held up as crucial values, even above kindness to the patients. To reinforce this image, the new nurses wore uniforms, and the wards were expected to be impeccably neat. The status of nursing as an occupation was certainly improved by these changes, and gradually it assumed other characteristics of professionalisation. In other ways, however, the changes were slow to filter through, especially in small hospitals. Nurses still undertook menial tasks, their turnover was high, they were paid on a weekly basis, and they were sacked without notice.

When the Fistula Infirmary was established, there was a matron and an under-nurse. The 1841 Census showed in addition one resident servant. In 1851 the complement was the matron, a nurse and a cook. When the hospital moved to City Road, the matron oversaw two nurses, a cook, a kitchenmaid, a housemaid, a porter and a 'scrubber', who had general cleaning responsibilities in the hospital. The matron presided over all the internal arrangements of the hospital, from nursing to housekeeping. At St Mark's she was more closely involved with medical treatment than most of her counterparts at the general hospitals whose main tasks were housekeeping: yet again, the special hospitals were more 'medicalised' at an earlier date than the general hospitals. The matron received patients on their arrival and assigned them to beds. She followed the surgeon on his ward rounds, and helped him with dressings when required. She herself administered medicines, leeches and fomentations to the patients, and it was her responsibility to separate medicines intended for internal from those for external use, and to take particular care with their labels. Such duties in general hospitals usually fell to ward nurses or to clinical clerks: the matrons at these establishments had their hands full with housekeeping duties. Patients at St Mark's therefore not only received attention from the surgeon himself but also from the matron. The matron in turn would have been better informed about the medical well-being of the patients than was the case in the general hospitals.

The matron also played the part of overseer and disciplinarian of the patients. She was supposed to read the rules to each one on admission, and was responsible for seeing that they were kept. She also had to ensure

that patients were fed according to the diet prescribed by the surgeon. She was responsible for all the furniture, sheets, coverlets, blankets, and other items in the hospital. All had to be maintained in a good state and any replacements acquired through the committee of management. Linen was to be well aired when returned from the laundress and again prior to use. Before any patient left the Infirmary an inventory was taken to make sure that there had been no pilfering. When stores and other provisions arrived at the hospital, the matron was supposed to check them for quality and weight, entering them in a book to enable the surgeon's assistant to correlate them with diet plans. She herself could not order provisions for the hospital, however. This was a task only the surgeon was allowed to do.²

Evidence of the matron's housekeeping duties recur throughout the nineteenth century. As in the running of a large household, she was responsible for appointments in areas which would not now be associated with nursing. She was responsible for the kitchen, and in this capacity she successfully recommended an increase in the cook's and housemaid's wages in 1862.³ She also appointed scrubbers, kitchenmaids, housemaids, had a major hand in selecting the cook as well as appointing nurses.⁴ The governors who visited the hospital weekly and then the committee of management had to confirm these appointments, but confirmation was invariably given. However, the matron could only appoint replacement staff; she could not take the decision on her own to increase the staff complement. Thus, in 1866, the matron was reprimanded first by the finance committee and then by the committee of management for employing a night nurse without consultation.⁵ The purchase of regular provisions was approved weekly, although any change in the pattern was referred to the committee of management, and later, when established, the house committee. Thus, an increase in the amount of vegetables to be purchased in 1882 was decided by the house committee but then referred to the matron to carry out. When she wished to buy items for the hospital or the patients, again she had to go to the higher authority. Also in 1882, permission was granted for her to buy 34 small trays for the patients. There are notes of such purchases by the matron as new carpets for the rooms of the resident officers or, in another case, 80 yards of towelling and two dozen ward counterpanes.⁶

In return for these tasks, the matron was given a salary, lodging and perquisites. The salary varied considerably over the century according to variations in duties and how long the matron had served. The first matron to be appointed was Mrs Watson, and her salary in 1838 was 25 guineas a year. When she left in 1839 she was replaced by Mrs Marshall, who received 30 guineas in the 1840s. Mrs Marshall also received five guinea bonuses, probably every year. The difference in salary between these two

first matrons reflected the growth in size of the hospital when it moved to Charterhouse Square. In 1846 Mrs Wilson was appointed and almost immediately her salary was increased to £50. The year that the new hospital opened in City Road, Mrs Wilson received a bonus of £10, and this gratuity was repeated in 1858. From then on, her salary increased rapidly: it was £60 in 1859, £75 a year later, and £85 by 1862. It remained at this level until her death in 1873, when her replacement, Miss Hastings, was once again given £50. This was soon increased to £60, and it was around this level through her five year matronship and the succeeding briefer one of Miss Brice. In 1881 Mrs Palmer was appointed and served for almost 12 years. Her salary was increased in 1884 to £80 where it remained at least until the 1890s. In 1899, the matron's salary rose to £100 a year.⁷

The matron's perquisites were fairly extensive for the first quarter century of the hospital's existence, including food, coals, and other goods. In 1860, however, when the hospital decided to commute certain perquisites in order to cut expense, the matron was forbidden anything 'beyond the customary hospital food and chandling'. Seven years later, since the consumption of food and beer remained at a high level, the matron was granted an annual gratuity of £6 in lieu of beer.⁸ The matron was allowed a month's holiday from work, although she was required to find a substitute, paid by the hospital, for this time. She lived in her own lodgings within the hospital, in which she could not take lodgers or 'inmates'. Hospitals were generally very strict about their matrons' marital state. Most required that matrons be single or widowed. If she had children – however numerous or young – this was not regarded as the same sort of responsibility as a husband. Even a woman who was separated, but was not actually widowed, would usually be rejected for the position of matron. Although the rules at St Mark's did not specify that the matron must be single or widowed, when in 1896 the matron, Miss Owen, became engaged to be married she immediately resigned and no attempt was made to persuade her to stay. In fact she had delayed her marriage beyond the rebuilding of the hospital to provide continuity during that time. It was assumed that marriage debarred her from continuing with her work: the requirement to live in the hospital reinforced this.⁹ There were other rules which were intended to guide her behaviour, but on a smaller scale. She was not allowed to receive any fee or gratuity from patients, their friends or relations, or from any tradesman or anyone else who was similarly connected with the hospital. This was a common rule at hospitals, but particularly difficult to enforce, since it was the matron, not the surgeon or governors, who was constantly on the premises.

When the hospital was established it was small and insignificant, and

the quality of applicants for the position of matron would have reflected this. When Mrs Wilson was appointed in 1846, she was already 53. She remained in her position for 27 years, dying at the age of 80 in 1873. By the time of her death, the hospital had grown considerably in size and importance, and there were 53 applicants for the job. Nine were short-listed by the house committee and Miss Hastings was 'unanimously elected'.¹⁰ The house committee, however, seems to have been far less satisfied with her performance than that of her predecessor, and in 1879 reassessed the 'domestic economy' of the hospital and encouraged her resignation. The position was then advertised in *The Times* and *The Lancet*, producing 39 applicants. Some of the eight on the short list came from a considerable distance, as indicated by their travel expenses. Miss Brice was duly selected.¹¹ Miss Brice died in January 1881, and was replaced by Mrs Palmer. After serving eleven and a half years, she resigned and was granted a 50 guinea gratuity. Again 39 women applied for her position, of whom six were shortlisted. Their current addresses were given. One came from Fitzroy Square, where there were a number of medical institutions including special hospitals, another was formerly at the Foundling Hospital but was now based in Hurstpierpoint, Sussex, while others came from Pimlico, Wiltshire and Colchester. The appointee was Miss Elizabeth Leach Curtis, a nurse from St Bartholomew's.¹²

The appointment of Miss Curtis was of some significance. When the hospital was founded, and for much of the nineteenth century, it was not usual for the matron to have had any nursing experience. She was chosen from a class above the nurses, who were not expected to rise to become matrons. Her social background was more important than any previous medical experience, particularly since she played the part of housekeeper. By the end of the century, as more middle class women entered nursing, and as training developed, hospitals began to recruit matrons from among their number. Florence Nightingale was very anxious that her lady probationers should be appointed as matrons so that they could reform hospitals: this was undertaken in many cases with missionising zeal. It is highly probable that the special hospitals employed matrons with some experience of nursing long before the general hospitals for two main reasons. Firstly, they probably could not hope to attract the class of woman who would apply for the position at a general hospital. Secondly, matrons at special hospitals took a larger share of nursing responsibilities than those at the general hospitals. However, it was only with the appointment of Miss Curtis that it is clear that St Mark's recruited nurses to be its matrons. Matrons at St Mark's between the 1890s and the First World War did not hold their positions for long: of the five, four of them lasted between two and five years, and only one was there for a significantly longer period. This relative transience would also indicate that

SHE SHALL SCOUR THE WARDS

these were trained women, who later sought positions at larger and more prestigious hospitals. From the First World War onwards, the reputation of St Mark's was such that the hospital was less of a stepping stone and more of an arrival point in a matron's progress. The ages of the shortlisted applicants for the position in 1896 show that they would probably have already gained a considerable amount of experience, and yet they were still young. They ranged in age between 31 and 40, with the majority aged 35 or under.¹³

The second or under nurse in the Infirmary was expected to help the matron with her work, not only in nursing, but also in tending the hospital like a maid.

She shall scour the Wards, Stair-case, and Landing-places as often as desired, and be especially careful to remove out of the Apartments all foul and offensive matter.

She shall keep clean the grates, pails, platters, pans, kitchen requisites, and all other utensils not appertaining to the dispensing department.

She shall make the beds, assist at needle-work, and do any other business which the Treasurer, Committee, Surgeon, or the Matron may direct.¹⁴

Besides spending her time cleaning, the under nurse was also expected to play an important part in maintaining discipline in the wards. She was to be kindly in her manner in doing this: interestingly this was not a provision included in the matron's rules. The nurse should not 'indulge' the patients, or show any partiality in any way, but should behave 'with humanity and kindness, at all times preserving the utmost decorum of temper and conduct'. The under nurse was required to prepare the food for the patients in the quantities assigned by the matron, at the proper time, giving it in 'an honest and comfortable manner'. She should act as a model of behaviour to the patients, 'setting an example by abstaining from ... improprieties'.¹⁵ She was particularly charged to be frugal. With a tight budget based upon charitable donations, it was essential to ensure that efficiency and wise management were maintained and, above all, seen to be maintained. The nurse was therefore instructed to prevent waste and embezzlement of provisions or other articles and to 'use everything with the utmost economy'.¹⁶

The nurses' wages fluctuated considerably between about £15 and £35 a year over the century, according to the financial state of the hospital, the nurses' position in the hierarchy, and difficulties in finding nurses. However, some of their perquisites (they received food, beer and lodging) helped to supplement their income. A kitchenmaid in the 1850s at St Mark's was paid about four shillings a week, or about £10 a year, and this was probably a similar rate of pay to that for a scrubber. The number of staff

remained steady. In 1859 Frederick Salmon recommended that a male rather than a female nurse be appointed for the male wards. One was duly selected, and supplied with two linen jackets and waistcoats, to be cleaned at the hospital's expense, and 'a pair of cloth trousers such as are worn by the porter'.¹⁷ The matron appointed two 'servants' to take the place of the 'scrubber' in 1865, a change of terminology which revealed a change of emphasis. It was eventually accepted that a third nurse should be employed specifically for night duty in 1866, and another nurse was added in 1868.¹⁸

However, by the 1880s there were only three nurses: two staff day nurses and one night nurse. The matron, Mrs Palmer, found this insufficient, and made the first suggestion that nurse training should be undertaken at St Mark's. She needed a substitute in case one was taken ill, and suggested the appointment of 'a young woman who shall be trained in as Probationer or Assistant Nurse'. This would allow some sort of continuity when other members of staff left:

I find when a Nurse perfects herself in dealing with the special cases treated here, she is anxious to leave and take a higher position elsewhere ¹⁹

Such nurses left (even though pay might not be higher elsewhere) partly because

. . . being obliged to do a certain amount of work in cleaning the wards – usually performed by an assistant elsewhere in Hospitals – she considers it lowers her status.²⁰

It would be more satisfactory to have a woman 'trained in this House' to take over in such instances, to be replaced in her turn by another probationer. Nurses who had trained in the Nightingale Training School generally complained of an excess of cleaning over nursing tasks: the situation was to be no different at St Mark's. The matron proposed to get rid of the maid who cleaned the wards, whose tasks would be taken over by the probationer, who would also 'relieve the nurses of dusting, scrubbing tables and other cleansing'. The only nursing task specifically mentioned for the trainee was some work in the male wards, since there were more patients there than on the female side. A more lowly employee would also be needed under this arrangement: a non-residential 'scrubber', to be paid nine shillings a week in addition to receiving two meals a day. The probationer was to receive £15 in her first year, rising annually by £1 up to £20. This arrangement would enable Mrs Palmer

. . . to give each Nurse more out-door recreation – which I consider most desirable in a Hospital of this description – and at the same time the additional advantage of always having two Nurses on duty.²¹

Mrs Palmer certainly adhered to the School's aims, including her strong emphasis – like Nightingale's own – on outdoor exercise for the nurses. The term 'probationer' in itself indicates Nightingale School influence.

The new probationer was to be supplied with a uniform: it was from about this time that nurses at St Mark's first wore uniforms, supplied by the hospital. A certain amount of laundry was undertaken for the nurses and servants, and in 1892 the number of items they were expected to use each week was listed. For the nurses it consisted of one dress, petticoat, chemise, and nightgown, five aprons, two pairs of drawers and seven 'smaller items'. Servants had a similar wardrobe, except they were expected to use only one pair of drawers and four smaller items.²²

It took a few years before Mrs Palmer's suggestions for reform were adopted: it was not until 1887 that the structure was re-arranged. Kate Smith, a long-serving nurse, now became head nurse, with her pay increased from £25 a year to £30. Her assistant nurse, Sarah Churchill, was made staff nurse, with her pay increased from £15 to £18, with annual increments taking it up to £25. A new assistant nurse was also appointed, and together with the night nurse, the matron now had four nurses for an average of about 28 patients. There was also a charwoman who cleaned the floors on the men's side, the outpatients' rooms and the staircase, and a ward servant who cleaned the floors and fireplaces on the women's side of the hospital.²³ The new system was used for just under two years before Mrs Palmer concluded that the reforms were not sufficiently far-reaching. Much more was now being demanded of the nurses than previously, and yet their status had not been amended to allow for that. Personal advancement, and concentration on nursing rather than menial tasks, still seemed elusive goals. Kate Smith was on the point of leaving. Mrs Palmer pointed to the increased demands resulting from 'the rapid advance of surgical skill and its requirements'. The number of staff would be sufficient, Mrs Palmer maintained, 'if the 28 Patients were nursed in two large wards, such as we find in large Hospitals, but we have them separated into seven wards', which considerably increased the amount of ward-cleaning required 'in which the under nurses must assist'. They were involved, for example, in scrubbing all tables and ward furniture, cleaning baths, sinks and lavatories, lighting fires and sweeping. Therefore, 'a large share of the actual nursing devolves to the head nurse, whose experience and knowledge entitle her to the position of a Superintendent rather than a Manual Nurse'. Moreover, the increased demand upon her skill by the surgeons meant that she needed suitable help. Kate Smith, 'who has served the Hospital faithfully for seven years' certainly felt this, and had given notice, 'desiring to improve her social position'.²⁴

In an attempt to retain Smith, Mrs Palmer recommended an increase in

her salary; she also requested an additional nurse 'of a higher standing' than those employed as assistants.

It should be a woman who has had training in a General Hospital and [is] sufficiently educated both in Manner and Work to be a companion and help to Head Nurse and able to take full responsibility in her absence.²⁵

Suitable accommodation must be provided for her to live in. The system of training a probationer or assistant nurse was evidently not working well. After her year's training, the nurse

... grows unsettled, recognising the fact that in our small staff the opportunity for promotion is remote. She has gained some knowledge which aids her in obtaining a better appointment and more opportunity to train in General Nursing. She leaves us and we are again crippled for efficient aid just when we hoped to have secured it.²⁶

Mrs Palmer recommended that the position be upgraded, with a salary of £25. She concluded by pointing out to the house committee that:

Nursing has become a science and women devoted to it now feel it an encroachment on their time and position to be expected to act also the part of Housemaid in Hospital work.²⁷

The house committee this time was much more rapid in changing its policy: Smith received a wage rise and a new assistant nurse was appointed at £25 a year. Those appointed to this position were now recruited from a general hospital training school, rather than being trained as a probationer at St Mark's. Since most hospitals tended to use their probationers for cheap labour, this represented a step up in the position of nurses at St Mark's. Kate Smith did not remain long at the hospital, however. Barely a year later, in January 1890, she left to get married, receiving a £10 gratuity as she did so. Mrs Palmer took the opportunity to advertise the position of head nurse at £30 rising to £35 a year. Interestingly, she did not choose to promote one of the nurses already at St Mark's: her continued reforms depended on appointing a nurse with some experience, from a general hospital.²⁸

Mrs Palmer requested and obtained a rearrangement of the daily routine at St Mark's in 1891, 'in view of the increased variety of work comprehended in present day nursing'. The patients' breakfast was moved an hour and a half earlier to 6.30 am 'to permit the morning duties to begin at 7 a.m. and go on uninterrupted instead of being broken, as heretofore, at 8 a.m. for breakfast'.²⁹ She also requested that her suggestions of 1883 regarding an increase in the number of menial assistants now be adopted. A charwoman should be appointed, arriving early at the hospital to

relieve the most junior nurse by cleaning fireplaces and grates. By 1892, those concerned with nursing and housekeeping consisted of five nurses and four servants.³⁰ The total spent on this department, possibly including those who worked in the kitchens, too, amounted to £230.

In 1892, however, Mrs Palmer became ill, underwent an operation and then resigned. The succeeding two matrons only remained a couple of years each, and no further changes were initiated.³¹ Even when Mrs Hepper, a long-serving matron, was appointed in 1896, it seemed that the reforms were not being maintained. In 1897 she engaged a nurse who did not come up to the standards now required of St Mark's nurses: one of the surgeons, David Goodsall, reiterated later that year to the house committee that assistant nurses 'ought to have some training at a general Hospital before being engaged'. Whereas at general hospitals nursing reforms tended to be opposed by the medical staff, as it strengthened the matron's control of the ward in relation to the doctor's, at the special hospitals, where medical intervention was more intensive, this was not necessarily the case. The house committee agreed with Goodsall, stipulating that at least one year's training – that is, a probationer's normal training – should be required.³² The problem of covering the nursing duties when a nurse was away was also tackled: it was decided that a locum should be appointed to cover for the other nurses for three months while they took their annual leave.³³

Recruiting trained nurses, however, proved something of a problem. The house committee reaffirmed their decision in June 1898, and yet were forced to rescind it in December because of a scarcity of nurses who would come to St Mark's. Another step in the nursing hierarchy had become apparent by this stage, and pay had been improved: there was now a senior sister, receiving up to £40, a sister, paid between £30 and £35, and several assistant nurses paid between £20 and £26.³⁴ Despite these improvements, the matron found it very difficult to obtain assistant nurses with one year's training in a general hospital. In the autumn of 1897 Mrs Hepper was forced to engage two special nurses at £1 11s 6d a week each, which worked out at considerably more than the wages for an assistant nurse. She was recruiting from a growing band of nurses who were acting in a temporary capacity at hospitals and private nursing homes. Mrs Hepper explained that nurses who had a year's training 'did not care to do probationers' work'. She concluded that it would be better to have two probationers than to attempt to employ a trained assistant nurse. However, the house committee, now urged on by the medical staff, remained more anxious than the matron to adhere to the reforms, and boosted the assistant nurse's salary by £5, but not altering her menial duties.³⁵ Not surprisingly, this did not work, and in December 1898 Mrs Hepper claimed that fair trial had been made of the system of trained

ST MARK'S HOSPITAL, LONDON

nurses, but that it was not feasible. Two probationers were duly appointed, at £12 a year each, plus uniforms. However, although the house committee was forced to rescind its earlier rule regarding training, it nevertheless stressed that 'if possible' even these nurses should have had some hospital training.³⁶

The hospital's system of accounting was changed after it expanded in the mid-1890s, in a way which demonstrated a new distinction between nursing and cleaning: nurses' wages were separated from servants' pay. By 1900, therefore, many of the changes within nursing in the voluntary hospitals in Britain were taking effect at St Mark's. The matrons had become more vociferous members of the hospital's establishment, arguing for reform and the elevation of the status of their nurses. For the nurses, pay had improved, a hierarchy had been established and they now wore uniforms in distinction from hospital servants. They were expected to have had some training and to take a considerable responsibility for tending patients, a larger proportion of whom had undergone operations. However, the new nurses were still not satisfied that they had yet left cleaning and other menial tasks behind them. The first rule for the nurses still began 'She shall scour the Wards ...'.

CHAPTER IX

Diseases of the rectum in all their baneful varieties

Nineteenth century views

The nineteenth century surgeons at St Mark's – devoted as the hospital was to the treatment of 'diseases of the rectum in all their baneful varieties' – played a large part in the development of modern proctology.¹ The treatment of rectal diseases was beginning to assume the characteristics of a recognised specialty: three hospitals for rectal disease were founded over the century and an increasingly large number of articles and books on the subject were produced. Rectal problems were differentiated and new treatments suggested. The development of anaesthesia and anti-sepsis vastly expanded the possibilities of surgery, allowing the growth of rectal surgery to include diseases of the colon as well.

Specialisation itself was beginning to be accepted by the end of the century, assisted by conceptual changes in medicine. In the early nineteenth century, a modified form of ancient humoral theories of disease dominated medicine. It was believed that illness was due to an imbalance in the four bodily humours and that health would be restored by humoral adjustments. Eating, drinking, sweating, bloodletting, urinating and defaecating all played a vital part in maintaining health and had to be kept in balance. Gradually, however, the emphasis shifted from the body as a whole to what were seen as interdependent parts; systems, organs and, later, cells were seen as the foundations of the body and the seats of disease. Increasing attention was paid to function rather than morphology, and attempts were made to correlate disease symptoms during life with pathological appearances after death in order to establish new classifications of diseases. Views of disease causation, too, were changing by the mid-nineteenth century. Some argued that disease was caused by miasma: disease could be therefore combatted by sanitary reform and the disposal of organic waste. Others believed that disease was caused by specific contagia. Louis Pasteur (1822–1895) argued that specific germs or bacteria caused fermentation in milk, and concluded in 1864 that germs also caused disease. The germ theory of disease was slow in gaining acceptance, with many rejecting it and others amalgamating it with older notions. Robert Koch in the 1880s laid down postulates, the application of which was used to identify specific pathogenic organisms. By the end of the century it was increasingly assumed that almost all diseases, including ones like scurvy which already had satisfactory explanations and

treatments, were caused by germs and could be prevented by inoculation.

Medical science and research had little place in the nineteenth century voluntary hospitals. Scientific rhetoric became the hallmark of the progressive medical man, but it had little effect on his clinical practice. In the 1870s most of the London teaching hospitals employed a part-time chemist to analyse urine for albuminous content, but within 30 years they had established laboratories for the bacteriological analysis of blood and urine. The special hospitals were tardier in their use of medical scientists. They did not have medical schools supposedly training students in scientific medicine, and lay governors were chary of anything that might indicate that patients were being used for the purposes of science. Only in extraordinary instances were bacteriological analyses made. At St Mark's it was not routine to make such investigations, but in the 1890s, when a puzzling infection struck the hospital, tissue samples were sent for analysis to Emanuel Klein, pathologist and bacteriologist at St Bartholomew's.

The types of problems first tackled at St Mark's – fistulae, abscesses, piles, fissures – were all readily accessible by direct vision or the finger. The development of general anaesthesia and antiseptic methods meant that by the end of the nineteenth century operations on the abdomen could also be undertaken. Nitrous oxide and then ether were introduced in America in the 1840s, but chloroform became the most widely used anaesthetic in Britain in the nineteenth century. It required no shift in current views of disease to accept anaesthesia, making its adoption easier. However, it had its opponents, including Frederick Salmon himself, and it was only gradually that it began to have major impact on surgery. Although anaesthesia enabled surgeons to operate more slowly, sepsis remained a great danger. After operation patients often suffered from gangrene, erysipelas or pyaemia: from the 1830s, statistical summaries were made which highlighted the danger of treatment in hospitals, indicating that major amputations, such as the removal of a leg at the thigh, had a mortality rate of around 66 per cent, with perhaps half of the deaths being due to hospital disease. Joseph Lister (1827–1912) argued that airborne germs caused infection and maintained in 1867 that these could be combatted by an 'antiseptic'.² He used carbolic acid, applying it in various strengths and media to wounds, and later attempting to render the air around the surgeon antiseptic by the use of a carbolic acid spray. Fierce controversy surrounded the adoption of antiseptics, and it took at least 30 years for the germ theory, and antiseptic practices, to be widely accepted.³ Antisepsis was more readily adopted in Germany than in Britain, and taken a stage further. At first German surgeons adhered rigidly to Lister's plan, unlike their British counterparts, but later they argued that 'asepsis' would be more effective. Instruments were therefore sterilised and greater attention was paid to absolute cleanliness.

When Lister first broke the skin overlying a simple fracture in order to set the bone more effectively, he was condemned for risking the life of his patient. To undertake abdominal surgery, where the skin was not yet broken, was an extension of this principle. In Britain the removal of ovarian cysts had predated antisepsis but the operation was undertaken with greater frequency in the last 20 years of the century. By the first decade of the twentieth century surgeons had become so enthusiastic about abdominal procedures that there was almost a vogue for undertaking operations like appendicectomy. At St Mark's, there was great interest in what was then termed 'colotomy', in which the colon was brought to the surface and incised.

Specialisation in medicine had always existed, but it was only in the nineteenth century that a more central role was accorded to it by members of the higher echelons of the profession. In the seventeenth century there were a few monographs on specific organs which considered their anatomy, physiology and pathology, but most medical works tended to be eclectic, advising on numerous different subjects. Thus in 1676, Richard Wiseman, Serjeant-Surgeon to Charles II, wrote a book which discussed diseases of the anus, but also scrofula, tumours, ulcers, gunshot wounds and fractures. Medical men writing in the eighteenth century still tended to cover a range of topics, but more frequently in different volumes. Percivall Pott, an eminent London surgeon, wrote a work on fistula, but he also wrote books on maladies of other parts of the body as well. Marvels of one kind or another were also recorded. For example, one author wrote in 1725 of 'A Fork put up the Anus and afterwards drawn out through the Buttock' while another wrote in 1733 'An Account of the Most Extraordinary Worm discharged from the Intestines'. By the end of the eighteenth century the number of systematic works on rectal problems was expanding. Thomas Copeland, a major influence on Frederick Salmon, wrote an important work, *Observations on Some of the Principal Diseases of the Rectum and Anus*, first published in 1810 and reissued twice in the next eight years. During the same period, however, he also wrote on diseases of the hip joint, wrist, knees and spine.⁴

Throughout the nineteenth century, as more books and articles were produced on all subjects, there was an increase in the number of works specifically on rectal problems. Most, however, were written by surgeons with an interest in other areas too, on which they also wrote books. Only towards the end of the century did rectal specialists come to the fore. Specialisation in the early nineteenth century was still associated with quackery. So-called quacks frequently focussed on one area of the body, one disease, or one cure and traded their specialist skills around the country. The ingredients for their remedies were carefully guarded secrets, since upon them depended the practitioner's income; secrecy thus

became the hallmark of a quack. However, social changes as well as changes in medicine were encouraging specialisation. As cities and towns grew, it became feasible for doctors to specialise in specific diseases or parts of the body without travelling from place to place, since they could now gather a sufficient number of patients. In a crowded medical marketplace, specialisation was a means of competing successfully for patients.

FREDERICK SALMON'S EARLY WORK

Frederick Salmon wrote two books on rectal disease – a work on stricture which went through four editions between 1828 and 1833, and one on prolapse (1831).⁵ It was a way of defining his area of expertise that was no longer necessary after the establishment of his own hospital: he published not a single article after its foundation. His writings were practical in slant rather than theoretical, for use by other medical practitioners, who might of course refer patients to him. Like other specialists, Salmon argued that most diseases in his special area were very common, yet little understood. Surgeons were, he thought, too apt to rely upon the authority of others, instead of judging from their own observations, a point that was made with increasing frequency in the nineteenth century as observation and experience came to epitomise the skills of a clinician.⁶

Salmon's works included both constitutional or humoral elements and surgical treatments. Adhering to humoral notions, he believed that the patient should be treated as a whole, and not simply in an afflicted part. Health was represented by balance and disease by imbalance, but it required constant care and attention to maintain balance. At the change of seasons, or in different periods of life, active measures such as purges or bleeding were called for. 'Neglect' led to ill-health. Particular attention should be paid to patients' diet and the management of their bowels.

It cannot have escaped the observation of the most inexperienced practitioner that in the treatment of all disorders and diseases, he is more or less successful in proportion as he attends to the functions of the stomach and bowels. We readily understand why this should happen, when we reflect upon the important services they perform, that they are the source by which the body is nourished, repaired, and relieved of the impurities daily imposed upon it.⁷

So important was the condition of the bowels that even in the treatment of stricture, 'no use of instruments can possibly establish a recovery, unless the bowels are brought to a free and comfortable relief daily'.⁸ Salmon did not, however, advocate the use of drastic purgatives, which

he considered highly dangerous. The bowels should rather be 'solicited ... to perform their office' by the use of mild aperients. He recommended that patients should use 'a common elastic bottle and pipe' with three quarters of a pint of thin water gruel with a dessertspoonful of castor oil as what in 1828 he called an 'injection' but in later works termed an enema. Few Britons – apparently unlike the French – used this method of producing daily bowel movements, much to Salmon's regret. He knew that he was fighting a very difficult battle simply in writing about this subject. Patients shrank from such discussions, and doctors, too, showed 'fastidious feelings' about making such recommendations. 'The customs of society', Salmon concluded, 'must materially alter' before this plan would be generally followed.⁹ He held that

... we copy our neighbours in many of their frivolities and inconsistencies, yet lose sight of their attention to this particular habit, alike evidential of good sense and strict delicacy.¹⁰

It was, he knew, extremely difficult to elicit from patients accurate information about bowel habits. It was therefore essential to make 'an inspection of the motions, a duty no medical man, however eminent, or however extensive his practice, should fail to perform'.¹¹ Salmon always emphasised the importance of physical examination far more than surgeons of an earlier generation.

Salmon also maintained that diet should be carefully monitored. He held strong views about the disadvantages of civilised living, which he felt contributed to rectal problems. He spoke in condemnatory terms of

... those habits of luxury by which the health, comfort, and prosperity of society are alike contaminated and destroyed. Instead of enjoying the simple products of nature, we have recourse to every species of unnatural and artificial combination to gratify the palate and pamper the appetite. Not content with loading the stomach with immense quantities of food, we irritate and distend it with substances alike dissimilar and unnecessary.¹²

People should avoid fish, soups, 'made dishes', pastry, undressed fruits, vegetables and fermented liquor. The foods which Salmon considered nutritious and easy to digest were cocoa, chocolate, milk, beef, mutton and brown meat. Fluid should not be consumed with the meal, he claimed, since it diluted the acid needed for digestion, although a very small quantity of wine might be allowed. He disapproved in particular of the 'injurious custom of late dinners'.¹³

Salmon frowned on other habits of civilised life as well. He condemned sedentary employments and thought that 'the luxurious habit of sitting upon cushioned chairs, sofas or stuffed seats' could be blamed for many

rectal problems. Hence many gentlemen of the legal profession and 'females of all ranks and the higher grades of society generally' suffered disproportionately from diseases like rectal prolapse.¹⁴ When Charles Dickens was a patient of his, Salmon had blamed his fistula on 'too much sitting at his desk'.¹⁵ He argued that 'daily exercise, either on foot or in a carriage, is indispensable'.¹⁶

In addition to constitutional measures, local treatment was useful in adjusting the humoral balance since disease had manifested itself in a specific area. Salmon recommended topical remedies, such as attaching leeches to the verge of the anus 'and cupping the perineum, nates or loins': inflammation indicated an excess of blood which could be reduced by blood-letting.¹⁷ Salmon also believed in the long-held view that sympathies existed between different parts of the body. This helped to explain why an affliction in one part might seem to affect another. For example, he often found afflictions of the urinary organs, uterus or vagina accompanying rectal disease. He noted 'how natural it is for the functions of the [bladder] to be more or less disturbed by stricture in the rectum' and the uterus, too, 'often sympathises with the rectum'.¹⁸ Salmon's belief in sympathies between elements of the body meant that he could maintain an holistic view even though he specialised in a limited part of the body.

By the consistent action of every organ the general fabric of the body is preserved . . . it appears as if it was a law in nature, that, in proportion as the function of any particular part is material to the support of man, any deviation from its healthful condition produces a corresponding effect.¹⁹

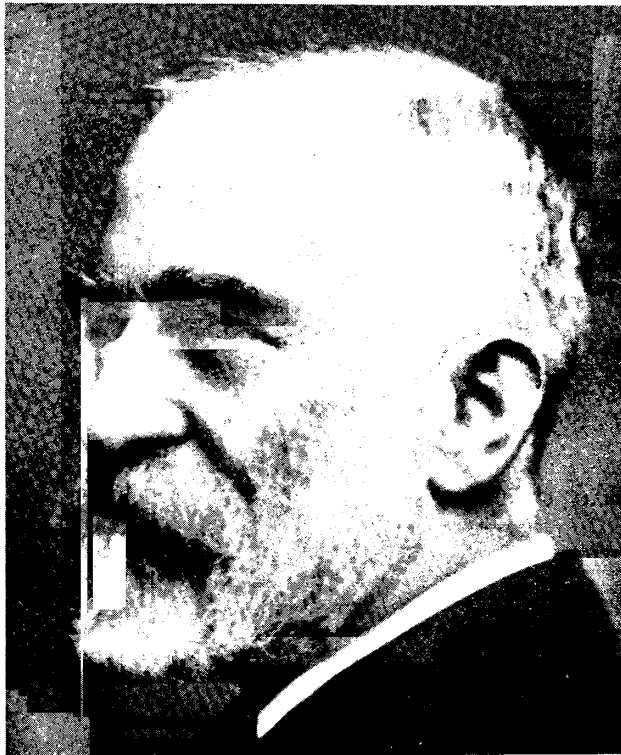
The blood was especially important in maintaining the health of each organ, and it was therefore crucial that its circulation was not impaired. Stricture might have such damaging consequences in the rectum.

We cannot, therefore, be too careful to avoid or to correct any cause which may produce a disturbed condition of the circulation of the blood of this particular part.²⁰

The state of the liver was also critical.

We should endeavour to obtain a healthy and sufficient secretion of bile; first, by equalizing the circulation of the liver, through the occasional loss of blood, by cupping, or by the application of leeches, and afterwards by the exhibition of alterative doses of mercury.²¹

By the early nineteenth century, anatomy was increasingly seen as crucial to the understanding and treatment of diseases. In order to increase his knowledge of anatomy and pathology Salmon undertook postmortems and collected pathological specimens, referring to his



D H Goodsall



Herbert Allingham



The New St Mark's, 1896



Women's ward, 1896

collection in his work on stricture. He stated that he had intended to illustrate the various kinds of strictures by drawings. However, he had given a

... large quantity of morbid preparations, which I had been some years in collecting, to the care of a professional gentleman of reputed character, from whose possession the most valuable of these preparations have been unaccountably lost.²²

A postmortem which he conducted in the 1820s on a patient with stricture and ulceration had, Salmon claimed,

... made a lasting impression upon my mind, and first directed my attention to a more accurate examination of the nature and effects of stricture in the rectum.²³

Current views of the anatomy of the rectal region were very different from those held today: there were also – and remain – significant differences between the interpretation of anatomists working on cadavers and those of clinicians working with patients. As concepts in academic anatomy changed they did not necessarily influence clinicians. Moreover, anatomical terms used between the early nineteenth century and the late twentieth century did not always change, although they might be applied to different parts of the rectal anatomy, leading to confusion among modern readers of earlier texts. In particular the internal and external sphincters were named but seen as differently arranged from modern notions, and the rectum was seen as the distal part of the bowel, ending at the anus, and often including what is now termed the sigmoid colon. The term 'anal canal' was introduced only at the end of the nineteenth century, and it was some time after that that it entered general surgical use.²⁴ It would be anachronistic, however, to employ terms other than as they were at the time.

Frederick Salmon explained that the rectum, which he described as the lowest portion of the alimentary canal, was usually about ten inches long, although it could be as much as 14 inches, and extended from the sigmoid flexure of the colon 'to the extremity of the gut' (the anus).²⁵ It began on the left side of the 'sacro-vertebral articulation or curvature' and descended obliquely in its first portion to the right into the pelvis in front of the sacrum and then descended in its second portion forwards and slightly downwards as low as the prostate gland in the male and 'under the vagina' in the female. At this level its third portion began, proceeding downwards and forwards 'to its termination at the anus'.²⁶ Its second portion rested on the levator ani muscles while the third portion was enveloped laterally by the levator ani muscles and inferiorly 'by the sphincter muscle'.²⁷ He believed that it served as a container of faeces and

when empty its mucous coat was thrown into undulating folds known as the columns of Morgagni. Its muscular coat consisted of two layers of fibres, an external longitudinal and an internal circular muscle, the first being formed from the longitudinal fibres of the colon which were arranged as three bands, uniting at the rectum into two layers. These, however, 'speedily expand into one coat, the strength of which diminishes the nearer we approach to the sphincter'.²⁸ Three arteries supplied the rectum: the superior, middle and inferior haemorrhoidals, and the nerves came from the sympathetic and sacral plexus. In explaining the action of defaecation, Salmon maintained that the diaphragm and abdominal muscles propelled the faeces down but as they approached 'the inferior part of the bowel', the action, being somewhat removed, diminished, and the contractile power of the intestine was proportionately increased, leading to defaecation.²⁹ In keeping with the tradition of natural theology, which did not see natural knowledge as undermining but rather as confirming religious beliefs, Salmon expressed admiration of the rectum:

... the entire arrangement of the part, as respects its form, muscular structure, and general anatomy, evinces a design far beyond the intervention of human ingenuity.³⁰

Salmon's view of the structure and function of the rectum generally accorded with most surgical commentators of the early nineteenth century, including William White of Bath and Thomas Copeland. However, in 1833 James O'Beirne of Dublin, Surgeon Extraordinary to the King, published his *New Views of the Process of Defaecation* in which he refuted several previously held views and became involved in a lengthy controversy with Salmon in the medical press. O'Beirne held that the rectum above its pouch was not a receptacle for faeces but except at defaecation remained empty and firmly contracted. He argued that the rectum acted 'in unison' with the sphincters to keep its cavity closed until the desire of evacuation overcame both. He also held that the rectum had much stronger muscular coats than any other part of the intestine. In a review of the book in the *London Medical and Surgical Journal* Salmon was mentioned as an authority with whom O'Beirne disagreed.³¹ Salmon immediately rushed to refute O'Beirne, giving a description of the passage of faeces from the small intestine to the anus. He maintained that the contents of the small intestine were fluid, in the colon their condition changed and by the time they reached the sigmoid flexure 'the residue is of the consistence of good cream'.³² At the sigmoid flexure the faeces were retarded – the muscle fibres here served to support rather than propel the faeces – and accumulated. They were then imperceptibly propelled into the rectum, which contracted when sufficient had collected, stimulating their expulsion. He argued that the rectum's purpose

was to accumulate faecal matter, which then acted as an 'antagonist' to the sphincter ani muscles. The controversy became quite acrimonious with both sides either denying originality in the other or completely contradicting his point of view. Attention focussed in particular on the nature of stricture, on which Salmon could be counted as an authority.

Stricture of the rectum

Stricture of the rectum was differentiated from other complaints as a specific disease in the nineteenth century; rectal specialists argued against those who denied its existence. By the end of the century, texts on rectal problems invariably included a chapter on stricture. However, in the twentieth century doubt was once again cast on its existence, or it was seen as a manifestation of other diseases such as tuberculosis, cancer or syphilis. Thomas Copeland had argued that stricture of the rectum could be produced by anything which 'excites inflammation or irritation in the inner membrane of the intestinal canal'.³³ William White argued that the problem was 'mechanical': the predisposing cause was that the gut was narrower around the termination of the colon 'than it ought to be for the free and easy passage of the faeces'.³⁴ Salmon sympathised more with Copeland's view than White's. He did not agree that the rectum was badly designed, although there might be 'a constitutional predisposition to stricture' due to the narrowness of the colon at the sigmoid flexure. However, it required an irritant to produce 'contraction'. Habitual costiveness, the use of large doses of drastic purgative medicines, indigestion, or the 'acid state' of undigested matter could all irritate the inner coat of the bowel. He was sceptical of a prevalent notion that syphilis could cause strictures. The problem could result from piles or fistula, although he believed that fistula was more frequently a consequence rather than a cause of stricture. The most distressing causes were 'carcinomatous affections', which were very painful and 'invariably fatal'.³⁵ Salmon noted that the mucous coat of the rectum was rarely changed in appearance. However,

... occasionally the internal coat of the bowel is thrown into wrinkles, forming so many pouches; and where irritation attendant upon the disease has been great and protracted I have discovered inflammatory appearances and patches of ulceration.³⁶

Sometimes the bowel then became very much thickened and the passage was therefore narrower. In extreme cases, where stricture had been 'neglected', Salmon described finding adhesions which 'firmly unite' the rectum with the bladder and the uterus or vagina, often with fistulous

communications between them.³⁷ He thought that the morbid change was probably the result of severe thickening of the bowel, 'from deposition in the cellular substance between its muscular and mucous coats'.³⁸

Salmon argued that it was at the angles of the three curves of the rectum that obstruction could be expected. In his experience, most strictures were either about five or six inches from the anus, or at the sigmoid flexure. Strictures due to a carcinomatous affection were close to the anus, as the disease

... in all probability, originates in the mucous glands of the intestine, which are most prevalent towards the inferior part of the bowel.³⁹

There had been reports of carcinoma of the rectum in 'the most superior part of the bowel', but Salmon argued that only recently had particular attention been paid to rectal diseases and these cases were 'merely instances of permanent spasmodic stricture' where the bowel had ulcerated due to 'neglect'.⁴⁰ He noted that even the most eminent of practitioners rarely made a physical examination of their patients. Most strictures, he argued, were within the reach of a finger, and yet patients came to him who had not been physically examined.

James O'Beirne, however, cast doubt on the existence of most 'strictures'. He argued that when examining a healthy person the finger could pass up about two inches from the anus and would then meet a firm ring which could easily be mistaken for a stricture but which was perfectly normal. Those who were constipated or who used purgative medicines could, however, irritate the colon at the sigmoid flexure, causing a 'spasmodic' stricture. He denied that stricture was ever found lower in the rectum.⁴¹ Salmon on the other hand argued that a permanent stricture could exist and offered to demonstrate this by showing numerous morbid preparations in his support. Authorities enlisted by both sides failed to resolve the immediate controversy, but it was Salmon's point of view that persisted throughout the century.⁴²

In treating stricture, Salmon first paid attention to the patient's constitution, and then applied 'surgical' means to the disease. This did not necessarily entail cutting but, in more general terms, some sort of manual treatment. Salmon used a bougie, a flexible slender instrument, generally made of wax. (The name comes from the French for a wax candle, which in turn derives from Bujiyah, an Algerian town which had an important wax trade.) He gave his patients an enema of 'tepid poppy water' (an opiate) to 'tranquillize' the bowel and dislodge its contents.⁴³ He placed men either over the back of a chair or over a bed, so that he could easily see the anus and manipulate the bougie, and he examined women on their sides beneath the bedclothes, exposing only 'the orifice of the bowel'.⁴⁴ Salmon's bougies ranged in circumference from one inch to three and a

half inches and were specially made for him by Mr Brough, the surgical instrument maker of Bartholomew Close. To dilate strictures Salmon used a bougie of at least eleven inches long, thoroughly softened in hot water, well-oiled, and adapted to the shape of the passage. Having manoeuvred it so that it entered the sigmoid flexure, Salmon left it there for ten to fifteen minutes and then removed it. He allowed it to harden in the shape to which the intestine had moulded it, to see what the stricture looked like. At intervals of about three to five days, the 'operation' would be repeated, using a larger bougie each time.⁴⁵

By 1833 Salmon had modified his use of the bougie, recommending that it should remain in the rectum for a shorter time, but that it should be increased in length so that it could be introduced into the colon.⁴⁶ Salmon rarely used a knife to divide a stricture, condemning such treatment as dangerous and often useless.⁴⁷ He had used a knife on two occasions on a stricture near the anus, but there was always a serious danger of haemorrhage and in neither case had it been very successful. However, if the patient was suffering from cancer with a resultant stricture, a bougie simply aggravated the pain and a knife might need to be used: all that could be done in such a case was 'to soothe the passage of the afflicted sufferer to the grave'.⁴⁸

The possible link between 'disease of the lungs' (tuberculosis) and rectal problems was controversial. Salmon spoke of the frequent 'co-existence' of the two. Strictures could 'force into action the seeds of such particular affections as may be lying dormant in the constitution'.⁴⁹ In a public lecture at the Aldersgate Street Dispensary in 1832, Salmon noted that very frequently 'persons do not die from disease of the intestine, but from consumption'.⁵⁰ Nevertheless, he saw stricture and consumption as two separate diseases. He argued that fistula could act as an outlet for unhealthy material and if blocked up could be followed by 'structural disease of the lungs'.⁵¹

Prolapse of the rectum

Salmon's second book concerned prolapse of the rectum. He insisted on calling the disease 'by what it really is', prolapsus of the rectum rather than the name frequently used for it, prolapsus ani. The use of this term, Salmon declared,

... shows how superficially the diseases of the rectum have been studied; for the least reflection will convince us that the anus is but the aperture into the intestine through the sphincter, which is a fixed point, and therefore cannot be prolapsed.⁵²

He also occasionally termed the prolapse a 'tumour', an all-embracing

term for any swelling. The causes of prolapse of the rectum could be constitutional or 'connected with some peculiarity of the general health, or the ordinary pursuits and occupations of individuals'.⁵³ It might also occur because of some other disease of the rectum or its immediate vicinity. The most general cause was protracted costiveness. If the prolapsed rectum had a bluish appearance, this indicated that the liver was diseased, resulting in stagnation of the blood in the minute extremities of the haemorrhoidal vessels. Among other constitutional causes were 'general relaxation of the system' and want of attention to diet.⁵⁴

Treatment for prolapse included the daily use of mild enemas, the introduction of a bougie and the application of leeches to the anus, to relieve the evidently swollen blood vessels. Salmon held that prolapse often resulted from too strong a sphincter, and to correct this, he recommended making an incision through the muscle or removing a triangular portion of the anus. He had commissioned his surgical instrument maker to construct a dilator which was introduced after the patient had been prepared with an aperient. This was followed by 'one bold stroke with the knife through the muscle into the cellular substance around the anus'.⁵⁵ The patient was not anaesthetised, of course, and therefore it was necessary for a skilful surgeon to work fast. Occasionally Salmon removed a prolapse. The patient was asked to push the prolapse out; it was then secured with hooks or forceps and then, 'with one stroke of the scissors', it was removed.

... as deep as the line of division between the mucous and muscular coats of the rectum, the latter of which should be left entire, otherwise a permanent difficulty of relieving the bowels will follow the operation.⁵⁶

He argued that 'if we could combat the danger from haemorrhage' the operation by excision would be preferable. By pinning the prolapse outside – the pain produced by this part of the operation was 'insignificant' – it was easier to stem the haemorrhage. In most cases the flow of blood 'which it is better to encourage to a certain degree' would cease spontaneously. Otherwise it should be checked by the means in common use, such as cold or astringent washes.⁵⁷

Haemorrhoids

There were two main surgical methods in use for the treatment of haemorrhoids in the early nineteenth century: ligature and simple excision. However, it is clear from Salmon's descriptions and notes of particular cases that he used such operative measures rarely, generally preferring to use a bougie to dilate the bowel at the level of the haemor-

rhoids, as had been suggested by Thomas Copeland. Copeland held that the pressure of the bougie resulted in the absorption of the haemorrhoids, while Salmon argued that piles were frequently due to stricture, and the treatment had its effect by removing the stricture.⁵⁸ He noted (1828) that haemorrhoids were 'exceedingly common', so prevalent in fact that few persons 'deem it requisite to consult their medical advisers upon the subject' until the piles had become quite bad. Most people used 'the nostrum of some reputed quack' or a topical application recommended 'by some kind friend'. Piles could be caused, he thought, by almost any circumstances whether 'constitutional, mechanical, preternaturally exciting, [or] mechanically obstructing the circulation of these parts'. The excessive use of purgatives was an important constitutional cause, while a mechanical cause could be 'venery'. A sedentary lifestyle could promote preternatural warmth in the anal region and thus stimulate the development of piles, while 'torpid bowels' might help to obstruct the circulation with a similar effect.⁵⁹

In the 1820s and 1830s where operative intervention was necessary, Salmon preferred excision to ligature. He held that it was less painful, less prone to haemorrhage and healed more easily. He claimed to have used excision repeatedly with great success. Occasionally he encountered haemorrhage but never to such an extent as to endanger the life of the patient 'or even to be a source of apprehension, since it has readily subsided upon throwing a few injections of cold water into the rectum'.⁶⁰

Patients

In his works Salmon cited cases which reflected his ability to attract patients from far and wide. He mentioned businessmen, merchants, lawyers, those associated with the Indian civil service or trade with India, and in one instance a gentleman from the West Indies, who had apparently made a special trip to see him. Salmon also stressed the number of cases referred to him from other doctors. The patient in one instance suffered from distension and permanent enlargement of the colon. When Salmon first saw him, 'he lived in a coffee house and indulged himself'. Salmon persuaded him to move to 'a more airy and comfortable situation' at Walworth; but despite taking this advice he died, whereupon Salmon performed a postmortem on him.⁶¹

In another case, from 1825, the patient was in pain and passed what looked like 'sheep's dung', diarrhoea and blood. He was a poor man, who had attended many of London's hospitals including St George's, St Bartholomew's, Westminster, The London and The Middlesex. With a history like this, Salmon told him that it was 'useless to expect that I could give him any effectual advice'.⁶² However, Salmon diagnosed his

ST MARK'S HOSPITAL, LONDON

problem as stricture, and became interested in the case. The patient was 'destitute of friends, home, and even the common necessities of life', and in order to encourage his return, Salmon gave him a small allowance as well as medicines. The patient soon appeared to be improved, headed back to his home area so that he could be supported by his parish, but returned two months later with similar problems, having led 'an exceedingly irregular life'. Salmon refused to treat him further since he had been so negligent of himself.⁶³

If a case was interesting, but unsuccessful, Salmon usually endeavoured to conduct a postmortem on the body. He was, for example, able to carry out a postmortem on a woman who probably had a vesico-colic fistula. She apparently made Salmon promise to perform a postmortem to discover the 'true nature' of her disease even though she would not allow a full examination when she was alive.⁶⁴

PRACTICE AT ST MARK'S IN 1857

St Mark's was a small hospital, little reported in the medical press. A rare glimpse of practice at the hospital, however, appeared in the *Medical Times and Gazette* in 1857, shortly before Salmon retired, and shortly before the appointments of Gowlland and Lane. Salmon was therefore the only surgeon on the staff, although he also employed a house surgeon to assist him. Little had changed in his practice except in the treatment of haemorrhoids. The account of the medical visitor sent by the journal, however, helps to fill in the details of that practice.

Anaesthesia had now been employed for a decade in Britain, but Salmon rarely used it as he believed that it increased the risk of severe haemorrhage by relaxing the sphincter ani: he never anaesthetised patients at St Mark's, and only used chloroform in private practice if the patient very strongly desired it. The visitor from the *Medical Times and Gazette* commented that

We believe Mr Salmon is not alone in his dislike of chloroform in operations on the rectum, though we are not aware of any other Surgeon who lays any great stress on its disuse.⁶⁵

The visitor found Salmon's treatment of haemorrhoids particularly original. Most surgeons distinguished between external piles, defined as those which were outside the margin of the sphincter and were skin covered, and internal piles which were inside and covered in mucous membrane. The visitor noted that current opinion held that external piles were venous and should be excised while internal ones (the most common) were arterial and should be ligated as excision could lead to severe

haemorrhage.⁶⁶ Prominent surgeons such as James Syme, Thomas Blizard Curling, Sir Benjamin Brodie and Sir Astley Cooper had recommended ligating internal piles. The established method was to pass a threaded needle through the pile and to tie it in two halves. There were some opponents to ligation, who maintained that 'phlebitis' (inflammation of the veins), pelvic abscesses or even peritonitis could result. Those practising ligation claimed that it was very safe, while it was known that Astley Cooper had lost patients after simple excision. Frederick Salmon, who maintained that piles were prolapsed Morgagnian columns, hypertrophied and rendered vascular by constriction, criticised the established method of ligation on several grounds. It was sometimes difficult to tie the ligature sufficiently deep on the base of the pile, and in tying so thick a mass it was difficult to avoid including skin, causing great pain. Salmon noted that sometimes ligation of this kind resulted in the pile being cut through the middle rather than being taken away completely.⁶⁷

Since 1836 at St Mark's, according to William Allingham, Salmon had used a method of combined ligature and excision.⁶⁸ He first administered an enema to clear the gut and to bring the haemorrhoids into view and then placed the patient on his or her side on a high table, with the knees drawn up to the abdomen. With an assistant separating the buttocks, a tenaculum, or hooked fork, was passed into the anus to hook the pile just as he hooked prolapses. It was drawn downwards and held away from the margin of the sphincter while Salmon made 'a deep gash' with sharp scissors 'just at the margin of the junction of the skin and mucous membrane'.⁶⁹ Further incisions were made on each side, leaving the pile with only its mucous membrane uncut. A ligature of strong waxed silk was then tied around the base of the pile. Each pile was treated in this way, and not returned but kept protruded. The first dressing consisted of cotton wool or sponge, which a nurse held lightly against the part, to stem any bleeding. On the following day a bread poultice was substituted for the cotton wool until 'the tension of the parts had subsided'. It was expected that wounds would heal in about ten days. Throughout the treatment 'the strictest attention to cleanliness is enforced, and all discharges carefully washed away'.⁷⁰ The visitor to the hospital remarked that

From the observation of many cases there cannot, we think, be any doubts as to the very superior efficacy of this method of applying the ligature over others.⁷¹

He could think of only one possible problem which other surgeons might suggest: a risk of haemorrhage. However, Salmon maintained that the pile was generally fed by a single large artery running beneath the mucous

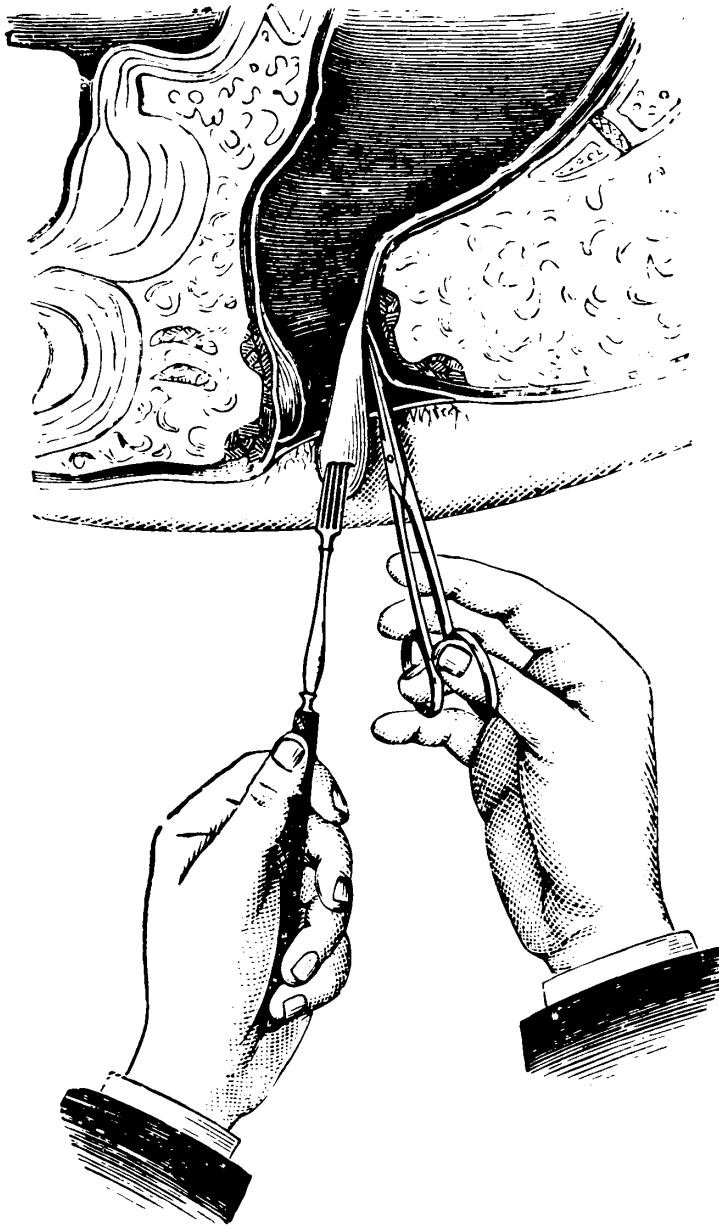
membrane, 'in a straight direction from above downwards'. An incision which passed up parallel with the surface could therefore be made without endangering this artery. Since he did not shorten the ends of the ligature, and did not return the pile, any haemorrhage could easily be noticed and arrested. The commentator concluded that

... we believe that the results which have been obtained through a long series of years at St Mark's justify Mr Salmon in holding the risk of haemorrhage to be no objection whatever to the operation.⁷²

The visitor from the medical journal also described Salmon's practice in the treatment of prolapse in children, fissure and fistula. Salmon recommended that children suffering from prolapse should defaecate while lying on their backs, making it difficult to strain violently. He also advocated vegetable-based lotions rather than the more popular minerals as local astringents. In small fissures, Salmon used a mercurial ointment much used for a variety of complaints in the nineteenth century, calomel.⁷³ In treating more serious fissures, however, Salmon made 'very free and deep incisions'.⁷⁴

A fistula was the Latin word for reed or pipe, and in medicine it was taken to mean a track connecting two epithelial surfaces, such as the bowel to the outside skin (a track which did not seem to have two openings was often, but not always, known as a sinus). Laying open a fistula had been a standard practice for centuries, although other practices had been followed as well. John of Arderne in the fourteenth century had recommended it using a director and bistoury. The same procedure was advocated by Percivall Pott in 1765, against those who either cut part of the fistula away or introduced caustic substances to erode it.⁷⁵ James Syme, writing in 1838, thought that laying open a fistula was very straightforward, and was surprised that not all surgeons had yet adopted it. He was particularly puzzled that the disease of fistula was so well known to the public, and wondered why the 'slight incision' required for its remedy was performed in hospital theatres 'with all the pomp and circumstance of a great operation'.⁷⁶ Frederick Salmon cut all the way along fistulae, and the medical visitor commented that this 'necessarily involves an extent of incision at least three times that usually employed'.⁷⁷ Salmon also added to the procedure by making what he called a 'back cut', a T-shaped cut beyond the external opening to prevent premature healing of the outer part of the wound before the rest had granulated. William Allingham later noted that if this was carried to excess, incontinence could result, although 'there can be no hesitation in saying that Mr Salmon cured many cases by this means where other surgeons had failed'.⁷⁸ Salmon employed cotton wool rather than the usual material,

DISEASES OF THE RECTUM IN ALL THEIR BANEFUL VARIETIES



Salmon's operation for piles, from Allingham (1901)

lint, to arrest any haemorrhage: he used it as a plug in the anus, and also introduced it with a thin metal probe along the incised fistula. The patient would then be sent back to bed, and allotted a separate attendant (often an ambulatory patient) to hold a piece of sponge gently against the anus and to report any bleeding. No styptics were used to prevent bleeding, and Salmon reported in 1857 that he had used cautery only twice in the preceding two years.⁷⁹

THE DEVELOPING FIELD, 1870-1900

After Salmon's retirement in 1859 (and death in 1868), St Mark's was no longer dominated by the practice of only one man. Several of his successors, in particular Peter Gowlland, the Allinghams and David Goodsall left their impression on treatments at the hospital. Some links with the past were preserved: the younger surgeons were taught by their older colleagues. The appointment of Arthur Leared as physician in 1866, just before Salmon's death, was also a link with Salmon's era. Leared had already published a book, *The Causes and Treatment of Imperfect Digestion* (1860) when he was appointed.⁸⁰ He was the last physician until after the Second World War whose area of expertise related to the treatment of diseases at St Mark's. Future physicians were expected to assess the general health (in particular the heart and lungs) of patients pre- or post-operatively, or to decide whether patients had tuberculosis. Surgery was divorcing itself increasingly from the medical and constitutional notions which Salmon had stressed: the new generation of surgeons at St Mark's was able to use anaesthesia and antiseptic techniques to extend surgical skills.

The number of specialists was increasing in all areas of surgery, although most endeavoured to gain an appointment at a general hospital as well. As the leaders in the profession more frequently had specialist skills, the social status of specialists rose. However great Salmon's specialist abilities, he was not a leader in the early Victorian medical world. On the other hand, 30 years later, William Allingham and subsequently his son were leaders both in that world and in the treatment of rectal disease in London. As the specialists laid the groundwork for their areas, they published books in increasing numbers covering all aspects of their practice as guides to other practitioners and to encourage referrals. Changes in practice were incorporated in new editions rather than in articles. It was only when this groundwork had been laid (in colorectal surgery this was by the interwar period in the twentieth century) that large numbers of articles were written to provide updates of the latest practice. As a specialist area grew, drawing in larger numbers

of practitioners, practice changed more rapidly, necessitating more frequent reassessments. Such articles were then mainly addressed to other practitioners in the specialist area rather than to general practitioners.

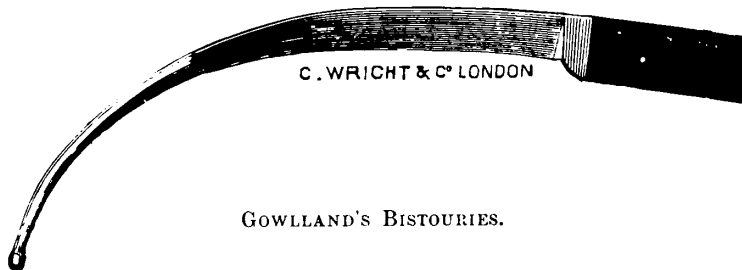
This pattern is clearly apparent among the St Mark's surgeons. Of Salmon's two immediate successors, Peter Gowlland wrote two articles and James Lane three. Neither wrote books.⁸¹ William Allingham was the first St Mark's surgeon to publish a book on rectal disease while holding an appointment at the hospital. *Fistula, Haemorrhoids, Painful Ulcer, Stricture, Prolapsus and Other Diseases of the Rectum: Their Diagnosis and Treatment* was first published in 1871, with subsequent editions in 1873, 1879 and 1882 (when it was also translated into Italian), and later editions (retitled *The Diagnosis and Treatment of Diseases of the Rectum*) published in conjunction with his son in 1888, 1896 and 1901.⁸² Alfred Cooper produced a book in 1887 that was less comprehensive than Allingham's, which was revised and extended with another member of the St Mark's staff, Frederick Swinford Edwards, and republished in 1892. Cooper also contributed one article to the contemporary debate on the operation of colotomy in 1888. By the end of the century it was becoming more common to contribute articles addressing current notions and practice to journals. David Goodsall, for example, co-authored a book with WE Miles on *Diseases of the Anus and Rectum* (1900 and 1905), but he also wrote 15 articles on a range of rectal complaints including polyps, fistula, fissure and stricture, and on colotomy.⁸³ Herbert Allingham not only contributed a substantial amount to his father's book, he also wrote 22 articles on rectal problems. He discussed polyps, piles, incontinence, constipation, fistula and prolapse, but most importantly he took an active part in the debate over the use of lumbar, inguinal, or transverse colotomy for rectal cancer.⁸⁴ Analyses of practice at St Mark's in the nineteenth century can only be based on published works: those who did not publish therefore go largely unrecorded. However, it was those who published who took the main part in developing the field, since it was their works which helped to achieve this.

Like other specialists, the surgeons at St Mark's also devised and described a range of new instruments for their specialty. Salmon had regularly commissioned new instruments from his instrument makers. Gowlland devised vulcanite tubes to arrest haemorrhage and Goodsall instructed his instrument makers to devise a new rectal bougie which he then described in *The Lancet*. The Allinghams had illustrations of several of their own instruments in their book, including Allingham senior's four-bladed speculum, an instrument for introducing an elastic ligature in the treatment of fistula, spring-scissors for fistula, a clamp for haemorrhoids, an injection tube for introducing ointment into the rectum,

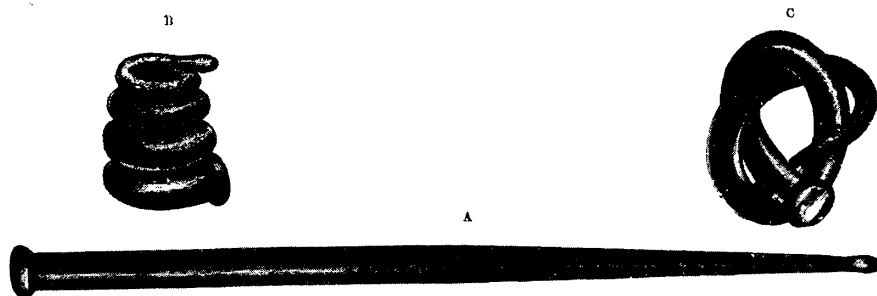
INSTRUMENTS DEvised BY SURGEONS AT ST MARK'S



GOWLLAND'S SPECULUM.



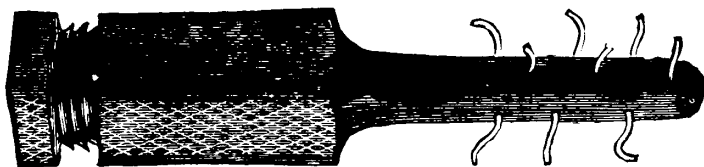
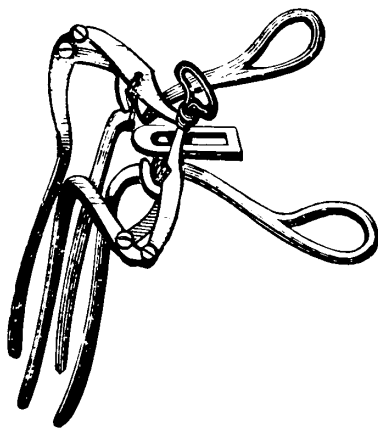
GOWLLAND'S BISTOURIES.



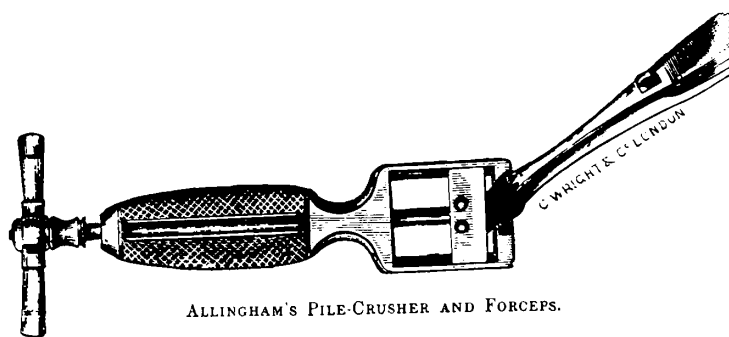
THE INDIA-RUBBER COATED SHOT-BOUGIE.

This Bougie was made for us by Messrs. Weiss & Son, and consists of a linen case coated with India-rubber and filled with No. 8 Shot. It is twelve inches in length. The first six inches from the base of the bougie is of the same diameter throughout, but the remaining six inches gradually taper to a slightly bulbous point as shown in Fig. A. The Bougie is made in sizes varying from three-eighths of an inch to one inch in diameter in gradations of one-sixteenth of an inch. The most useful sizes are those from three-eighths of an inch to three quarters of an inch, those of a larger size being seldom required. Figs B and C show the perfect pliability of these bougies after they have been immersed for a minute or two in warm water. Glycerine alone should be used for lubricating purposes as it tends to preserve the India-rubber, but vaseline or oil rapidly destroy it.

MR. ALLINGHAM'S FOUR-BLADED SPECULUM.



ALLINGHAM'S OINTMENT INTRODUCER.



ALLINGHAM'S PILE-CRUSHER AND FORCEPS.

Allingham junior's pile crusher and his instrument for the excision of haemorrhoids.⁸⁵

Again, like other specialists, the surgeons at St Mark's placed great stress on the need to improve understanding of their special area. William Allingham (1871) remarked that 'Rectal diseases are among the most common that affect civilized humanity'⁸⁶ but, although general practitioners were mostly well informed on other areas, 'much uncertainty' prevailed about rectal disease:

... it is not uncommon for me to hear gentlemen who come to St Mark's Hospital to see the practice say they know next to nothing about disease of the rectum.⁸⁷

He deplored this, arguing that many rectal problems 'in their earlier stages are curable by very simple means and often without recourse to any operation'. Reflecting the embryonic state of specialisation, Allingham noted that he had 'unusual' opportunities for the study of rectal disease and that he felt that it was therefore his duty to publish his experience 'for the benefit of my professional brethren'.⁸⁸ Alfred Cooper (1887) also stressed that his 'opportunities for the investigation and treatment' of rectal diseases had been 'ample', both because of his private practice and his work at St Mark's.⁸⁹

Stressing observation and experience, the surgeons in their writings aimed to be practical. In the earlier period, Salmon had included a little anatomy and physiology in his works: his nineteenth century successors did not. Salmon was not one of the medical elite, but was amongst those who adopted new notions of medical science, notions which often continued to be rejected by the elite, whose ranks the later St Mark's surgeons were joining. As Allingham put it, he intended 'to avoid all I could the domain of theory' so that a clear and applicable knowledge 'of a very prevalent class of disease' could be obtained. Readers were also encouraged to pay a few visits to St Mark's - 'all are heartily welcome' - an effective way of establishing the hospital as a pre-eminent rectal centre and of teaching general practitioners.⁹⁰

Allingham (1871) did not shun all theory: he speculated that the wrong food and too much alcohol, sedentary indoor occupations and inappropriate clothing could be factors in causing rectal disease. The natives of South Africa, he noted, rarely seemed to suffer from these problems. Like Salmon, Allingham stressed the importance of a thorough physical examination. It was not only 'false delicacy' but also 'not commonly honest' for a medical man to avoid examining a patient 'both ocularly and digitally'.⁹¹ Allingham described a number of questions he put to the patient. He or she was asked about pain, its nature and

position, on discharges and their character, incontinence of wind or faeces, and any hereditary tendency to rectal diseases. Women were asked about their uterus, and both sexes as to whether they coughed or had 'any proclivity to chest infections', because of the link between tuberculosis and rectal disease. Placing patients on their sides with their knees drawn up to the abdomen, Allingham submitted them to examination, noting any discolouration or mis-shaping of the anus, and any tumours, ulceration or fistulous orifices. With his forefinger he felt around the outside of the anus for induration or abscesses, and for the condition of the sphincter. An enema was then administered to the patient, after which any protrusion was noted. Finally the interior of the rectum was examined with the finger:

The instructed and practised finger passed into the rectum affords great information; to me generally all that is needed – internal fistulous orifices, polypi, minute ulcerations, fissures, etc., can all be easily detected.⁹²

Cooper (1887) described how the forefinger should be well anointed with its nail cut short (no covering was used). The Victorian medical elite distrusted instruments, often claiming that they detracted from clinical acuity.⁹³ Both Cooper and Allingham placed greater stress on the use of the finger than on a speculum or rectoscope. As Allingham (1871) put it: 'I have had many varieties of the latter instrument constructed, to be used with or without artificial light; but none in my humble opinion are of any general utility'.⁹⁴ He described the ordinary metal-plated speculum employed at St Mark's: it was shaped like a forefinger, was open up one side and at the end, with a well-fitting wooden plug which was removed after insertion. To explore the rectum at a higher level, Allingham recommended an ordinary glass tubular speculum, silvered inside and cut off obliquely at the end. On the recommendation of the American surgeon, J Marion Sims, patients were placed in a prone position, with hips well elevated on hard pillows for examination with the speculum. To diagnose stricture or malignant disease high up in the sigmoid flexure, Allingham held that it was possible to introduce a hand into the rectum of some women, after anaesthetising the patient and dilating the sphincter.⁹⁵ In later writings Cooper (1887) and Allingham (1888), recorded that they also used a bougie for their rectal examinations.⁹⁶

The differences between the editions of William and Herbert Allingham's book show how the field of rectal surgery was developing. In 1882, the fourth edition extended the section on cancer from 15 pages to 38. In 1888, William Allingham laid down clear guidelines for his son to follow in revising the book. He emphasised that 'the essentially practical

character' of the book must be maintained, 'anatomical and pathological questions only being considered when important in diagnosis or treatment'.⁹⁷ Herbert Allingham added material to every section, and wrote three entirely new chapters, on incontinence, excision of the rectum, and the use of inguinal and lumbar colotomy. The 1882 edition had included a few pictures, mainly of instruments, but the 1888 edition included 53 diagrams by Herbert Allingham of diseases and operations. Diagnostic techniques, too, were changing. The Allinghams now mentioned that they asked the patient whether there was blood, possibly mixed with mucus, in the stools. The state of the liver and kidneys was also elicited. If an operation seemed necessary, it was recommended that the urine should always be examined for sugar or albumin, lest the kidneys were diseased.⁹⁸

In the popular mind, according to William Allingham (1871), most rectal problems were either fistulae or piles. He compiled a chart of 4,000 consecutive cases seen in the outpatient department at St Mark's in the 1860s which showed that although over half of the cases fell into these categories, the surgeons were differentiating rectal complaints into a number of other afflictions, many more than had been the case in the 1830s. In particular, cases of stricture appeared far less frequently: whereas Salmon had ascribed many symptoms to this affliction, his successors, although still maintaining it as a separate disease, diagnosed it less often. The two tables make interesting comparison.

*Report of cases treated between 1 September 1835 and 1 September 1836*⁹⁹

		%
Stricture	34	26
Piles	26	20
Fistula	23	17.6
Prolapsus	19	14.5
Psoriasis Ani	6	4.6
Ulceration of the mucous membrane	5	3.8
Fissure of the orifice	4	3
Haemorrhage from the bowel	3	2.3
Inflammation of the rectum	3	2.3
Malignant disease	2	1.5
Condyloma ani	2	1.5
Abscess in the rectum	2	1.5
Ascarides	2	1.5
	131	100

DISEASES OF THE RECTUM IN ALL THEIR BANEFUL VARIETIES

*Outpatients at St Mark's in the 1860s:
classification by William Allingham of 4,000 consecutive cases¹⁰⁰*

		%
Fistula (172 with symptoms of affection of the lungs)	1,208	30.2
Abscess, 196 (of these 151 became fistulae)	45	1.1
Haemorrhoids, internal	863	21.6
external	102	2.6
Fissure or painful ulcer	446	11.2
Syphilitic diseases of the anus and rectum	348	8.7
Ulceration (neither malignant nor syphilitic)	190	4.8
Constipation	185	4.6
Pruritus ani	180	4.5
Stricture of the rectum (with or without ulceration)	178	4.5
Cancer of the rectum	105	2.6
Procidencia	53	1.3
Polypus (without fissure)	16	0.4
Haemorrhage (cause not ascertained)	15	0.4
Impaction of faeces	14	0.4
Neuralgia	12	0.3
Dysentery	12	0.3
Spasmodic contraction of the sphincter (no fissure)	8	0.2
Proctitis	7	0.2
Foreign bodies in the rectum	5	0.1
Necrosis of bone (sacrum and tuberosity of the ischium)	4	0.1
Rodent ulcer	2	0.05
Vicarious menstruation from the rectum	2	0.05
	<u>4,000</u>	<u>100</u>

Fistula

In Allingham's classification, cases of fistula outnumbered those of piles at St Mark's, figures which were disputed by other commentators. In later editions, the Allinghams continued to claim that fistula presented more frequently than haemorrhoids, at least in hospital practice (that is, among the poor). They withdrew the table in 1901 because of the 'great discrepancies between private and hospital practice'. They explained the difference in social terms: there were several diseases (for example, piles) 'to which hospital patients pay little or no attention, but which in well-to-do people are a source of great trouble'.¹⁰¹ It is also possible that the title of St Mark's 'for fistula and other diseases of the rectum', encouraged sufferers from fistula to seek treatment there.

William Allingham (1871) suggested a few possible causes for fistula: it

could result from an injury to the anus or to the mucous membrane of the bowel by costive motions, from foreign bodies such as fish or rabbit bones, exposure to wet or cold, or from sitting on damp seats after exercise. He maintained that he had traced many cases of rectal abscesses and subsequent fistulae to sitting on the outside of an omnibus shortly after active exertion. Fistulae could also result from 'certain depraved conditions of the blood, such as frequently gave rise to boils or carbuncles'.¹⁰² He held that most fistulae began after the formation of an abscess immediately beneath the skin just outside the anus, which then burst into the bowel, or tracked in any other direction. An abscess alone could be drained with a curved bistoury. Other fistulae began with the ulceration of the mucous membrane of the rectum, particularly in 'phthisical' (tubercular) patients: fistulae which did not make their way through to the skin were most commonly found 'in subjects who have consumption or who are predisposed to it'.¹⁰³ Alfred Cooper (1887) agreed with Allingham that fistulae either began in an abscess outside the bowel, or in ulceration of the mucous membrane. He thought that suppuration of inflamed haemorrhoidal veins could also cause fistulae and that a sedentary life-style, constipation or diarrhoea could predispose to the problem.¹⁰⁴

The surgeons at St Mark's used the standard classification of fistulae, 'complete' for those which had both an internal and an external opening, 'blind internal' for those which ran from the bowel but did not have an external opening, and 'blind external' which had an external opening but apparently no internal opening. Allingham (1871) maintained that the most common pattern was of a fistula running into the bowel from an abscess: 'very few fistulae . . . have existed for more than three months . . . without an internal opening'.¹⁰⁵ David Goodsall worked out a general rule for the topographical relation between the internal and external orifices of a fistula:

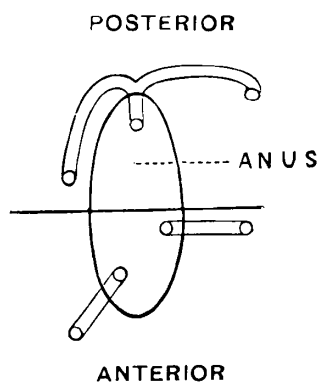
Fistulae having their external aperture situated behind a plane passing transversely through the centre of the anus usually have their internal orifices in the middle line posteriorly, and therefore have a somewhat curved course; whereas those which are anterior to this supposed plane generally have their internal openings immediately opposite the external, and on the same side, thus constituting the simplest form of complete fistula.¹⁰⁶

A horseshoe fistula had its opening in the midline, with external orifices on either side of the anus. Goodsall argued that it was necessary for the surgeon to recognise this, so that he did not think that he was dealing with two different fistulae.¹⁰⁷

Like Salmon, the later surgeons at St Mark's strongly recommended

DISEASES OF THE RECTUM IN ALL THEIR BANEFUL VARIETIES

laying open fistulae by cutting along the whole length of all tracks. In the early 1870s, Allingham did not administer a general anaesthetic, although he might spray the anal region with ether so that the operation 'otherwise exquisitely painful' was rendered 'almost if not quite painless'.¹⁰⁸ By 1882, he held that patients should be fully anaesthetised, although a small abscess might be drained merely with some local anaesthetic. His younger colleagues also anaesthetised their patients.¹⁰⁹ Allingham wrote that he frequently treated patients who had come from other hospitals, where the whole length of the fistula had not been laid open. Even very extensive incisions, he maintained, healed with astonishing rapidity if properly treated afterwards, while limited ones did not heal at all if the whole track of the fistula had not been followed. He 'packed' cotton wool into the wound to prevent haemorrhage after the operation, although stressing that it was important not to put too much too frequently into the wound, as this prevented the sides from uniting. Allingham found that it was sometimes difficult to keep the opening of a blind external fistula sufficiently large for it to heal, and from the late 1880s he occasionally used a method invented by a friend in which a bone collar stud was inserted in the opening of the fistula. Allingham improved on the method by drilling a hole in it to allow pus to drain.¹¹⁰



Goodsall's rule showing the relationship of external and internal openings of a fistula

In the early 1870s Allingham only recommended use of antiseptic lotions such as carbolic acid if the wound was 'unhealthy'. He did not accept the theory of antiseptics, but like many other surgeons he followed some of its practice when 'the odour is offensive' or there were other signs which adherents of antiseptic theory would maintain indicated septic infection.¹¹¹ His use of antiseptics had increased by 1882: the cavity of an abscess was now carefully filled with wool soaked in carbolised oil,

according to proportions which Lister recommended. He also used india-rubber drainage tubes, which he had not mentioned before.¹¹² Thorough antiseptic or aseptic precautions were not taken at St Mark's, however, until after the turn of the century.

The reluctance of surgeons like Salmon and Allingham to use anaesthesia strengthened the hands of the other specialists, the so-called quacks, who claimed simple, painless and effective cures. Those who maintained that there was an easy, non-operative solution misled their patients, Allingham (1873) argued:

I am often anxiously asked by sufferers if a fistula can be cured without an operation, or as they say, 'the use of the knife.' They frequently see in the papers, books advertised by individuals who pretend to cure fistula and other diseases of the rectum, without cutting or laying up.¹¹³

However, to Allingham, rectal diseases were among 'the most satisfactory in the whole range of surgery' since they were particularly amenable to operation.¹¹⁴ If the works of 'the pretenders to cure fistula' were consulted, he argued, 'you will find that they do not tell you what their method of treatment is', simply that they have had a great number of successful cases. He had seen a gentleman who had been under treatment of 'one of these advertising quacks' and had paid him more than a hundred guineas for simply the promise of a cure and yet he had 'suffered a martyrdom, and got worse instead of better'.¹¹⁵ After a while, the 'quack' was always out when he called. Allingham noted that the poor were more willing to submit to operation than those he met in his private practice:

... time is generally a great consideration to the poor man; he does not mind a little pain; he wants to be cured as quick as possible, and therefore prefers to be operated upon at once, in order to get well speedily. It is only the rich who can afford the luxury of three or four months' treatment, and, perhaps, at the end of that time be no nearer well than at first.¹¹⁶

It was not only the so-called quacks who were at fault: Allingham also described unsuccessful cases that had been treated at general hospitals such as St Thomas's or St Bartholomew's, and private cases which had passed through the hands of eminent medical practitioners. He stressed that bad cases would bring 'discredit' and 'disgrace' to the surgeon as well as anxiety to the patient. It was an argument for the necessity for specialists, as well as a way of encouraging both hospital and private referrals.¹¹⁷

An increasing concern in the 1880s and 1890s, as the treatment for

fistula was refined, was to avoid incontinence. There was disagreement over how much of the anal sphincters could be divided, a controversy which was complicated by a general absence of discussion, and therefore agreement, over their arrangement. The surgeons at St Mark's were agreed that it did not matter how extensive the laying open might be, so long as it was not carried too far up. They generally implied that the internal sphincter was above the external and it was the higher, or inner, muscle that should not be severed. The muscles were therefore internal and external in relation to the anus, not internal and external in relation to the anal canal as was later held. Hence there was talk of not dividing both sphincters. It was also maintained that one cut through the sphincters was often permissible but that two were dangerous. It was best to make incisions at right angles to the muscle fibres rather than at an oblique angle, which made healing more difficult. In the later editions of his book, William Allingham held that it was more important to know whether a fistula was anal, rectal or pelvic than whether it was blind or complete, internal or external.¹¹⁸ Swinford Edwards (1887) argued against excising a high-lying fistula lest this caused incontinence: frequent injections of tincture of iodine, with or without the insertion of a drainage tube, should be used.¹¹⁹ When a surgeon was faced with a horseshoe fistula, the danger of incontinence seemed particularly great. David Goodsall (1890) had hoped to simplify the treatment of fistula in working out his rule. He argued that the normal treatment was to divide both sphincters (that is, to take the incision high up), but, using his rule, he described a procedure which followed the fistulous track and divided only what he described as the posterior attachment of the external sphincter, leaving the internal sphincter intact.¹²⁰

A simple fistula was one thing: when it was associated with tuberculosis it was a far more difficult problem. Both William and Herbert Allingham were adamant that such fistulae should nevertheless be treated. Writing as a rectal specialist, William Allingham (1871) did not look at fistulae as making the treatment of tuberculosis more difficult: from his point of view it was the co-existence of tuberculosis which made the treatment of fistula difficult. As in Salmon's time, there was no general agreement about whether fistula was a feature of tuberculosis or whether the existence of both tuberculosis and a fistula in a patient was coincidental. Most contemporary writers argued that no interference should be attempted with such fistulae, that the wounds would not heal, and the patient's life might actually be shortened by such intervention since it was often held in quasi-humoral terms that the fistula formed an outlet for the 'chest infection' which it was dangerous to 'stop up'. Eminent medical men who had advocated non-intervention included Thomas Blizard Curling of The London Hospital, John Erichsen of University College

Hospital and Timothy Holmes of St George's. Others maintained that it was rare to find phthisis and fistula co-existing. Allingham (1871) had no doubt that there was 'a very large number of cases of fistula in which there is tubercular disease of the lungs': at the lowest computation, he thought that at least 14 per cent of patients with fistula also had tuberculosis.¹²¹ He argued that it was rare that treating a fistula made the lung disease worse, except in very advanced cases, although much greater care of the patient's environment needed to be taken. It was best to wait for 'genial weather' so that the patient was not confined after the operation; he or she should be allowed plenty of fresh air and sunshine, should be kept amused and cheerful, and should probably convalesce at the seaside – all the accepted treatments for tuberculosis.¹²² In 1874 Allingham argued that elastic ligatures could be useful in the treatment of tubercular patients with fistula, as had been recommended by Professor Leopold Dittel of Vienna. (The treatment of fistula by ligature was practised in very early times – Cooper (1887) recorded that Celsus had described it.) A ligature was threaded through the fistula and tied tightly, so that it gradually cut its way through the track of the fistula and out. In nineteenth century treatment an elastic ligature was substituted for the older silk ligatures.¹²³ Other surgeons at St Mark's also recommended its use for tubercular patients: it was held that ligatures were bloodless, cure was more rapid, no anaesthetic was required, there was 'a minimum amount of suppuration' and the patient did not need to be confined to bed.¹²⁴

Herbert Allingham agreed with his father on the treatment of fistula in tubercular patients. He presented a paper on the subject in 1890 to a meeting of the Medical Society of London. His paper and the discussion which followed demonstrated the divisions in contemporary medical and surgical opinion on the subject. Allingham quoted from three books on tuberculosis and diseases of the chest. Richard Douglas Powell in *Diseases of the Lungs* maintained that few cases of phthisis were complicated by fistula, although he noted that bacilli characteristic of tuberculosis were to be found in most cases of chronic fistula. Most cases should be operated upon, unless the chest disease was very far advanced, in which case it could help to spread it. JE Pollock, in his book on *Phthisis*, however, maintained that the discharge from a fistula was useful in 'quiescing' the disease in the lungs: he therefore opposed operation. Another medical commentator, HW Fuller, in *Diseases of the Chest*, believed that such fistulae should not be operated upon, unless the discharge was very great, when it became a source of 'waste' which should be stopped up. Allingham argued for operation but stressed that it was vital for the surgeon to consult the physician, and *vice versa*, over any patient with both afflictions.

It is absurd for either surgeon or physician to form a decided opinion without conferring one with the other both as to the nature and extent of the fistula and the condition of the phthisis.¹²⁵

Allingham argued that the fistula usually began with a tubercular ulcer in the rectum, which developed into a blind internal sinus, causing great pain. An incision should be made from the outside to drain it. He held that

... it is obvious that in order to give the lung a chance of recovery the discharging fistula should be cured, and a cessation be put to the drain on the system.¹²⁶

Allingham did not recommend operation in all cases: if the patient was very tubercular and the fistula slight, then it could well be left alone. Theodore Williams, President of the Medical Society of London, commented that any discharge in a case of phthisis, if not excessive, improved the condition of the lungs. His position therefore directly opposed Allingham's, and was largely supported by the other physicians. The surgeons on the other hand tended to favour Allingham's point of view.¹²⁷

Haemorrhoids

Allingham (1871) seemed to regard almost every activity, or lack of it, as potentially predisposing to haemorrhoids, including constipation, diarrhoea, 'too good living – especially the consumption of large quantities of meat', very coarse fare, indulgence in alcohol, excessive smoking, violent and prolonged exertion, sedentary occupation, exposure to wet or cold, discharges from the bowel resulting from intestinal diseases, pregnancy, uterine diseases, friction from clothing, the use of printed paper 'as a detergent', straining and

... the neglect of proper ablutions (this is very important; many persons seem to forget that the anus requires quite as much washing as any other part of the body).¹²⁸

Piles occurred 'almost equally in the robust and the weakly, in the rich and the poor, in the active and sedentary'.¹²⁹

All of the surgeons at St Mark's favoured Salmon's version of ligature and excision in removing internal piles.¹³⁰ (Later in the century, however, Frederick Swinford Edwards advocated injection treatment.) James R Lane strongly recommended ligature with excision, according to Salmon's procedure. External haemorrhoids, however, should be excised, a point of view with which all of his successors at St Mark's concurred.¹³¹ It was probably William Allingham who did most to popularise Salmon's operation: his book was very influential, being much quoted by later rectal surgeons both in Britain and America. Allingham gave a very full description of Salmon's procedure, strongly recommending it. Like Salmon,

Allingham early in his career preferred not to use an anaesthetic when operating for piles, less to check haemorrhage than to stop the protruded piles slipping up into the bowel. Allingham stated that he had often operated upon four or five haemorrhoids, returned them, and removed 'redundant skin' in one and a half to two minutes. However, he also described how to treat piles when the patient was under chloroform, and by the later editions of the book it is clear that he and his son were normally anaesthetising the patient.¹³² He made two changes to Salmon's procedure: if the pile was large, he occasionally cut part of it off after ligation, and he returned the piles through the sphincter after operation. If there was pain, Allingham gave the patient morphia. He described the operation as 'wonderfully free from danger to life', with results that were almost always satisfactory. In 1865 he published some statistics of practice at St Mark's, showing that in 3,210 operations on haemorrhoids, there had been no cases of pyaemia and what he described as 'only' five cases of tetanus.¹³³ Alfred Cooper (1887) argued that where constitutional or local treatments did not relieve symptoms, removal by ligature and excision 'will be found suitable for ninety-nine out of every hundred cases'.¹³⁴

Ligature and excision was later criticised for being potentially painful and leaving large raw areas, with a tendency to cause stenosis. The surgeons at St Mark's in the nineteenth century rarely referred to such problems, but despite their apparent satisfaction with the method, it is striking that they also experimented with other methods even if only to return to ligature and excision. Cauterisation of haemorrhoids was a method which had been practised since antiquity. In 1846 a Dublin surgeon, Cusack, introduced a procedure of clamp and cautery which later became particularly popular in America and enjoyed some favour in Britain after it was taken up by Henry Lee, at St George's. A clamp was placed at the base of each pile which was then cut off and a cautery iron was applied to the stump to prevent bleeding. A variation was clamp and torsion, where torsion was applied to bleeding vessels. The Allinghams (1901) considered that clamp and cautery or torsion had a higher risk of fatality, could be very painful post-operatively if the skin was involved, and was more likely to result in haemorrhage, slow healing and constriction from the scar tissue than ligature and excision.¹³⁵ William Allingham's senior, Peter Gowlland, 'who in all probability has had a larger experience in rectal surgery than any other surgeon in London', had given a prolonged trial to clamp and cautery, only to reject it in favour of ligature. Alfred Cooper had 'never had a fatal case with the ligature, and now does not employ the cautery'. Goodsall also preferred ligature and excision to clamp and cautery.¹³⁶

Crushing the base of the pile was advocated by George Pollock, of St George's Hospital, from the late 1870s. William Allingham tried it but

initially found it ineffective. His son devised a new form of crusher, in which a screw-movement was substituted for Pollock's lever action, and William Allingham maintained in 1882 that now 'the screw-crusher is a very safe instrument'. He had used it for 72 patients, 37 of whom were at St Mark's. However, it still had limitations: it had been hoped that it would cause less pain than the ligature method but in many cases the pain seemed as severe and prolonged, and recovery was not very rapid, averaging 23 days in the St Mark's cases.¹³⁷ Herbert Allingham, though, continued to be interested in pile crushing. In 1891 he reported on his experience of treating over 200 cases of piles, in which he had used crushing in over 100 cases and ligature in 80. He argued that surgeons should be flexible in their approach. Formerly each surgeon had one method which he used for all cases: some surgeons were pledged to the use of clamp and cautery while others upheld the supremacy of ligature in all instances. There was a place for a number of methods.¹³⁸

An operation which found little favour among the surgeons at St Mark's was Whitehead's procedure. Walter Whitehead (1882, 1887) argued that there was a specific pile bearing area that should be entirely removed to prevent recurrence. He stretched the anal sphincters and divided the mucous membrane at its junction with the skin around its entire circumference, separating the mucous membrane and haemorrhoids from the underlying structure. He found that generally patients did not suffer much pain in the post-operative period, although for 'highly neurotic patients' he kept a bag of ice in close proximity to the rectum.¹³⁹ The Allinghams thought that it was 'one of the worst operations for piles'.¹⁴⁰ There were serious risks of severe haemorrhage, anal stricture, incontinence and constant discharge of blood and mucus.¹⁴¹

As general anaesthesia was used more extensively and methods of stemming haemorrhage by torsion were improved, surgeons began to treat smaller piles which formerly would have been left alone. William Allingham advocated simple excision in some of these cases, and in 1882 recorded that he had treated 70 cases in this manner, with good results.¹⁴² A method of treatment which was strongly advocated by French surgeons was 'complete dilatation' of the sphincter muscles.¹⁴³ The Allinghams (1901) thought that in some cases 'full but gentle dilatation' brought relief, but that cases should be chosen with care: small piles, those in children or pregnant women, or associated with fissure, were the most appropriate.¹⁴⁴

The procedure for treating piles which attracted most interest towards the end of the nineteenth century was the use of injections. For many years some piles had been treated by the local application of caustics such as nitric acid, with varying degrees of success. In the new method, caustic

fluids were injected into the pile, with far more effective results. A Dublin surgeon, John Morgan, had injected piles with persulphate of iron from 1869, but it was not taken up in Britain. Because carbolic acid was used as a cure-all for any number of complaints, Milton Mitchell of Illinois, in 1871, began to treat piles by injecting them with a solution of one part carbolic acid to two parts of olive oil. He kept his method a secret, selling its formula just before his death to a number of so-called 'perambulating quacks'. A Chicago doctor, Edmund Andrews, discovered the secret in 1879, but its association with secret quack remedies engendered resistance to it among members of the medical profession. Many American surgeons who came to St Mark's repudiated the treatment, calling it uncertain and dangerous. Indeed many of the travelling pile-doctors were using very strong solutions. One particular opponent who visited St Mark's was Joseph Mathews of Louisville, who maintained that death from pyaemia, peritonitis or embolism could result from the treatment. William Allingham who also frequently condemned 'quacks', agreed with Mathews, arguing that the method was rarely effective.¹⁴⁵ However, Swinford Edwards in the 1880s conducted a trial of the method, his interest aroused by the practice among fringe practitioners, because it removed the need for a knife, 'an instrument the public is unduly afraid of'. He held that

... if the pain and confinement attendant upon an operation, whether by ligature, clamp and cautery, crushing, or excision, can be obviated, an immense boon is conferred upon the patient.¹⁴⁶

He carried out his experiment largely at St Mark's, rather than in his private practice: of the 38 cases, at most only three were private patients. He tried carbolic acid, perchloride of iron, sulphate of iron, and ergot, and was reasonably pleased with his results. The patient did not need to be confined for long, often an essential point, especially among hospital patients. One of his patients, for example, was a clerk in the City who feared that he would lose his job if he took time off for an operation. Edwards found that his patients experienced little pain, except in the case of one young man who, 'on my passing the needle into the first pile, jumped off the couch as if he had been shot'.¹⁴⁷ Edwards concluded that the method merited further trial. According to the Allinghams, Swinford Edwards then became the chief London exponent of injecting piles with carbolic acid.¹⁴⁸ It was not simply a method that was being taken up by the younger generation: his immediate colleague, Frederick Wallis, disagreed with Cooper on the merits of injection and continued to use ligature and excision.¹⁴⁹

Fissure

William Allingham (1873) reported that many patients with fissure thought they had haemorrhoids and that their medical attendants frequently accepted this diagnosis. It was an affliction which was seen at St Mark's with some regularity: over ten per cent of all cases seen in the outpatient department in the 1860s were diagnosed as having a fissure. Allingham maintained that women suffered more frequently from the complaint than men and that most fissures were 'dorsal', although they could be 'perineal' or 'lateral'. He thought that they were often caused by excessive straining or the passage of constipated stools, although a large number of fissures and other painful, irritable ulcers of the rectum were the result of syphilis. Fissures due to a tear in the mucous membrane, he held, were caused by simple means, could easily be cured, and yet they were allowed to wear out a patient's health in a remarkable manner. Given the pain resulting from a fissure, he found 'extraordinary' the length of time that people endured the affliction without seeking help.

It is not an uncommon thing for one to see fissures of many years' duration, especially in young women, who through delicacy of feeling often conceal rectal affections.¹⁵⁰

He described the fissure as an 'elongated, club-shaped ulcer' inside the anus, often accompanied by a 'polypoid growth'. James R Lane (1865) had also written of the coincidence of 'polypoid growths' with fissure, although maintaining in opposition to the view of another surgeon, Baker Brown, that fissures were not invariably accompanied by polyps.¹⁵¹ This growth was later known as Brodie's sentinel pile, although the surgeons at St Mark's did not refer to any such description by Benjamin Brodie and two modern commentators, Leon Banov and Miriam Duncan (1966), cannot find such an account in Brodie's works.¹⁵²

In the treatment of a dorsal fissure with little or no spasm, Allingham recommended the use of mild laxatives, and the application of an ointment consisting of belladonna, an opiate (as a painkiller) and a mercurial preparation (an anti-syphilitic treatment). Otherwise the fissure should be 'incised'. There was controversy over whether a minor or more extensive incision was the most effective. Allingham recommended the latter, with an incision not less than a quarter of an inch deep, cutting the length of the fissure. A French surgeon, Récamier, held that a spasmodic contraction of the sphincter was the main cause of fissure and that anal dilatation was therefore the best treatment. In the early 1870s Allingham thought that in severe fissures the pain was partly due to an 'exposed nerve' and spasmodic contraction of the sphincter, but that a lesion was also present and that dilatation was not the most effective treatment.¹⁵³ However, by the late 1870s, he saw greater merit in dilatation. The patient should be

anaesthetised – he remembered a case of dilatation in which the ‘cries of the patient were really heart-rending, and six or seven assistants were employed in holding him down’.¹⁵⁴ Considerable pressure was put on the sphincters for five or six minutes until they ‘completely give way’ and the muscle felt ‘like beef-steak, or even putty’.¹⁵⁵ The operation was, he said, perfectly safe, and useful for treating tubercular patients, the old, or children with congenital narrowness of the anus. In other cases he continued to advocate incision. He warned those who argued for only a slight incision, lest they produced incontinence, that patients would not thank them if they then needed a second operation and would probably seek advice elsewhere. He argued that the external sphincter (the lower part of the musculature) should be completely divided. If there was much spasm in the internal sphincter (that is, higher up), this should be thoroughly dilated, not cut. However, if there was an ‘ulcer’ at the level of the internal sphincter this should be incised.¹⁵⁶ At other times he argued that both the internal and external sphincters could be divided without risking incontinence, but on one side only.¹⁵⁷

In 1892 David Goodsall presented a systematic study of cases of non-syphilitic fissures and their treatment. He collected information from his own private practice as well as St Mark’s, and that of other surgeons at St Bartholomew’s, St Thomas’s and the Westminster. In non-syphilitic cases, there seemed to be two male cases to every three female ones. Most fissures were on the posterior side of the anus, just to the right or left of the middle line. ‘Polypoid growths’ were found in 11 per cent of male cases and 22 per cent of female. Most cases were cured by administering mild laxatives, lubricating the bowel with olive oil, and applying a resinous ointment. Where an operation was necessary, the best procedure was complete division of the external – but only the external – sphincter. One division only was necessary, however many fissures existed. Forcible stretching of the sphincters could also be used, particularly if there was a polypoid growth. In cases where the fissure was due to syphilis, relief was to be obtained by treating the patients with anti-syphilitic medicines.¹⁵⁸

Prolapse

Prolapse of the anus, Frederick Salmon had maintained in earlier years, was a misnomer for prolapse of the rectum. By the 1870s, further distinctions had been made. Peter Gowlland made some very careful drawings in the 1860s of diseases of the rectum in which he carefully distinguished between prolapsed piles, prolapse, procidentia, polyps and other afflictions.¹⁵⁹ (see illustrations facing pages 144 and 145). Allingham (1871) noted that prolapsed haemorrhoids were frequently termed ‘prolapsus ani’ and that this was very different pathologically either from prolapse of

the rectum or procidentia recti which he, like Gowlland, categorised as two conditions. Prolapse of the rectum, he argued, was the descent of the lower part of the rectum (what would later be termed the anal canal) through the anus. If an operation was required, he recommended a similar procedure to the treatment of haemorrhoids: ligation of the prolapsed rectum in several parts. Procidentia he defined as the descent of the upper part of the rectum, with all its coats, through the anus. A variation on this was intussusception, in which the upper part descended into the lower part of the bowel.

Allingham held that procidentia was more frequently seen in children than adults, and was more easily treatable in them; this related, he thought, to the anatomy and physiology of children. A likely cause was 'the very bad custom of sitting a child upon the chamber utensil, and leaving it there for an indefinite period, as practised by many mothers and nurses'.¹⁶⁰ Mild measures should be applied at first, but if these did not succeed, he recommended the application of strong nitric acid, under chloroform, to the prolapsed gut. In the adult, he used nitric acid or acid of nitrate of mercury, but it was not always effective, and in old people it could cause the rectum to slough. In very bad procidentia, Allingham held that it was worth dissecting off triangular portions of the mucous membrane, bringing the edges together with sutures, preferably of horse-hair, and returning the bowel.¹⁶¹ The Allinghams (1888) tried a plan recommended by the New York surgeon, Van Buren, for cauterising several parts of the prolapsed rectum to produce adhesions between the layers of bowel, reporting that it was a useful treatment. In addition to the remedies outlined by the Allinghams, Alfred Cooper and Swinford Edwards frequently used plugs which they inserted into the rectum to restrain a prolapse.¹⁶²

Pruritus ani

Some patients came to St Mark's complaining of a painful itching of the anus, or pruritus ani. William Allingham maintained that the disorder was frequently induced 'by habits of too free eating and drinking'.¹⁶³ The doctor should therefore 'spare no pains to investigate closely the habits' of the patient. Rich, highly seasoned foods, most meats, alcohol and coffee should be avoided, and fish, poultry, vegetables and ripe fruits were to be recommended. More exercise should be taken, and the patient should wash carefully night and morning, applying an ointment to the anus.¹⁶⁴ The Allinghams, Cooper and Edwards often included morphine or cocaine in their ointment. Occasionally a rectal plug seemed useful.¹⁶⁵ Frederick Wallis (1898) recorded that the first three questions he asked of such patients were: how much beer did they drink, when did they have

supper and when did they go to bed. He argued that poor patients improved with better cleansing, while richer patients often needed to forego a particular item of food.¹⁶⁶

Constipation and impaction of faeces

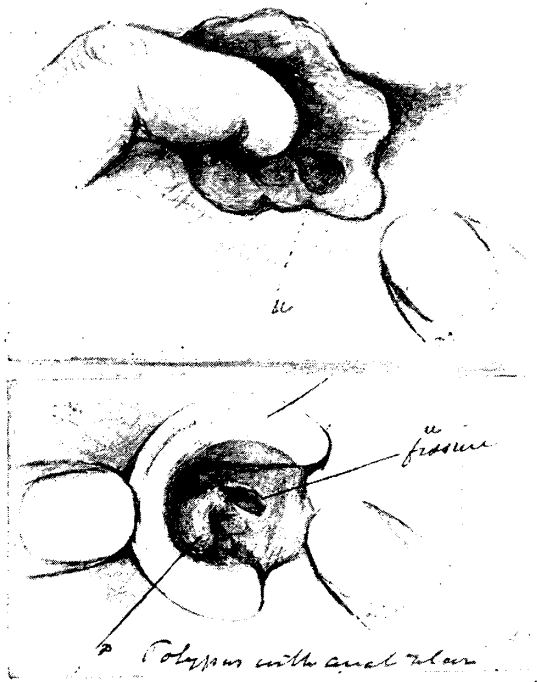
In the case of impaction, William Allingham (1871) recommended that the ball of faeces be broken up, and the sphincters dilated. He considered that the condition was due to loss of power of the muscular coat of the rectum, often as a result of childbirth.¹⁶⁷ Cooper (1887) placed most stress on the presence of a foreign body in the rectum.¹⁶⁸ William Allingham did not discuss constipation in the first editions of his book, even though almost 5 per cent of the outpatients at St Mark's were diagnosed as suffering from the ailment. This was largely because he did not see it as a surgical problem but one which should be remedied constitutionally. However, when his son revised the book in 1888, he considered the subject from a 'surgical' or instrumental point of view. It was sufficiently unusual to treat constipation in such way that Herbert Allingham also published the chapter as a paper in the *Medical Press and Circular*, together with articles on incontinence, looked at from an anatomical point of view. He noted that an increasing number of papers were now being written on the medical treatment of constipation. He argued that ill-health might cause it, but that more importantly constipation itself could cause ill-health 'for retained faeces poison the blood, and then the body is ill-nourished'.¹⁶⁹ 'Irregularity' was a potent cause of constipation: the fluid matter of faeces became absorbed, making defaecation more difficult. The sphincters became hypertrophied and thrown into spasm from straining, worsening the constipation. If the affliction was caused by another problem such as congenital narrowness of the anus, atonal muscles, intussusception of the rectum, polyps, piles, fissures, malignant disease or stricture, this should be treated. Otherwise, an enema should be administered through a long tube, introduced into the colon as far as the caecum. (When the colon was x-rayed in later years it was often shown that such tubes curled in the rectum rather than reaching the caecum.) He claimed that it was important to empty the bowel of its contents by 'mechanical means' as an initial measure, so that medicines were more likely to be assimilated, as the system recovered. Forcible dilatation, the use of bougies, galvanism or the injection of an irritant could all be useful in clearing the bowel: subsequent treatment should be medical.¹⁷⁰

Rectal polyps and non-malignant tumours

Rectal polyps, pedunculated growths in the rectum (which it may be remembered was considered to extend down to the anus), aroused some

DIFFERENTIATING BETWEEN TYPES
OF 'PROLAPSE'

Paintings by
P Y Gowlland, 1862



Polypus with anal ulcer

*Procidentia Recti in child ten
weeks old, it had been down
forteen days after diarrhoea.*



Procidentia recti in child

DIFFERENTIATING BETWEEN TYPES OF 'PROLAPSE'

Prolapsed Piles.

180



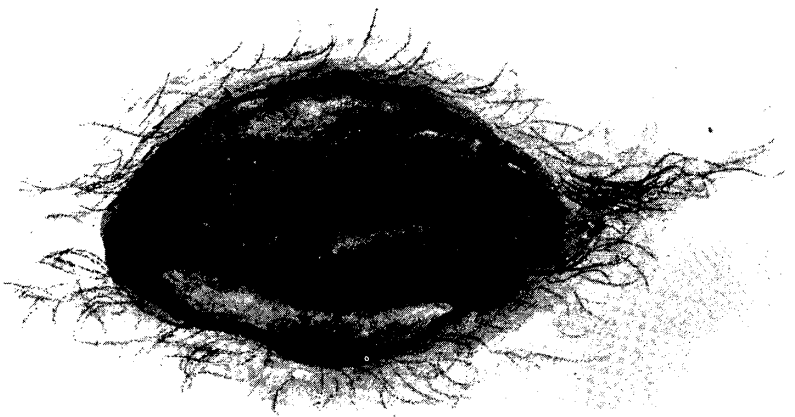
Thomas Coyle

*Py. 182
nat. 182
7. 182. 18. 1865.*

Prolapsed piles

Prolapsus Recti

181



James Crawford

*Py. 182
nat. 182
7. 182. 18. 1865.*

Prolapsus recti

interest among the St Mark's surgeons. Polypus recti was seen as a specific disease which was gradually being identified and differentiated from others. It was generally held that polyps were more frequent in children than adults but Lane (1865) argued that this was not the case.¹⁷¹ According to William Allingham (1871) polypus recti had formerly been regarded as rare, but it seemed either to be becoming more common or more readily diagnosed. He, too, had found no evidence that it was more frequently to be found in children, although Cooper (1887) disagreed.¹⁷² It had been noted that 'polypoid growths' often seemed to accompany fissures. Allingham distinguished between true rectal polyps and such polypoid growths: the latter, he thought, arose from the irritation caused by the fissure. However, he also believed that true polyps sometimes produced a fissure. Both he and Alfred Cooper argued that the condition should not be confused with procidentia or haemorrhoids, although this mistake was often made.¹⁷³ Allingham maintained that the polyp was generally situated an inch from the anus, and rarely higher. Occasionally more than one polyp might be found, and in children he had several times found two polyps. He recommended removal of the growth by ligature or clamp and torsion.¹⁷⁴

By the 1870s and 1880s, different types of polyps were being distinguished. Earlier it had been argued by Gowlland and others that there were two main types: soft or follicular, to be found in children, and hard or fibrous, to be found in adults.¹⁷⁵ Allingham (1873) agreed that children always had soft ones but thought that fibrous polyps were rare even in adults, and that these were probably cases of fibrous degeneration of piles.¹⁷⁶ Moreover, there were many other types of polyp, he argued. He remarked in 1888 that Gowlland had evidently not consulted the writings of foreign pathologists or he would have found this to be the case; Bathurst Woodman of the North-Eastern Hospital for Children, named five different kinds of polyps in children: soft, cystic, papillomatous, dermoid and sarcomatous.¹⁷⁷ In looking at adults other surgeons once again added fibrous polyps to this list.¹⁷⁸

Some microscopical work was now being undertaken, which was reflected in the greater differentiation of polyps. Collecting information from various sources, Cooper (1887) classified rectal polyps as non-malignant growths of the rectum, together with villous growths which he described as very rare, soft and spongy.¹⁷⁹ Five years later Cooper and Swinford Edwards (1892) expanded this classification with newly-available information. They argued that the main non-malignant growths in the rectum were adenoma, fibroma, papilloma, villous growths and lipoma. They held that adenomas or soft polyps resembled adenocarcinomas, except that they had no tendency to invade neighbouring tissues. They noted that these growths were 'not infrequently' found near

a cancerous ulcer in the rectum. Van Buren in America had stated that pedunculation in a rectal tumour had been assumed to be a diagnostic mark of adenoma, as distinct from cancer, but that he had seen several pedunculated polyps which had in fact shown under the microscope the characteristic features of cancer.¹⁸⁰ Cooper and Edwards argued that fibromas were more common than adenomas, if they included those found in connection with piles and fissure, and those which were due to 'hypertrophy of the upper extremities of the columns of Morgagni'. They consisted of fibrous bundles, could be quite large, were usually single but, in rare cases, as with the adenomas, could be found disseminated through the bowel. Papillomas or villous growths were rare afflictions, and mostly found in adults. Adenomas, fibromas and papillomas should all be removed by ligature. Lipomas were rarer still, and only a few cases were on record.¹⁸¹

By 1888 William Allingham had treated a few cases which had several polyps, ranging in number from 12 to 16. However, he had not met in his practice the large numbers of disseminated polyps recorded by Van Buren and Harrison Cripps, although he had seen such specimens in the museums at The Middlesex, Guy's and King's College Hospitals.¹⁸² However, by 1901 the Allinghams recorded the existence but rarity of disseminated polyps, and that they 'appear to be peculiar to certain families'. They personally knew of three families in which several members suffered from the disease. 'Why this should be so we are at a loss to explain.'¹⁸³ In these cases, the rectum was studded with many polyps, with the growths often along the whole length of the large intestine. Of the cases in their experience, all but one were female, aged between 20 and 25, with onset of the disease around the age of 15. Treatment was uncertain and difficult. They had initially tried to relieve these cases with large injections into the rectum of astringents such as nitrate of silver or iodine, with unsatisfactory results. By 1901 their practice was to dilate the sphincters under anaesthetic and scrape away the polyps with their finger nails, as far as the sigmoid flexure. The rest of the colon could not be reached. Cooper and Edwards in 1892 specifically pointed out that cases of multiple polyps had been recorded in which cancer followed.¹⁸⁴

Cancer of the rectum and colon

Towards the end of the nineteenth century, cancer seemed to many commentators to be an increasingly prevalent disease. Few cases of cancer of the rectum were treated at St Mark's when Salmon was surgeon, but his successors paid it increasing attention, partly because they had more techniques with which to treat it. Among rectal diseases, the advent of anaesthesia and antisepsis had most effect in the treatment of cancer, as operations which had formerly been performed extremely rarely because

of the risk of shock and sepsis began to enjoy greater favour. Salmon had argued that most cancers were to be found near the anus and that only misdiagnosis led other surgeons to suggest cancers at a higher level. In the last third of the nineteenth century it was accepted that cancer could develop in the colon, although with a lower incidence than in the rectum.

The surgeons at St Mark's were frank about their ability to affect the course of cancer. As William Allingham (1871) put it:

This is a subject one approaches with much pain and reluctance, as, unfortunately, we know no means of removing the disease, and our powers of delaying its progress, or even alleviating the suffering it causes, are but comparatively slight.¹⁸⁵

The pain was exquisite and, in advanced cases, unremitting: only temporary relief could be procured by the use of powerful sedatives and narcotics. Rectal cancer seemed to have a higher prevalence in men than women. As to the cause, Allingham stated that 'I cannot say that I have any knowledge of what causes cancer of the bowel, and I have but rarely been able to trace it to hereditary taint'.¹⁸⁶ Alfred Cooper also found that cancer of the rectum afflicted men more frequently than women, with most patients over 40. However, cancer of the rectum accounted for only four per cent of all cancers, he argued. Heredity was occasionally a factor, while 'sedentary and luxurious habits' and the existence of any source of continuous irritation were predisposing causes. Predominant symptoms were pain, constipation alternating with diarrhoea, discharge of blood, mucus and pus and general debilitation. A two-year life expectancy was all that could be anticipated.¹⁸⁷

William Allingham (1871) described cancer as a circumscribed deposit in the submucous connective tissue in the form of a tumour. It was usually fairly hard, and generally ulcerated at its summit. With the use of a speculum, it could be seen to be sloughy, dark-coloured and eaten away. It also had a distinctive odour. In 1871 he held that most tumours were situated within three inches of the anus. The 'ulceration' tended to spread upwards and downwards, affecting the rectal glands, and 'coincident with this, marked blood poisoning occurs, and secondary deposits take place in the liver, mesentery, ovaries, lungs and other organs'.¹⁸⁸ Frequently, Allingham held, it was misdiagnosed as other complaints such as piles by medical men who did not make a sufficiently thorough examination. By the late 1880s the microscope was being used more frequently to determine whether a tumour was malignant. Cooper (1887) used a microscope to help with his diagnosis, but the Allinghams (1888) stressed that clinical diagnosis was more accurate: some 'innocent' growths resembled malignant ones, and within the same tumour there could be both malignant and benign appearances.¹⁸⁹

The treatment of cancer was as difficult as trying to elucidate its cause. Allingham (1873) saw no prospect of cure:

There is no single remedy I ever saw mentioned or heard of that I have not made trial of, but I am sorry to say I never saw a particle of curative effect from any drug or any system of medicine.¹⁹⁰

The pain could be relieved to some extent by injections of morphine, and the application of caustics to the tumour could help to relieve symptoms. He had tried the injection of acetic acid, but found it only increased pain.¹⁹¹ In the 1870s a new remedy for cancer containing turpentine had been suggested by a Birmingham surgeon, John Clay, but Allingham (1882) found it ineffective.¹⁹²

By the early 1870s a new procedure – colotomy – was being used as a palliative measure in the treatment of rectal cancer. It was advocated when cancer obstructed the bowel and to relieve pain which was believed to result from faeces passing over the cancer. The technique consisted of bringing the bowel to the skin surface and dividing it so that faeces escaped by an artificial anus. In the nineteenth century it was termed 'colotomy', an incision in the colon, becoming known as 'colostomy', or the creation of a hole or stoma, in the twentieth century. In the earlier period greater emphasis was placed on the fact that surgeons incised the colon, a very risky operation in pre-antiseptic days, while in the twentieth century the stress was on the effective creation of an artificial anus. The change of terminology also reflected the earlier hope that the incision when used for other afflictions could eventually be repaired and the bowel dropped back into the abdomen; later it was accepted that the hole was usually permanent. The first colotomies were undertaken for imperforate anus in children. Alexis Littre of Paris suggested in 1710 that it might be possible to open the caecum or sigmoid colon by an incision in the right or left groin, but the great danger of peritonitis or other septic infection meant that such operations were extremely rare. In the late eighteenth century the operation was suggested for intestinal obstruction, but again rarely performed. In 1796 a Danish surgeon, Heinrich Callisen, suggested a modification to Littre's operation in an attempt to avoid peritonitis. He advised operating through the back, in the lumbar region, close to the spine, to avoid entering the peritoneum. There was no evidence that he ever carried out such an operation nor that the next proponent of the method, JZ Amussat, of Paris, did so either, although the procedure then bore his name. By the mid-1850s the patient could be anaesthetised and a few London surgeons, including John Erichsen at University College Hospital, adopted Amussat's method, although the operation was far from widespread. In competition with them was a group of surgeons at The London Hospital who followed Littre's abdominal or

inguinal approach. One of their number, Nathaniel Ward, advocated in 1865 that colotomy should be performed in all cases of rectal cancer, even before obstruction occurred. It was Amussat's lumbar, extra-peritoneal approach which was the preferred operation until the late 1880s.¹⁹³

The operation secured a great deal of interest among surgeons at the London hospitals. Allingham performed his first colotomy in 1865, after carrying out more than 50 dissections. He reported his first ten cases in 1870, having operated for obstruction, cancer, syphilitic ulceration and tuberculous ulceration.¹⁹⁴ In treating cancer, some surgeons argued that life could be prolonged by the diversion of faeces, although William Allingham (1873) thought that it simply mitigated suffering. By 1873 he had performed lumbar colotomy 16 times on patients with cancer. Until the 1860s, the operation was generally not undertaken unless complete obstruction had existed for some time, and consequently the gut was distended and easy to find. By the late 1860s and 1870s it was held that earlier intervention was desirable, but this meant that the colon was more difficult to locate. Allingham maintained that the surgeon should mark a spot 'on the crest of the ilium, full half an inch posterior to its centre, measured between the two superior spinous processes' since he had found that the colon was normally opposite this point.¹⁹⁵ The intestine should be drawn well out of the wound and opened longitudinally for about an inch, the edges of the incision being stitched to the edges of the skin. Allingham argued that the immediate outcome of the operation depended almost entirely on whether the peritoneal cavity was opened by mistake. He applied a weak solution of carbolic acid to the wound after operation, and patients were usually able to get about in four weeks. They were fitted with an india-rubber pad to prevent the escape of wind and faeces from the lumbar opening and were encouraged if possible to defaecate in the morning to avoid incontinence and to wash the aperture twice daily.¹⁹⁶

As antiseptic practices gained wider acceptance, dividing the peritoneum seemed more feasible and a younger generation of surgeons argued for inguinal colotomy. In 1882 William Allingham had never performed an inguinal colotomy on an adult, although he had used it for two infants; he argued that the left lumbar region was 'best suited' anatomically for colotomy.¹⁹⁷ His son thought differently, and Herbert Allingham became a major exponent of inguinal colotomy, publishing several articles and contributing a complete chapter on the subject to his father's book. He declared in 1887 that: 'The more I watch the more confident I feel that inguinal colotomy is the better operation in the majority of cases'.¹⁹⁸

Now that surgery, through perfect cleanliness, has made such gigantic strides, and the peritoneum is no longer held in awe as in former days,

the opening of the serous cavity, if due care be taken, does not to any great extent increase the danger of the operation ¹⁹⁹

Herbert Allingham first performed the operation in 1886 at the age of 24, having never seen it carried out by anyone else, on a patient who was not suitable for lumbar colotomy. There were various methods then in vogue for performing the operation, but Allingham worked out his own procedure. He made a diagonal two-inch incision in the left inguinal region (left iliac fossa) through the skin and muscles and snipped through the peritoneum, which was then carefully sewn with carbolised silk or catgut to the skin. The gut at the sigmoid flexure was brought through and stitched to the wound. A few days later when the wound had healed slightly the bowel was opened so that it appeared like a double-barrelled gun with two orifices separated by a spur. Herbert Allingham gave several reasons for preferring inguinal to lumbar colotomy. He found it easier to administer anaesthesia to patients when they were lying on their backs rather than on their sides, and the intestine did not fall away from the operator, allowing a smaller incision. He had undertaken more than 500 postmortems to establish that the sigmoid flexure had a normal position, which he maintained was easier to find than in lumbar colotomy. An objection levelled at those practising inguinal colotomy was that faeces more frequently passed beyond the artificial anus than in the lumbar procedure. Allingham held the view that, provided that there was a good spur, this was not a problem. Some surgeons objected that the opening was not sufficiently far from the diseased part, but Allingham maintained that it was rare for cancer to attack the sigmoid flexure, and supported this statement by referring to the postmortem records from St George's Hospital from 1848 to 1887, which indicated that it was usually only the rectum that was diseased. After inguinal colotomy, Allingham held, there was little or no suppuration, whereas this seemed a frequent accompaniment of lumbar colotomy. It was also easier for patients to clean themselves.²⁰⁰

The shift in preference from lumbar to inguinal colotomy was reflected in the practice of Alfred Cooper. In 1887 he preferred the former, and held that patients had no difficulty in wearing a pad and controlling the escape of faeces.²⁰¹ However, it would appear that he had not actually performed an inguinal colotomy at this stage. In 1888, according to the notes of Arthur Chilcott, the house surgeon at St Mark's, Cooper performed three cases of inguinal colotomy. By the time that he reissued his book in 1892 (with Swinford Edwards) he had changed his view, now preferring inguinal colotomy.²⁰² In the meantime, Herbert Allingham continued to take an active part in the debate over the two methods, popularising and improving upon the inguinal approach. In 1889 he published a paper on a problem which occurred with inguinal colotomy,

prolapse of the bowel through the aperture, however small the incision. He recommended that the bowel be pulled through the incision as far as possible, and then as much as 12 inches could be cut off, with the help of a clamp to arrest haemorrhage. 'It is interesting to note', Allingham wrote, 'the large amounts of intestines ... that can be removed without any apparent detriment to the patient'. Risk of haemorrhage seemed to be the only serious drawback.²⁰³ In his first 50 cases of inguinal colotomy Allingham was candid about his results: in 11 cases, faeces escaped both from the artificial anus and the rectum. However, he lost only two patients in the immediate aftermath of the operation.²⁰⁴

The operation of colotomy was palliative only and used largely to avoid obstruction: it seemed impossible to cure cancer. Another procedure which began to be followed from the 1870s, and which was also intended to relieve rather than to cure cancer, was excision of the rectum. Again it was made feasible by anaesthetic and antiseptic techniques. In cases of encephaloid cancer of the rectum, William Allingham (1882) claimed that much relief could be obtained by tearing out the growth with his fingers. 'Extirpation of the rectum' was also possible if it did not require the removal of more than about five inches in males or four inches in females, measuring from the anus, so that the peritoneal cavity was not opened.²⁰⁵ Excision of the rectum had occasionally been performed for at least 130 years: in 1739 in France Jean Faget had excised the rectum via the perineum for cancer and in 1826 Jacques Lisfranc had also used the method. However, it did not gain wide acceptance because of its attendant mortality. As Henry Smith, surgeon at University College Hospital, remarked in Holmes' *System of Surgery* (1870):

... some surgeons, a few years since, were in the habit of performing excision of the lower part of the rectum when affected with cancer, but this proceeding must be looked upon as both barbarous and unscientific, and it is now happily exploded from the catalogue of surgical operations.²⁰⁶

However, with new precautions against sepsis, Verneuil revived perineal excision of the rectum in 1873.²⁰⁷ Between 1874 and 1879 William Allingham excised sections of the rectum (it should be remembered that the rectum was considered to end at the anus) in 13 cases and in 16 others removed the rectum in its whole circumference, but with mixed results. In most cases the disease returned, affecting the glands in the groin or involving the liver, and most patients soon died. Most of the patients became incontinent, and one patient died of erysipelas 14 days after the operation. However in one case, in which Allingham described the growth as 'only feebly malignant', the patient survived for at least three years.²⁰⁸ Where he had excised the circumference of the rectum,

Allingham mostly found it impossible to bring the stump of the rectum down to the skin as Richard von Volkmann in Germany claimed to be able to do. Haemorrhage was therefore a serious danger before the wound granulated. He stated that he did not use carbolic dressings

... with the view of following Mr Lister in his antiseptic treatment; in fact, these operations appear to me to be about the very last to which the process, valuable as it undoubtedly is in some cases, is applicable.²⁰⁹

Antiseptic methods seemed useless, he argued, as faecal matter was bound to get in the wound. However, he did argue that it was useful to syringe the wound with 'some innocent disinfectant'. It would then rapidly 'fill up' and the rectum would grow downwards and unite with the skin.²¹⁰

By 1882 Allingham was undertaking fewer excisions of the rectum because of dissatisfaction with his and others' results. Only one of his earlier patients was still alive, and he was in 'the most wretched condition'. He had been operated upon in 1878 at St Mark's, at the age of 50. He now had perpetual incontinence, and the rectum had constricted so much after the operation that he was obliged to wear a tube constantly lest it close completely. 'He is, as a matter of course, incapable of earning his livelihood.'²¹¹ Allingham concluded that life was probably little prolonged by the operation and he disagreed strongly with those German surgeons who maintained that the operation should be undertaken in all cases, regardless of extent of disease, the parts involved, or the age and condition of the patient. James Adams of The London Hospital had recommended that a colotomy should be performed prior to excising the rectum in order to divert faeces from contaminating the wound and in the hope of preventing recurrence. In 1882 Allingham was not practising this, although he considered that it might be useful.²¹² Alfred Cooper (1887) argued that good results could be achieved by the extirpation of diseased portions of the rectum, in 'appropriate cases', but warned of the dangers of haemorrhage, purulent inflammation, septicaemia and peritonitis. Antiseptic precautions, he held, were essential.²¹³

By the 1890s, however, excision of the rectum was beginning to offer the hope of cure. Cooper and Edwards (1892) had found that it was attended with very good results in properly selected cases. The removal of the growth could sometimes arrest the disease, provided that it had not spread, particularly into the lymphatic glands. 'As in other operations for cancer', they noted, 'a sufficient margin of healthy tissue should be removed with the disease'.²¹⁴ They recommended it even when the disease had existed for a long time, arguing that generally in cancer of the rectum, 'the lymphatic glands remain unaffected until a comparatively late

period'.²¹⁵ Variations on the operation of excision of the rectum were now being practised, although in 1892 Cooper and Edwards preferred the perineal approach.²¹⁶ Theodor Kocher in 1875 had employed a sacral approach, which Kraske had then taken up and refined. Aiming to reach malignant growths as high as the sigmoid flexure, he removed the coccyx and part of the sacrum, which also allowed the lower part of the bowel to be left intact if not diseased. In 1886 Max Schede recommended a temporary colotomy before operating according to Kraske's method, to avoid sepsis and fistulae²¹⁷, and various other German surgeons experimented with modifications of the method. By 1892, Swinford Edwards had used the method once, in a case of malignant disease involving a large portion of the rectum. He performed a preliminary colotomy, and washed the rectum out with an antiseptic, Condy's fluid.²¹⁸ In 1897 Swinford Edwards reported on a series of 14 cases in which he had used Kraske's operation. Surgeons still debated the relative merits of colotomy and excision of the rectum for cancer, with the majority preferring the former because it had a lower operative mortality rate. To debate in such terms meant that both operations were seen as palliative, but Edwards argued that this was not the case and he drew a sharp distinction between colotomy as a palliative measure and excision which held out the possibility of removing the disease altogether or delaying recurrence. Among his 14 cases there were two operative deaths, from exhaustion and from peritonitis, and only one recurrence. The only contraindication for the operation, he held, was evidence of 'lymphatic infection' or extension of the disease beyond the rectal walls – extirpation was then disastrous.²¹⁹

In the 1890s the Allinghams saw 1,500 cases of cancer of the rectum. On these they had performed 100 excisions of the rectum and 500 colotomies. They noted that colotomy seemed to prolong a patient's life by very little, and they doubted that diverting the faeces slowed the course of the cancer.²²⁰ They concluded that excision of the rectum was the only operation which held out the possibility of cure. However they did not recommend it if there were significant adhesions or enlarged glands, or if the patient was so exhausted that free loss of blood would endanger life. Moreover, they felt that patients tended not to seek advice sufficiently early for there to be a good chance of eradicating the disease. Like their colleagues Cooper and Edwards, the Allinghams preferred Kraske's method to the perineal approach, unless the growth was close to the anus. In Kraske's operation, they recommended that the bowel be brought out and fixed into the upper angle of the wound, as a sacral anus. Alternatively, the bowel could be anastomosed to the anal canal, or it could be brought down and fixed into the anus, although in this method, suggested by Moulouguet, there was a danger of necrosis of the gut.²²¹

It was gradually found when treating obstruction with colotomy that cancers could appear in any part of the bowel: it was not a disease that was always found close to the anus. Building on the experience that opening the bowel seemed not to damage the health of a patient, that parts of the colon could be safely removed when they prolapsed through the artificial anus, that it was possible to open the peritoneum with antiseptic precautions and not cause peritonitis, and that the removal of a cancer improved a patient's chances of survival, an increasing number of intestinal resections was undertaken in Britain towards the end of the nineteenth century. An early but successful resection and anastomosis of the bowel had been carried out by Reybard of Lyons in 1823, but without anaesthesia and antisepsis the practice was destined to be limited. By the 1870s and 1880s German and Austrian surgeons were ahead of their British, French and American counterparts in the range of their operations on the colon, partly because they more readily accepted antisepsis. Theodor Billroth experimented with thoracic and abdominal surgery first on animals and then on humans, extending the possibilities of surgery in an antiseptic environment. He resected the oesophagus in 1872, finding that he could then perform an anastomosis, and in 1873 excised the larynx for cancer. Two of his assistants demonstrated on animals that parts of the gut could be excised and the ends anastomosed by suture. One, Carl Gussenbauer, successfully excised part of the human sigmoid colon in 1877, and in 1881 Billroth successfully performed a partial gastrectomy. Between 1878 and 1892 Billroth undertook a number of intestinal resections, using the sero-muscular suture invented by an early nineteenth century French surgeon, Antoine Lembert, to stitch the two bowel ends together.²²²

A major problem in performing an anastomosis on the large bowel was that it had a tendency to leak and cause peritonitis. Surgeons had to operate fast, because of the dangers of keeping patients anaesthetised for long periods, which inhibited careful suturing. A solution to this problem was put forward by an American, Nicholas Senn, who inserted perforated plates of bone into the lumina of the two ends of the bowel, to allow the bowel to be anastomosed over them. Other foreign bodies which it was hoped would either be absorbed or passed after they had held the two bowel ends in position until healed together were then suggested. Murphy's buttons (1892) and the bobbins devised by a Leeds surgeon, Mayo Robson, in 1893, both separated into two parts which could be anchored together after insertion in the bowel and oversewn with Lembert's suture. Dehiscence or haemorrhage, however, could still not be ruled out. An alternative was to build on the experience of colotomy, and bring the bowel to the surface to resect and anastomose it there. In 1879 Schede and Gussenbauer resected the colon at the surface, but not out of choice;

in 1894 Bloch of Copenhagen undertook the procedure in the hope of reducing the danger of peritonitis. He exteriorised the sigmoid colon, inserting a drain. A few days later, when the colon had become fixed in the abdominal wall, the protruding loop was excised with the cancer. The bowel was anastomosed and later still the colotomy was closed. Frank Paul of Liverpool (1895) and J von Mikulicz-Radecki of Breslau (1903) developed similar techniques, although Paul excised the loop at the time of operation because of the dangers and discomfort from delaying relief of obstruction and tied glass tubes into the ends of the bowel to drain it.²²³ (The Allinghams later noted that they had used tubing in such a way before Paul reported it, an instance of the very common phenomenon of parallel development in surgery.²²⁴) Both Paul and von Mikulicz later closed the colotomy. Von Mikulicz claimed to have reduced the mortality rate from 42.9 per cent for resection with primary anastomosis to 12.5 per cent for resection with exteriorisation.

These developments had their impact on the surgeons at St Mark's. Most operations were undertaken to treat obstruction, in some cases by the simple palliative measure of forming an artificial anus, but in other cases the growth was removed and the bowel anastomosed. One of the problems was that it was not known where the obstruction might be. David Goodsall reported in 1891 on two cases in which he had opened the caecum for intestinal obstruction due to cancer in the ascending colon. In the first, there was considerable leakage into the peritoneum and the patient died, but in the second the patient survived the operation.²²⁵ In 1893, Herbert Allingham described a gastro-enterostomy that he had performed for cancer of the pylorus. The patient died five months later, however, with secondary deposits in the lungs. Allingham (1894) also reported on what he believed to be one of the first successful enteroplasties, or division of the small intestine for stricture, which he carried out at the Great Northern Hospital. He thought that there was a stricture in the colon, made an inguinal incision through which he passed his hand to explore the abdomen near the caecum, finally finding the stricture in the small intestine.²²⁶

Herbert Allingham was the most enterprising of the surgeons at St Mark's in undertaking the new operations. Having noted that patients did not seem to suffer even when a large part of the colon was removed for a colotomy prolapse he experimented with more extensive operations. In 1892 he saw a patient with obstruction and made an inguinal incision to examine the colon. A malignant growth was found in the sigmoid flexure, and the growth together with about fourteen inches of gut was pulled through the incision, and the parietal peritoneum stitched to the skin, leaving the mass of sigmoid flexure and growth outside the abdomen. A Paul's tube was inserted to drain

faeces. Ten days later the mass of gut and growth was removed, and the bowel acted from the inguinal opening. More than a year later Allingham advised the patient that the artificial anus could be closed, but the patient declared that she was so comfortable with the colotomy that she did not want to run any further risk.²²⁷ In a second case of obstruction, in 1893, Allingham brought out the caecum to produce an artificial anus. Five months later he opened the abdomen over the sigmoid flexure, removed a large piece of gut, including the stricture, joined it together with Lembert's suture over a Mayo Robson's bobbin, and returned it. Two weeks later he closed the opening in the caecum. However the patient died five months later with secondary deposits, but with no local recurrence. In another case he endeavoured to avoid a temporary colotomy, united the two ends of the bowel without using a bobbin and returned it to the abdomen, but the anastomosis leaked and the patient died of peritonitis two days after the operation.²²⁸ He subsequently used the button, although he had a case in which obstruction occurred at the button which had been completely blocked by faeces and the patient died of peritonitis.²²⁹ Gradually Herbert Allingham worked out the possibilities and pitfalls of the methods available to him.²³⁰

Ulceration and stricture of the rectum

Cases of what were described as 'ulceration of the rectum' were treated with greater frequency at St Mark's in the nineteenth century. They were often associated with stricture and obstruction, and surgeons increasingly applied some of the procedures devised for cancer to their treatment. William Allingham (1871) considered the problem very serious: if neglected, it led to conditions 'quite incurable by ordinary means'.²³¹ Many patients died after years of treatment, after being admitted and re-admitted to St Mark's and other hospitals.²³² Symptoms included diarrhoea and the desire to defaecate frequently, with the passage of 'coffee grounds', a whitish discharge or perhaps blood. As the ulceration extended, some healing might occur, resulting in the 'infiltration and thickening' of the submucous and muscular tissues, and consequent constriction of the bowel. Invariably, Allingham noted, there was a loss of power in the sphincters, and when suffering from diarrhoea patients had little control over their motions. By this time abscesses had frequently formed, sometimes resulting in fistulae. Allingham believed that the ulceration did not usually extend for more than four inches from the anus. If it was also present close to the anus, the pain would be very severe, usually with strictures and fistulae, occasionally leading into the bladder, vagina or peritoneal cavity. Allingham had seen instances, at

postmortem, of effusion into the peritoneal cavity, considerable adhesions between the intestines, massive destruction of tissue, and the whole of the rectum and sigmoid flexure involved in the ulceration.²³³

There was disagreement over whether ulceration could be caused by syphilis, tuberculosis or dysentery. In one group of 99 cases treated by William Allingham for ulceration with stricture, at least half showed signs of syphilis.²³⁴ However, James R Lane and Alfred Cooper, who were on the staff both of St Mark's and the Lock Hospital for venereal disease, argued that syphilis was rarely if ever a cause of the kind of generalised rectal ulceration seen at St Mark's.²³⁵ Allingham also argued that ulceration was often tuberculous, but he did not regard dysentery as a frequent forerunner of rectal ulceration: he had seen cases of dysentery in hot climates but rarely found that these cases developed such ulceration.²³⁶ All commentators agreed, however, that even if it were allowed that some cases were caused by syphilis or tuberculosis, many cases had no known cause.

Treatments for rectal ulceration ranged widely. To some extent they depended on whether it was seen to be linked to syphilis. Allingham recommended anti-syphilitic remedies including mercury if the patient seemed to be suffering from secondary syphilis, but argued that these did not help if the case was tertiary. He found syphilitic cases particularly intractable. In other cases, where the ulceration was mild, he confined the patient to bed for a month and ordered a diet consisting only of milk and milk products. If a stricture accompanied the ulceration, he used a bougie to dilate it and applied an ointment of acetate of lead, belladonna and opium.²³⁷ Alfred Cooper also recommended the use of a bougie and ointments as the initial treatment for rectal ulceration.²³⁸ Allingham found that there was a marked difference in his success rate between hospital and private patients:

... so different are the patients in many respects – their habits, the food they take, the houses they inhabit, their cleanliness, sobriety, the comparatively early stage of the malady at which they seek good advice – that one often finds the success in private practice so much greater as to be really astonishing.²³⁹

Fistulae sometimes accompanied stricture and ulceration, and William Allingham maintained that these were usually found above the stricture. He recommended that they should be laid open, but warned that incontinence was then likely.

In the most serious cases of ulceration with stricture, the surgeons at St Mark's advocated the new operative technique, colotomy. One of Allingham's patients treated in this way in 1867 was still alive six years later. He argued in 1873 that it was unfortunate that surgeons could

rarely persuade patients with very bad ulceration to submit to colotomy unless exceedingly ill: often the operation was postponed until it was too late. 'My own opinion is that the operation may be considered not merely palliative, but curative.'²⁴⁰ By bringing out the colon, obstruction was avoided and also, he thought, rectal ulceration generally healed. However, it was not possible to promise the patient that the aperture could be closed and continuity restored.²⁴¹

Allingham's enthusiasm for colotomy had waned somewhat by the early 1880s. In 70 cases of ulceration with stricture, he had performed only ten colotomies, with one death which occurred 56 hours after the operation. In the fatal case, Allingham attempted to open the ascending colon, but failed to find it, opening the duodenum by mistake instead. The patient had been in the habit of tight lacing, and Allingham explained from the postmortem appearance that the liver pressed downwards, carrying the ascending and transverse colon diagonally to the left side. He recorded the failure with frankness and sadness: 'I do not in any way wish to extenuate my error in the case; at the time I grieved seriously over it, and I have never forgotten it'.²⁴² Of the other patients, one had survived ten years, another eight and a third three years. Although the operation could prolong life, he now argued that it should not be performed without 'due consideration', because

... one cannot fail to see that in many cases the remedy proves a most objectionable one; an opening in the left loin through which the faeces escape is very harassing, and nothing but a great desire to live or the fear of immediate death would lead me to submit to such a proceeding.²⁴³

Alfred Cooper, (1887) too, recommended colotomies only in the most dangerous cases of stricture, but only after attempting treatment by other means first.²⁴⁴

Alternative procedures for treating ulceration with stricture included rectotomy, an operation devised by Verneuil. The stricture was divided from its upper edge down to the coccyx, through its entire depth. The wound was then syringed, the rectum washed out with carbolised lotion twice a day, and treated with dry dressings. As it healed, it was held that ulceration tended to cease and the stricture was sometimes cured.²⁴⁵ While operations became more ambitious in the treatment of cancer, the vogue for operative intervention in rectal ulceration declined: little seemed to be achieved. Alternative means of treatment were therefore tried. Swinford Edwards, who was a urologist as well as a rectal surgeon, had been treating stricture of the urethra with 'electrolysis' since the 1880s. In the early 1890s he applied it to rectal stricture as well. A negative pole was placed in the rectum and the positive pole under the

patient. Edwards then submitted the patient to five to ten milliamperes, finding this a useful treatment.²⁴⁶

Conclusion

By 1900 the field of rectal surgery was developing rapidly: it was also beginning to include problems of the colon. The surgeons at St Mark's played a leading role in this development – the Allinghams in particular were recognised leaders in the field. The flow of visitors, particularly from America, helped to establish the hospital's reputation, but more importantly, the surgeons became increasingly prolific in their writings on rectal disease, contributing to refinements of practice and devising new procedures. Their treatment for perianal disorders such as haemorrhoids, fistula and fissure were refinements upon the practice of Salmon, although they differentiated between complaints to an increasing extent; by the last third of the nineteenth century, with the development of anaesthesia and antisepsis, far more ambitious operations for cancer and ulceration were being developed. The surgeons at St Mark's drew from changes initiated elsewhere, in Britain as well as abroad; they also developed and publicised their own influential procedures. When Frederick Salmon established the hospital, little notice was taken in the medical profession of his practices: by the end of the century, the surgeons at St Mark's were making an impression on those members of their profession who were also interested in rectal disease, if not necessarily on the profession more generally. Although the majority of patients at St Mark's Hospital continued to suffer from rectal problems such as fistula and haemorrhoids, it was in the treatment of cancer, in the development of colotomy, rectal excision, and intestinal resection with anastomosis, that the greatest challenge for the surgeons lay.

CHAPTER X

The New St Mark's

1896–1918

When the 'New St Mark's' reopened in 1896 it was saddled with enormous debts. It struggled financially for at least a decade, but it was already beginning to feel the effects of the social successes of its surgeons. The all-important support of the gentry and aristocracy – which conveyed great prestige if not always large amounts of money – now came the hospital's way. Moreover the medical profession was increasingly favourable to specialisation and specialist institutions.

The rebuilding of the hospital, which could now house 54 inpatients, was so costly that only half of the potential number of beds could be opened. In 1897 an appeal was launched for £30,000: a pamphlet was prepared, which outlined the history and purpose of the hospital. At no point, however, except in giving the title of the hospital, were rectal diseases mentioned.¹ It was also advertised generally that the hospital had been remodelled, with a new block for the outpatient department, wards and a new operating theatre on the third floor.² A festival dinner was planned, and the Duke of Connaught accepted an invitation to chair it. Some time before it took place he changed his mind, but the committee of management kept that to themselves and advertised his expected presence, declaring only at the dinner that he was unavoidably absent, and that the Lord Mayor had agreed to take his place. However, they did succeed in getting the Earl of Cork to propose a toast. The proceeds from the dinner amounted to £2,500.³

The committee of management in the late 1890s was composed of the same social groups as earlier in the century – City businessmen, lawyers and bankers. In fact several of the families whose interest had been secured by Frederick Salmon continued to be represented on the committee. Samuel Merriman had passed his responsibilities in the affairs of the hospital to his son Thomas, and in 1909 Thomas' son, Mark, joined him on the finance committee, and subsequently other committees. Their own link with the Dyers' Company persisted: Samuel was Prime Warden in 1869, Thomas in 1897 and 1914 and Mark in 1940. A former partner of the Merrimans, Arthur Brewin, who left to become a member of the London Stock Exchange, and was Prime Warden of the Dyers' Company in 1887 and 1907, had also been active in the hospital's affairs. His son Julius followed him in his interest in St Mark's. The treasurer, Richard Biddulph Martin, and another governor, A G Sandeman, also came from

families who showed lasting interest in the hospital. The hospital certainly needed their assistance. In the late nineteenth century it was losing supporters: there was a 25 per cent drop in contributions from annual subscribers between 1881 and 1896. However, a member of the committee of management who appeared in 1893 represented a change in the traditional pattern. The new member was the Reverend Dr Arnold Rice Oxford, of Henrietta Street, Cavendish Square. Oxford was both a clergyman and medically qualified, from Charing Cross Hospital. Most importantly, Oxford was a prominent freemason and his social contacts proved extremely useful to the hospital. He served on the committee of management until the beginning of the Second World War – for much of that period as chairman.⁴

The reopening of the hospital also saw a change among the surgical staff. Herbert Allingham had resigned in 1895, and early in 1896 Frederick Charles Wallis was appointed as assistant surgeon. Wallis (1859-1912) was the son of a Southampton shipping agent, had gained a BA from Cambridge, and later trained at St Bartholomew's Hospital. He went to Australia, where he held a hospital post in Sydney and married the daughter of the Attorney-General of Victoria. Wallis returned to Britain to become demonstrator in anatomy at St Bartholomew's, and was elected assistant surgeon to Charing Cross Hospital in 1893. His greater loyalty was always to Charing Cross rather than to St Mark's. St Mark's established his reputation as a rectal specialist, but his position at Charing Cross counted for more in professional terms.⁵ It was a pattern which was repeated among several of his colleagues at St Mark's between 1890 and 1920. Wallis also held other positions at various times, at the Grosvenor Hospital for Officers, the Metropolitan Hospital, St Luke's Hostel, Willesden Cottage Hospital, St Monica's Home and the British Orphan Asylum.

When the hospital reopened in 1896, the first anaesthetist, Rickard Lloyd, was appointed. His appointment reflected the growth in the number of operations, especially serious ones, which were now being carried out. In the past at St Mark's the house surgeon had administered anaesthesia (at some hospitals this was undertaken by a theatre nurse). The rules at the hospital still held that only the two full surgeons performed operations, while the two assistant surgeons attended outpatients; during absences of the senior surgeons, however, the assistant surgeons – and sometimes even the house surgeon – assumed their responsibilities.⁶

In 1898 Alfred Cooper retired from active practice at St Mark's. The committee of management toyed with the idea of not enforcing the rule that surgeons should retire at 60, finally deciding against this. However, Cooper continued to play a part in the hospital's affairs, being appointed as honorary consulting surgeon and serving on the committee of manage-

ment.⁷ The position of fourth surgeon was taken by Percy Furnivall, after a fierce competition. There were two applicants for the appointment: Furnivall, and Ernest Miles, who had served as house surgeon. In an unprecedented situation, the surgeons were divided in their recommendations. Furnivall was supported by Swinford Edwards, Frederick Wallis and the physician Francis de Havilland Hall. He was seeking to replace a freemason and was supported by at least two other freemasons, and was a mason himself. On the other hand, Ernest Miles, who acted as private assistant to David Goodsall, was only supported by him. (There is no evidence that either was a mason.) In the end, both names were put forward to the committee of management, with a preference for Furnivall. He duly received seven votes to Miles' four.⁸

Percy Furnivall (1868–1938) was the son of Frederick J Furnivall PhD, a rather eccentric scholar. Frederick Furnivall's father, George Frederick Furnivall, had owned a private lunatic asylum in Egham, Surrey, a profitable enterprise which enabled him to leave about a quarter of a million pounds on his death. Frederick Furnivall became well known in London society, associating with such artists and literati as Dante Gabriel Rossetti, John Ruskin and Charles Kingsley. However, when Percy Furnivall was an undergraduate at Cambridge, his father lost all his money after the collapse of a bank. On the advice of Charles Kingsley's brother, Percy Furnivall chose medicine as a promising way of supporting himself, and began to train at St Bartholomew's. He served as house surgeon to Henry Butlin, a very successful, ambitious and able surgeon who was on the Council of the Royal College of Surgeons, later became its president and was knighted. Furnivall expressed a wish to marry his daughter, but Butlin would not allow this until Furnivall was well established. In a pattern that was becoming increasingly common, Furnivall sought positions in various special areas, becoming house surgeon at the Belgrave Hospital for Children, and clinical assistant at the Royal London Ophthalmic Hospital and to the throat department at St Bartholomew's. He was also awarded the Jacksonian Prize of the Royal College of Surgeons in April 1898 for an essay on 'The Pathology, Diagnosis, and Treatment of the Various Neoplasms met with in the Stomach, Small Intestine, Caecum, and Colon.' By the time that he applied to St Mark's, he was already assistant surgeon to the Metropolitan Hospital, where he knew Frederick Wallis, and had become engaged to Butlin's daughter. Furnivall had served as Wallis' locum at St Mark's in September 1897, looking after his outpatient clinic, and he had already published several papers, on cases of fistula, cancer of the colon, and rodent ulcers, as well as on athletic training (a subject of great interest to him).⁹

Furnivall's letters of recommendation survive from his application to St Mark's, and they were very strong. He was supported by Sir Dyce

Duckworth, physician at St Bartholomew's and honorary physician to the Prince of Wales, Sir Thomas Smith, consulting surgeon at St Bartholomew's and Surgeon Extraordinary to Queen Victoria, from Henry Butlin, from Clinton Dent, surgeon to St George's and the Belgrave Hospital for Children, and W Bruce Clarke, Anthony Bowlby and C B Lockwood, assistant surgeons at St Bartholomew's. It was his social qualities that were stressed: no reference at all was made to any medical skills. In London medicine those in control of patronage sought to appoint those who came from a similar class to themselves. Well-off patients, too, looked for physicians and surgeons who showed all the qualities respected within their class. Smith argued that Furnivall was 'active, intelligent, and highly educated' and that he worked harmoniously with his seniors and subordinates. Butlin stated that he had every quality 'which is desirable in a surgeon of his standing, and bids fair to take a prominent position in surgery in the future'. W Bruce Clarke remarked that 'whether it has been as a competitor for a bicycle race or for a Jacksonian prize, Mr Furnivall has always managed to come in a good first'.¹⁰ Certainly, therefore, Furnivall seemed to have had a great deal in his favour: he was socially and professionally well-connected, able and with considerable promise. His rival, Ernest Miles, was not as well placed. He had been born and educated in Trinidad, the son of a headmaster. He had trained at St Bartholomew's, and served as demonstrator of anatomy there, but not as house surgeon. This post he held at the Radcliffe Infirmary, Oxford, as well as at St Mark's.¹¹

The outcome of the competition between the two was significant: the staff and governors at St Mark's chose the man who was the most socially and professionally acceptable. Furnivall in 1899 secured the position of assistant surgeon at The London Hospital, and his father-in-law was convinced that if he had waited, he could have secured the position of assistant surgeon at St Bartholomew's instead. Miles on the other hand became assistant surgeon in 1899 at the less highly-regarded (specialised) institutions, the Royal Cancer and the Gordon Hospitals. But it was Miles who made an outstanding contribution to medical practice and the profession through his work on the treatment of colo-rectal disease. Furnivall's aim was rather to succeed as a general surgeon. Perhaps because he came from a different social background from Furnivall, Miles in the end showed the greater ambition, and the greater achievement.¹² Although Goodsall continued to work with Miles, co-authoring with him *Diseases of the Anus and Rectum* (1900, 1905), Miles began to build a base at the Gordon Hospital which placed it in direct competition with St Mark's.

Towards the end of the century the surgeons began to emphasise their practice at St Mark's to a greater extent. In 1899 the two full surgeons,

Goodsall and Edwards, decided that they wished to see outpatients as well as conducting operations. They arranged to see outpatients respectively on Tuesday and Thursday mornings, and followed this by operating in the afternoons. At first the two assistant surgeons, Wallis and Furnivall, divided up the remaining outpatient sessions with one seeing women on Wednesdays and the other seeing men on Saturdays, alternating each year as to which day they took. By 1901 they had become dissatisfied with seeing one sex only and suggested that one assistant surgeon should take both outpatient sessions in one week and his colleague those in the second week. The committee of management initially refused this request, although eventually conceding it.¹³

Although the position of surgeon at St Mark's was much in demand, the appointment of physician was not: as operative remedies were increasingly stressed, so the place of the physician became less important. An attachment to St Mark's did little for a physician's reputation. When Francis de Havilland Hall, a throat specialist, retired in 1900 after serving the hospital for twenty years, no applicant came forward who sufficiently impressed the surgeons. Advertising the position produced only one candidate, Dr Seymour Taylor, FRCP MD(Aberdeen) MB CM and MRCS, but he was judged unsuitable. By late 1901, there were only two candidates: Taylor, and a graduate of Cambridge, Dr H Langdon Brown, who possessed an MD, but was not an FRCP, although this was a qualification for the position. Taylor was still thought unsuitable (perhaps because he did not train in London or at Oxbridge) and the surgeons recommended that the rules should be bent to allow the appointment of Brown. The committee of management would not permit this, and Alfred Cooper, as a member of the committee, promised to ask Sir Richard Douglas Powell, an expert on tuberculosis and diseases of the chest, if he would take the position. The medical committee reluctantly accepted the suggestion but argued that with the appointment of such a senior man (who would not be expected to take an active part in hospital affairs), an assistant physician, possibly only an MRCP, should be appointed in addition so that the surgeons could call upon him actively. Again the committee of management over-ruled the suggestion, claiming that such a position was unnecessary. Of the two surgeons who were on the committee of management, Goodsall opposed this decision, while Swinford Edwards seemed to acquiesce. Powell was duly elected in 1902. Almost two years had passed without a physician, and Powell showed little sign of interest in the hospital: the place of the physician seemed increasingly insignificant.¹⁴

By 1902 the hospital was in very difficult financial circumstances, unable to meet the deficit from the rebuilding costs. Only about £3,500 had been raised in donations to meet a bill of nearly £30,000. A mixed

relationship with the Prince of Wales' (later King Edward VII's) Hospital Fund did not help things. The first grant the hospital received, fifty guineas in 1897, was regarded as far from adequate. Seeing the Fund as a drain on the public's resources, redirecting gifts that would have otherwise gone straight to the hospitals, St Mark's protested.¹⁵ (In 1900 the Drapers' Company which had given twenty guineas each year to the hospital for almost thirty years withdrew its support in favour of giving to the Fund.)¹⁶ However, in the following two years, the Fund contributed nothing at all, and the hospital became a little more circumspect in what it said. In 1899 the hospital received sufficient in legacies to meet its expenditure requirements (although not its rebuilding debt); the Fund decided that the hospital did not need a grant, publishing a note to this effect in its *Report*. The governors at St Mark's were appalled: they felt that the Fund had damaged the hospital's chances of raising money. Their reaction was an indication of the significance which the Fund was now assuming.¹⁷ The conditional nature of the Fund's gifts soon became apparent. In 1901 it granted the hospital £150 but requested that the committee of management abolish requirements that inpatients provided certain articles of food and clothing. The committee quickly explained to the Fund that these requirements had largely lapsed, but it also passed a resolution that in future patients need only bring in a brush, comb, slippers and change of linen.¹⁸ There was a note in June 1901 that a new inpatient order book was submitted 'as required' by the Fund.¹⁹

In 1900 there were just over a thousand supporters of the hospital. Only a quarter now gave City addresses while 35 per cent of subscribers lived in the West End of London, in the areas around Hyde Park, Regent's Park, Cavendish Square and Grosvenor Square. A further quarter came from all parts of Britain. Even allowing for businessmen giving their residential addresses, now largely out of the City, there was other evidence too that there had been a social shift among the supporters of the hospital. There was one baron, de Tessier, the Dukes of Connaught, Bedford and Norfolk, seven earls, five viscounts, and eight other lords, in addition to over twenty baronets. In many instances it was recorded that one of the surgeons was responsible for enlisting the support of an aristocrat. It was through Alfred Cooper that the Duke of Norfolk, the Earl of Caernarvon, the Earl of Cork and Orrery, the Earl of Euston, Lord Charles Montagu and many others gave to the hospital. Their assistance was not necessarily limited to an occasional gift, although in most instances this was probably the case. The Earl of Euston, a descendant of an illegitimate son of Charles II, served for a number of years on the committee of management. It was always Alfred Cooper who was detailed to find an appropriate aristocrat, preferably with royal links, to preside over functions. When other arrangements fell through Cooper



of a Matinee held in aid of the Funds of this Hospital, at the Imperial Theatre (kindly lent by Mrs. Langtry), on Tuesday the 11th February, 1902.

always assured the committee of management that the Earl of Euston's help could be counted upon.²⁰

These new contacts were enlisted to support a charity matinée organised in 1902 to pull the hospital out of its debt. On Tuesday 11 February 1902 a performance was held in aid of St Mark's at the Imperial Theatre, Drury Lane, lent for the occasion by Lillie Langtry. Lillie Langtry was the mistress of Edward VII, with whom Alfred Cooper was very friendly. The souvenir programme related 'The Story of St Mark's'. No mention at all – not even in the title of the hospital – was made of the diseases which St Mark's treated. It was recorded that the public owed a great debt of gratitude to Salmon in pioneering 'his special branch of surgery'.²¹ 'Apprised by knowledge that many poor people were enduring torment day by day and year by year for want of skilled surgical treatment', Salmon had opened his Infirmary. Before long,



Mrs. Langtry,
who is at present playing the part of
"Mademoiselle Mars"
at this beautiful Theatre.

From a Photograph by Lafayette.

Pages from the souvenir programme, Charity Matinée, 1902

... to the help of Mr Salmon, came other surgeons who had learned of him, and rapidly the reputation of the Hospital grew, until patients from all over England were to be found on its books, and surgeons from distant parts of Europe, the Colonies, and America came to learn of its surgeons.²²

Then, so the tale went, it became imperative to have a larger house. Moreover, the hospital needed to be brought in line with the needs of modern aseptic surgery 'and every equipment added that could insure safety and speedy recovery to the patients'.²³ The governors had felt certain that if the public once understood the situation and realised the immense good the hospital did, their debt would be met: '... but for some reason their expectations have not been realised'.²⁴ And yet patients steadily increased in number – many of them suffering from cancer. Those attending the *matinée* were urged to subscribe to the hospital:

... if any are seeking a worthy object for their Charity, in this the Coronation Year of our beloved King Edward VII, let them remember St Marks – a Charity without whose aid thousands now well and happy would have lived a life of torture or died in agony.²⁵

Lillie Langtry herself organised the *matinée*. Among those helping were the actor managers Herbert Beerbohm Tree and John Martin Harvey, the actor and playwright Oscar Asche (who later wrote *Chu Chin Chow*) and almost forty others including Mr Hayden Coffin, Miss Zeffie Tilbury, Mr Rutland Barrington and Miss Topsy Sinden.²⁶

The committee of management made other attempts in the first years of the twentieth century to increase their sources of income, although some of these were less to the surgeons' liking than charity *matinées* at Lillie Langtry's theatre. In 1900, they recommended that each outpatient should be charged sixpence a week.²⁷ The scheme was not adopted at this stage, because of opposition from the medical staff. General practitioners were so sensitive about custom being removed from them that they exerted a considerable amount of pressure on the hospital physicians and surgeons to curb their treatment of any but the most indigent. The contentious nature of the issue was made clear by the treasurer, Richard Biddulph Martin in 1902. He pointed out that it was an 'old and much debated question' as to how far a hospital 'is justified in interfering with the private practice of the Medical Profession', but mentioned an acquaintance of his whom 'I should only have been too glad to have seen admitted to the Hospital on payment of a limited sum'.²⁸ In 1903 a subcommittee consisting of two governors, Thomas Merriman and Colonel Fairland, and David Goodsall proposed that each new outpatient should pay one shilling for the first attendance and sixpence for each

subsequent attendance. Each inpatient should, according to his or her means, pay between five and ten shillings a week for maintenance and treatment. Remission of these fees would only be made if 'clear evidence' of low income was supplied. In addition, two rooms were to be set aside for private patients, who were to pay at least four guineas a week to cover nursing, food and medicine in addition to the surgeons' fees.²⁹ The committee of management approved the charges to outpatients but postponed charges for poor inpatients. They also decided that the charge to private paying patients should include the surgeon's fee rather than it being separate and that the hospital secretary should have discretionary powers to remit outpatient fees.³⁰ Everything seemed to go smoothly into operation in March 1904.

Despite the fact that the arrangements were agreed at the Annual General Meeting, and that David Goodsall, senior surgeon until early in 1904, had been involved in establishing the new arrangements, the junior surgeons seemed to have been unaware of the plans. Mrs Furnivall recalled that her husband was on his way to Northwood to play golf when he called into St Mark's and was accosted by an outpatient who complained: 'Here I've been waiting ever so long, and I've paid my threepence.' Furnivall threatened to resign over outpatient payments and was supported in his stand by the newly appointed surgeon, Lockhart-Mummery.³¹ Goodsall, of course, had retired by this stage, but it would seem that none of the surgical staff had attended the Annual General Meeting (which was usually attended by as few as six or seven people), or paid close attention to what the lay committee of management was doing. The committee summoned a special meeting of the surgeons, at which the surgeons expressed their anxiety that they should not be seen to be treating free of charge those who would otherwise pay general practitioners. The committee reassured them that the patients were paying for bandages and medicines, not for a surgeon's help. In a departure from former arrangements, the surgeons were given greater discretion than before: they were authorised to see any patients, free of charge, 'if they consider it to be in the interests of science, or of the patient'. Moreover, the register of outpatients was to be open for inspection by 'any qualified Medical Man or Surgeon practising in the neighbourhood' who might think that his custom was being taken away from him.³² At the Annual General Meeting in 1905, the chairman of the committee of management remarked that the system was working well and that £150 had been raised in the year from the two pay beds and from outpatient payments, which had been made 'very readily'. He also thanked the surgical staff for the 'very kind way in which they had worked with the committee in this matter'.³³ That all was not smooth was shown at the Annual General Meeting in 1906, when Thomas Merriman, proposing thanks to the

surgeons, noted that there had been the 'little vexed question on the subject of payments by patients': some of the staff felt that if patients paid for their treatment 'it would appear as if the Surgeons were paid for their service'.³⁴ Sir Richard Martin responded that the hospital had no desire

... to interfere in any way with the General Medical Practitioner. The Institution Existed for the benefit of the poor, and he hoped that they would always be careful to protect the interest of the practitioners in their neighbourhood.³⁵

The resignation of David Goodsall on his sixtieth birthday in 1904 resulted in a competition for his position almost as close as that between Furnivall and Miles in 1898. Wallis was promoted to be full surgeon, leaving a vacancy at the bottom of the ladder for an assistant surgeon. There were three applicants: FW Forbes-Ross, Percy Lockhart-Mummery and Charles Gordon-Watson. 'After some discussion' the last two were equally ranked first, and both referred to the committee of management, who interviewed them and selected Lockhart-Mummery.³⁶ JP Lockhart-Mummery (who hyphenated his name in the 1920s) played a prominent part in the fortunes of the hospital from the first. There was a strong tradition of dentistry and medicine in his family: his brother was a dental surgeon, so was his father, J Howard Mummery, and his paternal grandfather, who had written a book on the incidence of dental caries among different races. JP Lockhart-Mummery's father and grandfather both practised in Cavendish Square, and JH Mummery conducted a significant amount of research into dental disease, and was president of the Odontological Society. JH Mummery married the daughter of William Lockhart, a medical missionary in China, who founded two hospitals, in Shanghai and Peking. Lockhart returned to Britain in 1864 and settled into practice in Blackheath. Percy Lockhart-Mummery (1875-1957) went to school and university in Cambridge, and attended St George's Hospital for his clinical training. As a young man, he had one leg removed by Joseph Lister for suspected sarcoma, and he was always chary of allowing people to see his wooden leg when changing for operations. He held the posts of house surgeon, house physician, and assistant in the throat department at St George's, and acted as a private assistant to Herbert Allingham. In 1900 he took the FRCS and soon afterwards joined the staffs of the North East Hospital for Children in Hackney and the King Edward VII Hospital. Lockhart-Mummery had already published a book in 1903 entitled *After-Treatment of Operations*, in which he gave especial thanks to Herbert Allingham for assistance. The link with Allingham probably helped to secure his position at St Mark's.³⁷

Lockhart-Mummery followed the tradition of the Allinghams. He decided at an early stage to specialise as a rectal surgeon, and did not

attempt, like other colleagues at St Mark's, to try to establish a reputation as a general surgeon. He did not gain a position at a major teaching hospital in addition to St Mark's, making a virtue of this, and throughout his life sought to promote the specialised treatment of colo-rectal problems. His forcefulness and, as some commentators termed it, a certain commercial-mindedness, may have made it difficult to move in the highest aristocratic circles, but these very qualities were of great importance to St Mark's: the hospital had secured well-placed social contacts through Cooper and others, but it now needed dynamic leadership. Lockhart-Mummery had only been at the hospital for two months when he made a proposal to strengthen postgraduate teaching there, which not only assisted the surgeons by way of publicity, but also helped the hospital. He also began to propose new methods for raising money for the hospital, and strongly supported Sir Alfred Cooper's suggestion for including the word 'cancer' in its title.³⁸

The dedication of some of the surgeons to the hospital was not necessarily strong, especially as their private practices grew. There were frequent complaints that the assistant surgeons did not attend their outpatient clinics. The house committee constantly reiterated that they should sign an attendance book on arrival, but this did not seem to improve things. In 1904 the committee returned to the conclusion that the system by which each assistant surgeon had to attend outpatients twice in one week although not the next, did not work. They therefore insisted that the assistant surgeons should decide on one day for their attendance, and adhere to that weekly. If one was forced to be absent, the other should cover for him. In order to satisfy their demand that they see both sexes, it was decided that both sexes should attend together on each outpatient day.³⁹

In 1905 operating days were altered from Tuesdays and Thursdays to Tuesdays and Fridays. The anaesthetist, Rickard Lloyd, took advantage of the change to request that he attended only one of the days and that a second anaesthetist be appointed. The committee of management and medical committee both concurred, since the number of operations was increasing, and H Bellamy Gardner MRCS was selected. Gardner received £25 a year for his work, Lloyd £40.⁴⁰ The post was usually seen as a stepping stone towards other positions, and the junior anaesthetists did not remain long at the hospital. Gardner resigned in 1908 to be replaced by GA Jones. Jones felt that insufficient attention was paid to the anaesthetist and his work, and threatened to resign in 1910 unless new equipment was purchased – he was in fact successful in his demand and remained at the hospital.⁴¹ Many years after bacteriologists had been appointed at the teaching hospitals, it was decided in 1908 that the work at St Mark's necessitated

the appointment of a 'pathologist'. The hospital appointed Dr HQD Spitta who was already honorary bacteriologist in the king's household and pathologist at St George's Hospital. Spitta's work was almost entirely bacteriological, with no equipment at the hospital for additional work. It was seen as a temporary position, and Spitta was elected for a year (with pay of £10 for the year), although he was later reappointed.⁴²

Percy Furnivall resigned as assistant surgeon in 1908 to give greater attention to his private practice and The London Hospital. His widow later recollected that his health – he suffered from bronchitis – would not allow him to serve at both. (During the First World War, however, he was associated with thirteen hospitals.)⁴³ Furnivall already had a large private practice in Weymouth Street, and aspired to be a general rather than a specialist surgeon. There were two candidates for Furnivall's position: Charles Gordon-Watson, making his second attempt to join the staff, and Aslett Baldwin. The medical committee recommended that the surgeons should be increased in number and both candidates were accepted; the committee of management concurred.⁴⁴ Charles Gordon-Watson (1874–1949) – who officially hyphenated his name in 1920 – was the eighth of twelve children of the Reverend Henry Watson, a Buckinghamshire vicar, and his wife, who was the daughter of another vicar. Gordon-Watson himself became a Catholic under the influence of an uncle who was one of the founders of Westminster Cathedral. His one youthful ambition was to become a soldier, but he considered life in the army impossible without private means and therefore ruled it out. He failed to gain admission either to Oxford or Cambridge, or to secure a position as a manager of an estate. Having not succeeded in obtaining what he saw as suitable employment, he recalled that, in desperation,

... although I had no bent for science and had never touched it at school, I went up to London, interviewed the Dean at Bart's and entered the school, there and then.⁴⁵

Gordon-Watson served as house surgeon at St Bartholomew's and the Norfolk and Norwich Hospital. With his interest in the army, he acted as a civil surgeon in South Africa from 1899 until 1901, during the Boer War. He saw himself very much as a general surgeon, who found it necessary to develop expertise in special areas to secure a place in the competitive world of private practice. Initially he specialised in orthopaedics, later moving into colo-rectal work. He was very ambitious to secure a position at a teaching hospital, and he was appointed as assistant surgeon at St Bartholomew's in 1910. His career reflected that of other St Mark's surgeons around the turn of the century. In 1902–1903 he had

served as registrar and pathologist to the Metropolitan Hospital and then as assistant surgeon. In this position he did most of the operations of his senior, as the latter was very much occupied at a teaching hospital. Gordon-Watson recorded that he performed 285 operations, for all types of problems, and noted that his operative experience was therefore greater than normal. At St Bartholomew's, for example, a young surgeon might serve as house surgeon, demonstrator of anatomy and surgical registrar before becoming assistant surgeon, and during all this time 'there would be *no facilities for operative surgery and research*'.⁴⁶ Without private means, Gordon-Watson explained, the individual would have to fill up his spare time with coaching in order to live. 'If he could fit it in, he would get an outpatient appointment at some smaller hospital' to gain experience. Most would have no experience of pathology 'though a few would pass through the pathological department before the surgical registrarship'.⁴⁷ When the surgeon finally secured an appointment at a general teaching hospital, all his energies were concentrated 'in making up for lost financial rewards'.⁴⁸

The second assistant surgeon to be appointed in 1908 was Aslett Baldwin (1860-1945). Baldwin was significantly older than either Gordon-Watson or Lockhart-Mummery, who were both in their mid-30s: he was almost 50. He had been educated in Nottingham and at The Middlesex Hospital, gaining his FRCS in 1896. He held several hospital posts in his career, including that of surgeon to the West London Hospital. As a freemason, he also secured a position at the Royal Masonic Hospital. His obituary noted that he 'began and continued as a general surgeon' although gradually including more proctology in his work.⁴⁹ Baldwin made little mark on the medical profession, and published little, but Frederick Swinford Edwards' widow described him as a 'dear old boy' who did not get the credit he deserved as a surgeon.⁵⁰ Lionel Norbury, who came to St Mark's in 1912, described Baldwin as a very quiet fellow, who never smiled, never pushed himself forward, rather a nonentity. 'He was just an ordinary good surgeon, did nothing spectacular and never made a great reputation for himself'.⁵¹

The surgeons had remained unhappy about the principle of treating paying patients in hospital. They pointed out that the number of outpatients was declining. In 1903 there had been 6,343 attendances but in 1904 and 1905 these fell to 5,094 and 4,710 respectively. The house committee wondered whether evening attendances might improve the situation, but the surgeons argued that all outpatient charges should be abolished.⁵² The house committee responded by arguing that the surgical staff should be paid an honorarium, and that they should be punctual and conscientious in their attendance at the hospital. The assistant surgeons were willing to accept an honorarium, provided that it was not less than

fifty guineas a year, but the committee of management would not agree to this, instead recommending that patients in the pay beds paid a surgeon's fee.⁵³

In 1908 the medical committee persuaded the committee of management to abolish payments by outpatients.⁵⁴ Attention therefore had to be turned to other means of raising money. A sub-committee was established, consisting of Lockhart-Mummery and Gordon-Watson, Dr Oxford, and two other governors, to discuss the question of fund-raising.⁵⁵ They came to the conclusion that a ward should be set aside for cancer patients, to be called the 'Cancer Ward', and advertised as such – raising money for the treatment of cancer was far more feasible than for other rectal diseases. The committee also agreed that paying patients should no longer be taken; the hospital should therefore be advertised as the only free institution for rectal complaints in London, in contrast to the Gordon. Collecting boxes were, if possible, to be placed in the stations on the City and South London Railway, and collecting cards were to be issued to all patients when they left the hospital. In addition a deputation was to be sent to the King's Fund

... to point out the difficulty of raising money, owing to the nature of the complaints treated, and to ask for an additional grant.⁵⁶

In this request St Mark's was disappointed: the King's Fund did not respond to their appeal. The Fund was, however, playing a larger part in their affairs. It sent two visitors, one medical and one lay, to St Mark's and other London hospitals annually, to assess their conditions. In 1903 and 1904 the Fund urged St Mark's to economise: its costs were too high. The visitors for 1904 argued that 'special assistance of a *permanent* character' would be needed.⁵⁷ In 1905, the Fund's visitors stated that costs at the hospital had been reduced by about 10 per cent but they expressed scepticism about the hospital's future:

The Hospital, no doubt, does a good work, but we think its exercise at all is a doubtful good, as its Funds could be merged in a larger Hospital, where the same diseases could be treated.⁵⁸

The Fund was at the time actively seeking – and achieving – the merger of some small special hospitals in order to reduce what they saw as over-provision, duplication and excessive cost. However, subsequent visitors were more positive: R Havelock Charles and Steuart Gladstone, the Fund's representatives in 1906, reported that although costs at St Mark's were higher than at a larger institution, the hospital was in a

... flourishing condition (VERY different from the small Hospital – Central London Ophthalmic – we visited last week), and hence will *not*

amalgamate. It is *not* a moribund institution and hence should be supported.⁵⁹

Norman Moore, of St Bartholomew's, and Steuart Gladstone, who visited the hospital in 1907 declared again that it was 'in excellent order' and was thoroughly deserving of support. They did note that it was darkened on the Pickard Street side by the ruins of the congregational chapel; Moore and a businessman, Leslie Vigers, recommended in 1909 that this site should be purchased by the hospital.⁶⁰

St Mark's fared better at the hands of the Fund's visitors than the Gordon. Visitors in the late 1890s reported that the Gordon only had nineteen beds, in two old and 'quite unsuitable' private houses. The bedding was not clean, the furniture was poor and the outpatient department in the basement very bad. It almost counted as a 'pay' hospital, with two-thirds of its income derived from patients' payments. Only six of the 253 inpatients in 1897 were treated free of charge. No grant therefore was made to the hospital. When a deputation from the Gordon requested a grant in 1905 towards the costs of a new building, the King's Fund expressed the opinion that this was the type of small special hospital which should be discouraged. The same opinion was reiterated in 1907 when the Fund's visitors stated that they did not endorse 'the multiplying of special Hospitals of this nature; cases treated here are as well and perhaps better treated in a General Hospital'.⁶¹

The King's Fund and St Mark's came into direct conflict in 1909 over the hospital's attempts at fund-raising. It all focussed on the hospital's change in name. In 1904 Alfred Cooper first suggested a change in title, but the medical committee rejected the idea. In 1909, on the recommendation of Frederick Wallis, 'cancer' was added to the hospital's name: it became known as St Mark's Hospital for Cancer, Fistula and other Diseases of the Rectum.⁶² The King's Fund was 'informed', but immediately expressed its disapproval. An internal Fund memorandum noted that in the previous year at St Mark's 523 inpatients had been treated, of whom only 33 suffered from cancer, while 134 had fistulae. Moreover, cancer was not only a disease of the rectum and the title therefore seemed to mislead. The proposed name would, especially when used in abbreviated form, 'be likely to convey both to the charitable public and to prospective patients, the impression that the scope of the hospital was wider than it really is.'⁶³ The distribution committee of the Fund therefore wrote to St Mark's that it did not approve of the proposed change in name. The reply from the hospital indicated the concern it took over the Fund's attitudes. Although the change of title had in fact been conceived in relation to fund-raising, Dr Oxford, writing on behalf of the committee of management, maintained that it was simply to give the

public better information. When St Mark's was founded, fistula was the most serious operation attempted, but now 'the chief operations were the formidable ones initiated by Kraske for Cancer of the lower bowel.' Lest the public suppose that St Mark's only existed for the treatment of minor ailments it would be wise to include the word 'cancer' in the title.⁶⁴ Although the King's Fund eventually accepted the proposal on this basis, the hospital was more careful in future about seeking the Fund's prior support for changes in plans. However, the change of title was very necessary: there was a shortfall between income and expenditure of up to 50 per cent every year between 1900 and 1910, and the hospital was rapidly depleting its invested resources.

St Mark's steadily attracted young surgeons who were trying to establish a career in London medicine. It was decided in 1909 that three clinical assistants should be officially appointed to help the three assistant surgeons. Each attended one outpatient surgeon for periods of three or six months, for which they paid the surgeons three or five guineas respectively, and were issued with certificates signed by the whole of the surgical staff. Many candidates applied to work with Gordon-Watson and Lockhart-Mummery although fewer requested to help Baldwin. One of Lockhart-Mummery's clinical assistants in 1910 was W Girling Ball, later a prominent surgeon in the profession (interestingly, Ball had to be pursued by his senior for his fee). The clinical assistants were already well qualified, beyond the level of the house surgeon. One applicant in 1910 has already been house surgeon to Mr Bland Sutton at The Middlesex two years previously, and frequently they were already FRCS. One applicant, Charles WM Hope, held an MB and BS from Durham, FRCS England and LRCP London, and sent letters of recommendation from a surgeon at the Royal Victoria Infirmary, Newcastle, where he had been house surgeon from 1903 to 1904, and from WH Clayton Greene and J Ernest Lane (James R Lane's son), both surgeons at St Mary's Hospital, where Hope had been resident anaesthetist. The position of clinical assistant was regarded as part of postgraduate training, or analogous to helping a surgeon in private practice.⁶⁵ The surgeons at St Mark's were also increasingly anxious to undertake postgraduate teaching. In 1910 the medical committee successfully requested the use of the hospital board room once a week as a lecture room. Details of classes were registered with the London Post-Graduate Association, which supplied information to potential students: members of the association enjoyed a special reduction in fees.⁶⁶

Between 1910 and the First World War, there were several significant changes in the surgical arrangements of the hospital. A ward was enlarged in 1910 and it was decided by the surgical staff that, for the first time, beds should be allocated to the junior surgeons (they were given two



The Reverend Dr Arnold Oxford



J P Lockhart-Mummery

each). The following year the surgeons decided that improvements needed to be made in the provision for pathological analysis at the hospital. Since 1908 Dr Spitta had theoretically been in charge of a 'department', but it was a reflection of his limited role that, in 1911, the medical committee recommended the establishment of a pathological department in the hospital, with the appointment of a pathologist at £20 a year. It was agreed that his pay, together with the cost of furnishing and equipping the new department, should be drawn from the fees from the clinical assistants and others who studied at the hospital. Spitta was made honorary bacteriologist, while H Graeme Anderson, a former house surgeon, was appointed as the new pathologist. Purchases for the new department, however, added up to only £5.⁶⁷

Despite the increasing interest that the surgeons appeared to show in their hospital work, it was usually far from their first priority. One of the clinical assistants noted in 1909 that Lockhart-Mummery had failed to appear for outpatient attendance, and he did not seem at all surprised.⁶⁸ In October 1911 the committee of management strongly rebuked Gordon-Watson for dereliction of duty:

The committee learn with great concern that Mr Gordon Watson, without sufficient reason, left the Hospital on Sept 25 without operating on seven patients who had been prepared for operation. They trust that such a serious breach of duty will not occur again.⁶⁹

Quite frequently, operations were left to the house surgeon. In November 1911 Thomas and Mark Merriman proposed to the committee of management that no operation should be performed by the house surgeon 'without the express direction and in the presence of one of the surgeons'.⁷⁰ This proposal was evidently unworkable, for it was then amended to refer only to operations in the theatre, as opposed to procedures carried out on the wards or in outpatients, and the presence of the surgeon was deemed only 'desirable'. However, the matter arose again in March 1912 when it became apparent that the house surgeon had performed six of Sir Frederick Wallis' operations without Wallis or any other member of staff being present.⁷¹

Further consideration of the problem was interrupted by Wallis' sudden death in April. Wallis had been knighted in 1911, in honour of his work as founder of the Union Jack Club for Soldiers and Sailors. One obituary noted that 'it was to Charing Cross Hospital that he gave most of his time, and a large share of his energy as well as his affection'. Like several of his colleagues, he was very fond of golf: 'His loss will be deeply felt at more than one golf club'.⁷² His daughter remembered him as very sociable: most of his friends were outside the medical profession 'and for this reason some of his medical colleagues thought him rather a snob'.

However, he associated closely with Frederick Swinford Edwards and Sir Alfred Cooper.⁷³

On Wallis' death, both Lockhart-Mummery and Aslett Baldwin were made full surgeons, giving a complement of three full surgeons with Swinford Edwards, who was nearing retirement age. Two new assistant surgeons were to be appointed to take their places.⁷⁴ The two new assistant surgeons were H Graeme Anderson (1882–1925) and Lionel Norbury (1882–1967). Anderson had been house surgeon and was currently employed as pathologist at the hospital, and was now given seniority over Norbury. He had been born in Renfrewshire, Scotland, and was educated at Glasgow, King's College, London and The London Hospital. He held various minor posts at The London, the Royal Orthopaedic, the Metropolitan and the Cancer Hospitals before joining St Mark's. There was a strong link between the Metropolitan Hospital and St Mark's surgeons: Goodsall, Wallis, Furnivall and Gordon-Watson all served on the staff as well. Anderson's career illustrated how surgeons of this period were far from regarding themselves as single specialists. He had filled appointments in departments of orthopaedics, anaesthetics, pathology, cancer treatment, aural disease, children's diseases, and venereal disease. Despite his association with St Mark's, in 1919 he applied unsuccessfully for the position of junior orthopaedic surgeon at King's College Hospital. His only book was on *The Medical and Surgical Aspects of Aviation*. He qualified as a pilot in the First World War, and retained an interest in aviation medicine. As consulting surgeon to the RAF, in 1919 he flew from Glasgow to London in an RAF plane carrying mail during a railway strike.⁷⁵ Lionel Norbury, Anderson's fellow assistant surgeon, had been born in South Africa, the son of a former St Bartholomew's student, Sir Henry Norbury, then Director-General of Naval Medical Services. Norbury trained at St Thomas's where he won a number of prizes. He held various resident surgical appointments there and stood well placed for a position on the staff at the hospital. In 1911 he was appointed assistant surgeon to the Mildmay Mission Hospital and acted as demonstrator of anatomy at St Thomas's. With the interruption of the First World War, he did not gain a position at St Thomas's, but he did secure an appointment as surgeon to the Royal Free in 1919.⁷⁶

When Swinford Edwards retired in January 1913, the committee of management requested that the total number of surgeons revert to five. The medical staff agreed, but suggested that Gordon-Watson should now become full surgeon, leaving the two newcomers as assistants. With three full surgeons, all conducting operations, Gordon-Watson and Lockhart-Mummery recommended that a third anaesthetist be appointed. They decided on the candidate themselves, and were rebuked by the committee of management which insisted that in future the position must be advertised.⁷⁷

With Wallis' death and Edwards' retirement, the two surgeons serving on the committee of management had gone. The lay members tried to take the opportunity to strengthen their control by insisting that no surgeons should serve on it, although, since Salmon's time, the full surgeons had always acted in an *ex officio* capacity on it. At the first meeting after Wallis' death, which Edwards did not attend, a resolution was agreed that 'from this date no member of the active staff shall be elected on the Managing Committee'.⁷⁸ However, at the next meeting, with Edwards present, the motion was rescinded. Edwards then proposed that all of the full surgeons should once again be *ex officio* members of the committee of management as a right. For two meetings the resolution was postponed, and at the third no lay member would second it, despite the fact that the medical committee had written to every member of the committee of management. In December 1912 the medical committee made a direct appeal for Lockhart-Mummery at least, as the future senior surgeon, to be appointed to the committee of management. Again the proposal, put by Edwards, was not seconded.⁷⁹ With Edwards' retirement in January 1913 the surgeons were in a very difficult position, and they decided to appeal over the heads of the committee of management directly to all the governors individually. They noted that since 1835 the hospital had been successfully managed by 'gentlemen who have kindly given their services for the proper conduct of the affairs of the Hospital' but that it had been the custom for the senior surgeons to be members of the committee 'so that the Medical Staff who really do the work of the Hospital, without remuneration, should be represented'. The refusal of the committee to include a member of the medical staff they felt to be 'a very grave injustice' which was 'prejudicial to the best interests of the Hospital' as well as 'contrary to the custom of the Great majority of London Hospitals'.⁸⁰ They also wrote to the Lord Mayor who intervened by urging the committee of management to meet the medical committee to discuss the problem. The committee of management eventually capitulated and agreed that in future one representative of the surgeons should be an *ex officio* member of the committee: the Lord Mayor was informed.⁸¹

The professional status of the St Mark's surgeons was now becoming well established. In December 1912 the British Proctological Society was formed. The surgeons from St Mark's played a crucial role in its foundation and subsequent activities. Of its fifteen members, nine were or had been on the staff of St Mark's. Its president was Frederick Swinford Edwards; Furnivall was vice-president and Lockhart-Mummery was secretary. Among the twelve other members were H G Anderson, Aslett Baldwin, Lionel Norbury and Charles Gordon-Watson. Other members

included Hamilton Drummond, from Newcastle, who had been a house surgeon at St Mark's, two surgeons from the Gordon, Ernest Miles (another former house surgeon) and Charles Ryall (whose brother Edward Canny Ryall had also been house surgeon at St Mark's). The society immediately published transactions of its meetings. Most of the older-established professional societies tended to disapprove of specialisation and specialist organisations. However, the Royal Society of Medicine was attempting to improve its position in particular in relation to the British Medical Association by absorbing specialist groups within it. It had already formed subsections for two other well-established specialties, urology and orthopaedics. It was a mark of the growing status of proctology that in July 1913 the British Proctological Society was subsumed as the Sub-Section of Proctology, within the Surgical Section of the Royal Society of Medicine.⁸² The specialists were happy to have the seal of approval of the Royal Society of Medicine; the disadvantages of this arrangement were perhaps more apparent later, as there was little need to establish a second proctological society, together with a journal, which would have stimulated the growth of proctology in Britain as a distinct specialty. The parallel with America is instructive. The British development had lagged over a decade behind its counterpart in America, although it was incorporated into the establishment more readily. The American Proctologic Society was formed in June 1899, in Columbus, Ohio. Several of its members, including its first president, Joseph M Mathews, had visited St Mark's during their training. Mathews subsequently became professor of surgery and head of the first American department of rectal surgery, in the Kentucky School of Medicine, Louisville. The American Proctologic Society had thirteen original members, and published transactions of its meetings. Surgeons from the American society made an official visit to St Mark's in 1914. The American Proctologic Society grew steadily, in 1907 producing its own journal, *The Proctologist*, which later became *Diseases of the Colon and Rectum*, and the society later became the American Society of Colon and Rectal Surgeons. There was no analogous society and journal in Britain.⁸³

From the 1870s the area around Harley Street was developing as a centre for medical men aspiring to treat the gentry and aristocracy in the West End. From the 1880s the St Mark's surgeons began to establish their practices in the West End. Salmon had practised in the City, and Gowlan did the same, in Finsbury Square. William Allingham, however, began in Finsbury Square but soon moved to Grosvenor Street in Mayfair. His son followed him there. Alfred Cooper set up his practice in Jermyn Street, in the heart of St James's. David Goodsall started with a City practice in Finsbury Square, but later moved to an address in the Harley Street area, 17 Devonshire Place. In the 1890s Wallis established

his practice at 107 Harley Street, while Furnivall worked around the corner in Weymouth Street, and from the early twentieth century Lockhart-Mummery practised at 149 and Gordon-Watson at 82 Harley Street.⁸⁴

The coming of the First World War in August 1914 produced several problems for St Mark's, although to a great extent the hospital was too specialised to be much affected by war. A sudden lack of staff at all levels became the most pressing problem. Even before the war, the hospital had experienced sudden difficulties in recruiting house surgeons: in May 1914 advertisements were placed in the medical press in eight successive weeks without producing suitable applicants. The house surgeon at the time, S R Moolgavkar, was persuaded to stay on, and his salary was raised from £80 to £100 a year. When he finally left in October 1914, there was only one applicant for the position, M K Joshi. Early in 1915 Joshi left to join the Indian Medical Service. Again there was only one applicant, Dr Spence, who was appointed. Spence also went off to the war in July 1915, and no one applied for his position. The salary was raised by 50 per cent to £150.⁸⁵ Even though Joshi contributed to work on colo-rectal surgery in collaboration with Lockhart-Mummery, candidates from similar social origins to the surgeons were preferred. Thus in 1915 H Child was appointed as 'the only European candidate'.⁸⁶ House surgeons usually served for at least six months, and frequently for a year, but this was not the case during the war. In December 1915 a new house surgeon was appointed, again 'the only European candidate'. No 'suitable' candidates were initially forthcoming on his resignation in June 1916. By early 1918, the house surgeon was being paid £250 a year, over three times the salary of pre-war house surgeons.⁸⁷ In June 1918, again no appropriate candidates were apparently forthcoming, and the secretary was therefore directed to mention in the advertisement that 'Ladies were eligible for the appointment'.⁸⁸ In July the first and only female house surgeon, Dr Anna Keilin, was duly appointed. (After the war it was specified that all house surgeons must be male.) Dr Keilin's appointment was made shortly after a woman, Miss Rivers, had been appointed as a dispenser. Miss Rivers proved to be a particularly long-serving member of staff.⁸⁹

Other members of the medical and surgical staff were soon drawn away by the war. Charles Gordon-Watson was a surgeon captain in the Territorial Reserve, and was immediately called up. He had enjoyed his sojourn in South Africa during the Boer War, and was ambitious to go to France as soon as possible. He was to find the First World War a very different and disturbing experience. In South Africa he had participated in an active social life, seeming to play polo more than helping with medical emergencies. He noted that when the Boers, good shots though they were, failed to kill those whom they hit, wounds frequently healed without surgical interference in the dry climate. In the First World War,

by contrast, soldiers suffered from severely lacerated shell wounds, and the heavily cultivated soil of Flanders, rich in anaerobes, meant that gangrene was very common. Moreover the wounded men were 'often care-worn, if not body-worn, with the ardours of trench warfare, often soaking wet and covered in mud'.⁹⁰ When war broke out Gordon-Watson approached the Duchess of Westminster who was offering money for a hospital, and secured the position of Major in surgical charge of the hospital, which was then established at Le Touquet. Few thought that the war would last beyond Christmas 1914: in fact Gordon-Watson was one of several who were away from St Mark's for more than four years. The two assistant surgeons, Lionel Norbury and H Graeme Anderson, both volunteered their services, respectively to the War Office and the Admiralty. Ivor Back and A Morley were appointed to undertake their outpatient duties during their absence, which was expected to be a shortlived necessity. Frederick Swinford Edwards willingly returned from retirement to undertake Gordon-Watson's work. The remaining two members of the pre-war surgical staff, Lockhart-Mummery and Aslett Baldwin, remained in place.⁹¹

A few months before the war, on Lockhart-Mummery's direction, a pathologist and bacteriologist, Stanley Wyard, had been appointed to replace H G Anderson. He was due to attend the hospital on at least three afternoons a week and to be paid £100 a year in the upgraded department. As soon as he was appointed, Wyard requested almost £50 for apparatus, and alterations were made to the pathology room. However, Lockhart-Mummery's plans to increase the amount of work on pathology at the hospital were interrupted by the war. Wyard received a commission from the Royal Army Medical Corps, and left, instructing that anything requiring his attention should be sent to the Victoria Hospital. In October 1914 he was granted leave of absence for six months, 'should the War last so long'.⁹² C A Jones, one of the anaesthetists, left in November for the Anglo-Russian Hospital and the senior anaesthetist assumed his duties.⁹³

One of the first effects of the war on the general management of the hospital was an increase in prices. In the first two months, meat rose in price by almost 13 per cent. It was agreed, too, that twelve beds should be assigned to the War Office for the treatment of soldiers. Further official attempts to requisition more space at the hospital were refused on the grounds that it was a specialist hospital. In January 1915 the government's Emergency Surgical Aid Committee asked the hospital as to the kind and number of cases that could be treated there 'in case of an attack on London by air Craft', but was told that it was inappropriate to treat such emergencies in the hospital. The Red Cross gained permission from the hospital for members of the Women's Voluntary Aid Detachment to

gain experience in nursing at the hospital, which assisted St Mark's both with extra staff, and with a small income. As the war continued, it became increasingly difficult to obtain good nurses, as so many were going to hospitals at the front. However, at the Annual General Meeting of the governors in 1915, it was declared that the hospital was 'getting on extremely well, in spite of the disastrous time of war and anxiety through which the nation was passing'. Swinford Edwards was particularly glad to be at the hospital again. He remarked that the operating theatre which had been upgraded again just before the war was the best-lit in London.⁹⁴

A member of the committee of management, Captain A G Sandeman, who had been particularly active in the service of the hospital, was killed in Flanders in 1915, bringing home to the hospital the reality of the war.⁹⁵ It was noted at the Annual General Meeting in February 1916 that the beds set aside for soldiers had been put to good use. The treasurer, Sir Richard Martin, referred particularly to a wounded soldier who had been successfully treated at St Mark's after a shell splinter had passed straight through him, and who had previously been treated without success at a general hospital. 'The incident proved the value of the special surgeon and special treatment, in a special Hospital', he remarked.⁹⁶ During the annual cleaning of the hospital in August 1915, St Mark's closed the wards for the whole month, partly due to lack of staff. Nursing sisters were given a bonus of £10 after a year's continuous service to try to retain them. In 1916, even the outpatient department was closed in August, and the assistant nurses were also given an annual bonus. A year later, a system of bonuses was worked out for domestic servants who had completed three months' service, as well. When the hospital closed for cleaning in August 1917, special permission was granted to the local authority to use it as an air raid shelter for the general public, if necessary. There was then a problem in terminating this arrangement: a strong lock and chain was purchased for the main gate, to be applied as soon as any warning was sounded. The hospital itself was hit in an air raid in February 1918: the mortuary was damaged.⁹⁷

On 11 November 1918, the armistice was signed between Germany and the Allies. However, before life could return to normal, a massive influenza epidemic hit Britain, killing 150,000 people. St Mark's was forced to close for a month simply because the laundry that supplied linen had insufficient staff to remain open.⁹⁸ But already the hospital was looking to the future. In 1917 the site of the chapel next door became available for purchase. The King's Fund granted permission to the hospital both to buy it and to appeal to the public to recoup the cost. Lockhart-Mummery intensified this appeal by warning that otherwise a factory might be built there. Within a few months over £4,500 had been raised. Barely had peace been concluded when the surgical staff presented

ST MARK'S HOSPITAL, LONDON

a proposal to reintroduce postgraduate education at the hospital.⁹⁹

St Mark's had entered the twentieth century with great promise – it possessed a building which had almost doubled in size, professional approval and aristocratic support – but it also had major financial problems. However, with the help of those aristocratic friends and by other more contentious means such as charging the patients for treatment, the hospital survived its recurrent economic problems. A legacy of £13,000 received just before the war helped to see it through that period. Its trump card, however, could not easily be used in the war, and remained for future employment – this was the fact that the hospital increasingly treated cancer and the word was now even included in the hospital's name.

CHAPTER XI

St Mark's Hospital for Cancer *1918–1948*

The voluntary hospital system faced a major crisis between the wars. The numbers of patients who sought hospital care expanded enormously: hospitals no longer only treated the poor. Medicine was becoming increasingly intensive with steadily rising drug, equipment and staff bills. By the 1930s many of the voluntary hospitals were suffering acutely from the financial strain; state assistance seemed inevitable. In the midst of this, St Mark's flourished: the interwar period was the hospital's pinnacle of success as an institution. Its future looked healthy and assured, leaving behind the problems of the past. The key to its success was the hospital's association with cancer: it became known in popular terms as St Mark's Hospital for Cancer. Cancer loomed threateningly in the popular imagination: people seemed helpless against its attack. It seemed to be increasingly common – even to be a disease of civilisation. The belief in progress, especially medical and scientific advance, was strong, and there was great confidence that with sufficient effort cancer could be overcome. With the energetic assistance of Percy Lockhart-Mummery, St Mark's took its place in the crusade against cancer. Interest and assistance in the hospital's work rose accordingly.

The interwar period also saw the final triumph of the specialists over the generalists. Patients themselves had long sought specialised care, encouraging a two-tier system of medicine, with general practitioners referring patients for specialised treatment. The First World War enhanced this process. Many physicians and surgeons had entered military service, returning in a large group into civilian medicine after the war; their re-absorption was difficult. Charles Gordon-Watson, who himself had been absent during the war, recalled how the sudden surfeit of doctors in the early 1920s encouraged their specialisation. Those returning to consultant practices did so with some anxiety: past connections with general practitioners had long been broken, and senior consultants who had employed younger men to take the overflow from their own practices had died, retired or had evolved other patterns. Moreover, men who before the war would have been general practitioners were now well-practised in surgery and drew work away from consultants:

In pre-war days from a certain radius round the Metropolis most of the emergency surgery came to London, but after the war so many men

who had been engaged in war surgery returned to general practice flushed with enthusiasm for operating and confidence in their powers to do many surgical operations hitherto unattempted.¹

For Charles Gordon-Watson, his connection with St Mark's allowed him to develop a reputation in colo-rectal surgery. In the prewar period, general surgery had predominated in his practice; after the war, this changed. Like many in his profession he regretted this trend.

How thankful I am that I practised general surgery for many years before the inevitable current of specialisation washed me into this back water. There save for an occasional excursion into the main stream, I must needs stay 'put' to the end, though not unthankful for the rewards that it brings and the benefits that I have been able to hand out to many sufferers.²

For Percy Lockhart-Mummery, and those who joined him at the hospital in the 1920s and 1930s, specialisation was far from a backwater. The tide was flowing with specialisation, and therefore with St Mark's.

As the First World War drew to its close, the committee of management urged absent members of the medical staff to return. Gordon-Watson (knighted for his wartime services) reappeared in the spring of 1919, Lionel Norbury and Graeme Anderson in the summer. Patients from France, many with 'shocking injuries', continued to arrive at the hospital. The War Office had contributed £400 to St Mark's for its care of wounded soldiers, and the hospital secretary was instructed to request that any remaining rectal cases be sent to St Mark's rather than to general hospitals. Redundant blankets and bed linen were also requested from the Red Cross.³

As the hospital returned to normality, there were a few changes of staff. Sir Richard Douglas Powell was still the honorary consulting physician, but he rarely if ever attended the hospital. The surgeons recommended that an honorary physician be appointed and that he should attend the hospital at least one day a fortnight.⁴ They selected Francis Crookshank (1873–1933), but his particular interest was psychology and psycho-analysis, and his stay at St Mark's did not last long.⁵ He resigned in 1922 and James Browning Alexander (1888–1962) was appointed in his place. Alexander was essentially a general physician, with an interest in chest diseases, and he was therefore in the tradition of other physicians appointed to the hospital. His association with St Mark's proved long-standing: he served until his retirement in 1953.⁶ Like those of his predecessors, his tasks were to oversee the general health of the patients, rather than to take any part in the treatment of colo-rectal disorders. However, his hours were more specific than theirs had been: he was

required to see any outpatients referred to him by the surgeons at 2.30 pm on Tuesdays, and visit inpatients 'as may be necessary'.⁷

There were changes among the surgeons too. Aslett Baldwin retired in June 1920 and H Graeme Anderson moved up to take his place as full surgeon. There were five applicants for Anderson's position as assistant surgeon: William Gabriel, W Turner Warwick, A S Morley, C Banting and an Australian who was settling in London after serving in the war in Europe, ETC Milligan. It was becoming a pattern that new surgeons were recruited from among former house surgeons. Turner Warwick had served in this position between October 1917 and February 1918 (and later became a surgeon with a strong colo-rectal interest at The Middlesex Hospital). Gabriel was the current holder of the position – it had been arranged that he should be house surgeon even before he was demobilised in 1919. No doubt Baldwin's imminent retirement would have been in the minds both of Gabriel and his superiors, who had clearly marked him out for promotion. He was reappointed twice to serve extra periods and the meeting which received Baldwin's resignation also received Gabriel's as house surgeon. The medical committee recommended that either Gabriel or Milligan be appointed, with a preference for Gabriel, and he was duly approved by the committee of management.⁸

WB Gabriel (1893–1975) played a prominent role in the hospital's history, particularly after the departure of Percy Lockhart-Mummery. As St Mark's and the Gordon increasingly dominated colo-rectal surgery, surgeons spoke of 'the gospel according to St Mark's': not surprisingly, there was also the Archangel Gabriel (and variations on this title). Gabriel was the son of an engineer from Suffolk, and received his early schooling at Monkton Combe School and Epsom College. In 1912 he entered The Middlesex Hospital Medical School, where he won several prizes. He held a house appointment there, served as a surgeon lieutenant in the Royal Navy in the war, and on demobilisation returned to The Middlesex as surgical and cancer registrar to Sir John Bland Sutton, who knew Lockhart-Mummery well. He also became Lockhart-Mummery's assistant in his private practice. Gabriel was a dedicated colo-rectal surgeon, and although he also held appointments at the Royal Northern Hospital and at Queen Mary's Hospital, Roehampton, it was as a specialist that he made his reputation.⁹ He was highly disciplined: memories of his punctuality linger on. A former laboratory technician remembered how he used to wait in his car around the corner from the hospital until the precise moment that he was expected.¹⁰

With its new members of staff, St Mark's looked to the future. Inflation during the First World War had increased the costs of the hospital, and throughout the 1920s its expenditure amounted to about £10,000 a year, but its income generally kept close to this. In 1920 the Lord Mayor

wished them success in their efforts 'to alleviate and cure Cancer',¹¹ and it was the treatment of cancer which became the dominant theme in the hospital's fund-raising efforts. St Mark's and its senior surgeon, Lockhart-Mummery, were brought to public notice in connection with the establishment of the British Empire Cancer Campaign (BECC) in 1923. The Campaign was not the first fund-raising organisation for cancer. The Imperial Cancer Research Fund (ICRF) had been founded as the Cancer Research Scheme in 1902, the first research institute devoted specifically to cancer. The ICRF had a laboratory for animal experiments as this was believed to hold the key to the understanding of cancer: clinical work on the treatment of human cancer had little place in this scheme of things.¹² Increasingly, however, clinicians argued that they needed an institution which more directly assisted their work. Lockhart-Mummery held that work on cancer should be supported within hospitals, rather than simply within laboratories, and it was suggested that a second fund-raising institution should be established to achieve this. Soon after the First World War, an industrialist, Sir Richard Garton, offered Lockhart-Mummery £20,000 in gratitude for treatment; Lockhart-Mummery directed this towards the establishment of such a body. The Campaign, or Crusade as it was initially termed, took its first shape during a meeting in March 1923 at the House of Commons under the auspices of a member of parliament and friend of Lockhart-Mummery, Godfrey Locker Lampson. Sir John Bland Sutton, Sir Charles Gordon-Watson, Sir Thomas Horder (later Lord Horder) and Sir Bernard Spilsbury were among the founder members. In May the Campaign was incorporated, under the chairmanship of Lockhart-Mummery. It was conceived as a fund-raising crusade throughout the Empire, which would then supply grants to hospitals for research on cancer. A massive press campaign was organised, and by the end of the first year £68,000 had been raised, and the BECC continued to go from strength to strength, based on public optimism – encouraged by leaders of the Campaign – that if sufficient was invested in the task, the problem of cancer could be solved.¹³

The course of the BECC was far from smooth. In 1913 the government had set up the Medical Research Committee, which became the Medical Research Council (MRC) in 1920. In 1923 the secretary of the MRC was Sir Walter Morley Fletcher who maintained that it should have complete control over the funding and direction of all medical research: the relationship between the MRC and the Campaign was therefore very tense. The ICRF, which had not been consulted in the early stages of the Campaign's creation, also tried to stifle the new organisation and competition between the two cancer funds was very persistent. Members both of the Medical Research Council and the Imperial Cancer Research Fund claimed that the Campaign was destructive in the long term in seeming to

claim that a single crusade against cancer could be effective. Attempts were made by the Campaign in its first few months to secure the cooperation of both the ICRF and the MRC, at the cost of sacrificing control over its own affairs. The Campaign formed a grand council which included eight members nominated by The Middlesex Hospital, seven by the ICRF, seven by the Cancer Hospital, including Ernest Miles and Sir Thomas Horder, three by St Mark's (Dr Oxford, Lockhart-Mummery and Gordon-Watson) as well as a handful of others including the surgeon, William Arbuthnot Lane.¹⁴ The British Empire Cancer Campaign had been successfully launched in financial terms: money was pouring in from its fund-raising efforts, even though its control over how the money was spent was severely limited by the other two organisations, and its purpose seemed uncertain. However, its creation assisted St Mark's in several ways: grants from the BECC enabled the hospital to undertake systematic research into cancer, and the Campaign's advertising increased public awareness of the involvement of St Mark's and its surgeons in the treatment of cancer.

The problem of cancer was stressed in the hospital's advertisements, through its title, through the *Annual Reports* and the Annual General Meeting. In 1926, for example, Lockhart-Mummery reported that a great deal of work was being carried out at the hospital on cancer – 'particularly investigation regarding [its] earlier stages'.¹⁵ He warned that the latest published figures showed a marked increase in the incidence of cancer, but that in his opinion 'they were arriving at something definite'.¹⁶

Most of the research on cancer was carried out in the new pathology department. When the pathologist, Stanley Wyard, resigned in 1920, Lockhart-Mummery decided to implement his prewar idea of establishing a more comprehensive pathology department. It was decided that the pathologist should be appointed on a half-time basis, rather than be an occasional visitor to the hospital. Having failed to find a suitable candidate on the grapevine, they advertised the position and Cuthbert Dukes was appointed in January 1922.¹⁷ Cuthbert E Dukes (1890-1977) was born in Somerset, the son of a clergyman. He himself became a Quaker, and was remembered for his unusual gentleness, humility and kindness. He went to Caterham School and then to Edinburgh University where he qualified in 1914. During the war, he served in the Royal Army Medical Corps and was awarded an OBE. He later gained a doctorate in medicine at Edinburgh and a diploma in public health at University College where he was appointed demonstrator in bacteriology.¹⁸ In June 1924 the first grants from the British Empire Cancer Campaign were made: the Christie Hospital, Manchester, received £1,000 and St Mark's Hospital £200 for the new pathology department.¹⁹

In 1921 the medical committee recommended the establishment of another important department, for x-ray work. The first radiologist, S Cochrane Shanks, was appointed in January 1922, on an honorarium of £25 per year.²⁰ For Shanks, the appointment at St Mark's was a stepping stone to appointments elsewhere and he left in 1925 to become assistant radiologist at Charing Cross.²¹ Shanks' successors served respectively for two and three years: it was only with the appointment in 1930 of Norman P Henderson, who remained at the hospital all his working life, that the position of radiologist at St Mark's was seen as a culmination of a career. In that respect radiology lagged behind pathology by a decade at St Mark's.²²

The trend for middle class patients to seek treatment in hospitals continued to grow rapidly. Lockhart-Mummery noted in 1921 what he explained as a 'curious effect of the war' – that more 'gentle-folk' had apparently been reduced to poverty and were now seeking treatment in the voluntary hospitals.²³ The question of paying patients was raised again, and in the 1920s paying patients were increasingly admitted. Two joint problems in medical care were beginning to be addressed in the 1920s: one was the means by which hospitals and general practitioners could support themselves, and the other concerned arrangements to assist the poorer members of society when they needed medical care. In 1911, David Lloyd George had introduced a contributory insurance scheme for workmen, which entitled them to some care from general practitioners who were reimbursed by the state partly out of the proceeds from the workers' contributions. Dependants were not covered, there was an upper income limit on those who could participate in the scheme, and specialist (and most hospital) services were not included. In 1919 the Ministry of Health was established, and commissioned a consultative body under the future Lord Dawson of Penn to consider how medical provision could be organised. The Dawson Report (1920) produced an outline of a national health service (including institutional care), available to all, although not necessarily free of charge. However, these far-reaching proposals were shelved, as the government retrenched after the war. Some financial assistance to the voluntary hospitals was made on the recommendation of the Cave Committee in 1921, but strictly on a limited basis, lest it undermine the voluntary system. It also recommended that hospitals should improve their accounting systems, undertake co-operative buying, act in concert in appeals for funds and develop contributory schemes of payments by employees to which employers should also contribute. Payment by patients should be encouraged, although private beds should not be provided.²⁴ Through the King's Fund, St Mark's responded to the Cave Committee's recommendations, arguing for a system of organised weekly contributions by wage earners on a large

scale, but without a definite insurance system. The Hospitals Savings Association was established at this time, and St. Mark's received a steadily increasing number of patients who contributed to the scheme, with the Association reimbursing the hospital for care.²⁵

The financial concerns of most hospitals, however, hardly seemed to touch St Mark's. Swinford Edwards, whose connection with the hospital dated back almost half a century to 1876, when he was house surgeon, noted at the Annual General Meeting in 1922 that he could not recollect a more satisfactory time for the hospital.²⁶ Its reputation in medical circles was also high: increasing numbers of visitors came to St Mark's from all over the world. Sir Charles Gordon-Watson noted that 'hardly a week passed without some American coming into St Mark's theatre.' He thought that the hospital was probably better known in the United States than in London. Continental surgeons, too, visited the hospital: he recorded in mid-1927 that 'only last week two distinguished surgeons from Paris came over specially to see an operation carried out'. Swinford Edwards mentioned the number coming from the 'dominions', and the records of visitors to the outpatient department and operating theatre confirms this impression.²⁷ The theatre visitors' book for 1925 showed 190 visitors, of whom 26 came from the United States, 20 from Australia and New Zealand, 11 from Canada, eight from South Africa and six from India.²⁸

While other hospitals retrenched, St Mark's looked towards expansion. In 1922 an ambitious plan was proposed. The hospital should build an extension on the new site next door to increase the number of beds from 54 to 72, create a larger outpatients department and expand the newly created x-ray and pathology departments. The argument that the 'present Facilities of Cancer Research were most unsuitable' had Lockhart-Mummery's imprint.²⁹ The King's Fund was asked to approve the plan. The new building was to adjoin the old, facing City Road on the Pickard Street side, and consisting of a four-storeyed block with the outpatient department on the ground floor, a male ward on the first floor and female on the second, with rooms to house an extra eight nurses and one sister on the third. At the rear of the site there was to be a garden court. The outpatient department would consist of a waiting room to accommodate thirty patients, two consulting rooms, a changing room, an enema room, the outpatient dispensary and the clerk's office. The Fund's visitors noted that no sanitary arrangements had been planned for the outpatient department, but made this provision the only condition of their approval.³⁰ The King's Fund had no sooner approved the extension than the medical committee proposed an alteration to the top floor. It should consist of small wards for paying patients, rather than nurses' rooms.³¹

By the end of 1923, almost £3,000 had been raised towards the

anticipated sum of £15,000 for the extension. An interesting arrangement was agreed with the *Daily Telegraph* of mutual benefit to the hospital and the paper. St Mark's would pay £600 and promise that a large number of the hospital's governors would place advertisements in the paper: in return the paper would publish a special news article about the appeal and, on the following day, a whole page, in illustrated and written form, about the hospital.³² On 11 February 1924 a news item duly appeared entitled 'St Mark's Hospital: Eighty-Eight Years' Work – Campaign Against Cancer'.³³

In 1924 income exceeded expenditure by £2,000. The Lord Mayor at the Annual General Meeting ascribed this to the efforts of the 'energetic Senior Surgeon', Lockhart-Mummery, who was at that moment in Nepal attending 'an important patient' (the Maharajah). The Lord Mayor warned that the idea should not get about that the hospital was well off: hospitals needed to show a debt to raise money.³⁴ Perhaps to ensure this, in 1924 the hospital bought several houses at the rear of its new site, 8–14 Pickard Street and 67–68 Moreland Street. With tenants in occupancy, no plans were made at that time for their use; it was intended that this area should be used for a nurses' home. Rooms in the extension could then be freed for paying patients.³⁵

As plans for the extensions continued, other aspects of the hospital's work were developed. Two courses on rectal diseases, given in cooperation with the Fellowship of Medicine and the Post Graduate Medical Association, were offered in 1924.³⁶ Henry Graeme Anderson died suddenly on a tennis court at the age of forty-two in June 1925, necessitating an unexpected change in staff. Lionel Norbury was promoted from assistant surgeon to full surgeon, and Edward Thomas Campbell Milligan (1886–1972), who had impressed the surgeons when he applied to the hospital in 1920 but had not served as house surgeon, was appointed as assistant surgeon. Milligan defeated another surgeon who later developed a great reputation, Rodney Maingot, who had been a clinical assistant at St Mark's before the war, and later became a surgeon at the Royal Free, publishing several influential volumes on abdominal operations.³⁷

Campbell Milligan had been born in Australia, the son of an engineer. He went to France with the Australian forces in 1914, and practised radical excision of wounds to combat gas gangrene: his deforming operations were at first much disapproved, and he was removed from operating in 1916. However, by the end of the war such procedures were accepted as necessary (he was given an OBE). Milligan caught typhoid and was moved to Britain, where he decided to settle after the war. He served on the staffs of the Woolwich War Memorial, Croydon General, the Weir and other hospitals as well as St Mark's.³⁸

In 1936 Milligan became associated with the Oxford Group, known

from 1938 as the Moral Rearmament Movement, and he would startle patients, fellow staff members and assistants alike by challenging them to share his beliefs.³⁹ He upset one convalescing patient by asking if she was prepared to meet her maker, a question which had nothing to do with her state of health.⁴⁰ Henry Thompson remembered him as a general surgeon in outlook and practice with a deep knowledge of the diseases of the rectum and colon, and a special interest in paediatric and genito-urinary surgery.⁴¹ Shortly after Anderson's death H A Richards, one of the anaesthetists, left and was replaced by J K Hasler. Hasler acted in this capacity for over a quarter of a century, and even at his retirement remained as honorary consulting anaesthetist. Anaesthesia, like radiology and pathology, was developing into a well-established discipline within medicine.⁴²

Undisturbed by these changes, building commenced in 1926, involving the hospital in a flurry of fund-raising activities to ensure that the builders could be paid. An appeal committee was established and set its members to 'use their influence' to secure a short appeal on the radio in early May.⁴³ A wealthy governor and former patient of Lockhart-Mummery, the solicitor Raymond Clifford Turner, offered to distribute 50,000 special appeal letters free of charge, and Sir Basil Clarke, of Editorial Services Ltd, advertising specialists, proposed an advertising scheme at the cost of two hundred guineas.⁴⁴ The BBC refused to broadcast an appeal, and the governors once again noted the difficulty of appealing for funds for the treatment of rectal diseases, even with their association with cancer.⁴⁵ At the Annual General Meeting in 1926, the Lord Mayor remarked that the hospital was very heavily handicapped 'by the disagreeable character' of the diseases it treated, 'and yet, on the boards of some of the London theatres plays were being acted infinitely nastier than any description of the Hospital's work'.⁴⁶ In efforts to raise money it was decided that a festival dinner should be held, a tradition which had lapsed for over twenty years.⁴⁷ The Lord Mayor agreed to take the chair, and the dinner raised £6,000 towards the rebuilding costs.⁴⁸

Advertisements which emphasised cancer were placed in newspapers: it was declared that St Mark's, 'this old City Hospital', needed £15,000 for additional wards and to provide larger cancer research laboratories. Donations were contributions to 'the Nation's Campaign against Cancer'. Ironically, directly below the St Mark's advertisement in the *City Press* was one for the Cancer Hospital which declared that it was 'the only special hospital in London for the treatment of the disease'.⁴⁹

An appeal leaflet was also produced, stating that St Mark's was 'practically the only special institution of its kind in the world' – there was, of course, the Gordon – and that patients came from all parts of the globe for 'the treatment of CANCER and other diseases of the colon and

bowel'.⁵⁰ The hospital had become the 'Mecca' for surgeons from all over the world, and 'Every case of cancer treated at St Mark's Hospital adds to the practical knowledge of science concerning this malignant and mysterious disease'.⁵¹ The hospital encountered the usual problems in securing the well-known and even the less well-known to lay the foundation stone, and it was decided that no ceremony should be held.⁵² Dissuaded by the King's Fund, which thought that royalty should be used sparingly, the Prince of Wales and other members of the royal family declined an invitation to open the new wing and again the notion was shelved.⁵³ On the other hand, others were anxious that their names should be associated with the hospital. The Prudential Assurance Company offered a donation provided that plaques to this effect were placed above two beds, as was the case in other hospitals. The committee of management liked the idea, and initiated a general scheme by which a person could make an annual donation to support the maintenance of a bed, with a plaque above it.⁵⁴ The cost of the new wing eventually came to £24,000, and it came into operation in 1927.⁵⁵

The two new public wards were termed 'A' and 'B' (the hospital was waiting for munificent benefactors after which to name them), and were in addition to the main old wards, Fournier and Holgate.⁵⁶ There were also ten beds for private patients in the old part of the hospital.⁵⁷ The medical committee decided that a second resident surgeon was required, renaming the senior resident as resident surgical officer (with a salary of £150) and keeping the old name of house surgeon for the junior officer (who was paid £75 a year). Appointments were to be for six months in the first instance but generally lasted for a year.⁵⁸ Both the x-ray and pathology departments had been extended in the rebuilding. New equipment at a cost of almost £1000 was purchased for the x-ray department, but the upgrading of the pathology department was even more marked. Dukes' salary was doubled, with the British Empire Cancer Campaign bearing the cost, and his title was changed to pathologist and director of the research department. By 1929 Dukes was a member of the medical committee, which had formerly consisted only of surgeons.⁵⁹

Imaginative new ways of raising money were devised in the late 1920s, which reflected the greater social prestige of the hospital. The most important was the Greyhound Ball. Greyhounds were a passion of Lockhart-Mummery (a grateful patient gave him one which won the Greyhound Derby), and it was at his suggestion that Mrs Edgar L de M Mocatta organised a ball at the Mayfair Hotel in December 1927, at which a greyhound was auctioned. Various notables attended, including Noel Coward. The proceeds of the Greyhound Ball amounted to over £1,000, and a second ball was immediately planned for 1928.⁶⁰ Almost

annually, too, sums of about £300 were received as part of the proceeds of the Stock Exchange Dramatic Society productions.⁶¹

St Mark's was able to pay for one new and expensive necessity, radium, without drawing upon such funds. In 1928 the surgeons requested fifty milligrammes of radium at a cost of £1,000. Philanthropists were keen to support radium treatment. St Mark's was therefore able to borrow 100 milligrammes from the King's Fund, purchased out of a £50,000 bequest from Sir Otto Beit. Miss Florence Clarke of Bristol made a £1,200 donation to St Mark's with which 89 milligrammes were purchased. The MRC lent an additional 50 milligrammes. The surgeons immediately asked to borrow radium at a fee of two shillings a milligramme for use in treating private patients elsewhere, but the committee of management refused their request. It was agreed, however, that a circular letter should be sent to southern provincial hospitals to inform them that St Mark's had radium facilities: such specialised – and expensive – facilities helped to establish the special hospitals and their surgeons as a further tier above local hospitals to which difficult cases could be referred.⁶² Borrowing radium, however, made the hospital subject to influence from outside institutions. The King's Fund and the MRC laid down strict guidelines regarding the safety of radium: it was, after all, both expensive and dangerous. The Fund requested that their radium should be kept under lock and key in a special box in a safe, to be overseen by the surgical staff. It could only be issued to a limited number of named people. No patients could be discharged with radium needles still attached to them, and no dressings could be destroyed until the radium had been accounted for.⁶³ It was soon found that the hospital held too much radium, especially as objections to its use grew. In 1931 only five per cent of the radium at the hospital's disposal was used and the King's Fund supply was returned. The following year the MRC's radium was also sent back, leaving the hospital dependant on its own supply.⁶⁴

Two events in 1929 seemed to pose potential threats to the hospital: one was the passage of the Local Government Act, and the second was the collapse of the Stock Exchange in New York. The government had made little attempt in the 1920s to ensure effective hospital provision or to reduce duplication between the hospitals. However, some systematisation was introduced among publicly-funded institutions in 1929. The Local Government Act transferred the responsibility for public hospitals from the Poor Law authorities to public health authorities (in the case of London, the London County Council). One provision of the Act was that the local authorities were to consult voluntary hospitals before providing hospital accommodation. However, there was no requirement that the voluntary hospitals should coordinate with what they regarded as their poor relations over their own developments, although this had been

an original intention – an intention which concerned St Mark's. It was decided that the hospital should cooperate with other special hospitals 'for mutual protection' and opposition to the Local Government Bill. It was argued at St Mark's that, 'Owing to their national work', special hospitals were not suitable 'for linking up with institutions in any scheme of a service for a limited geographical area'.⁶⁵ Despite their fears, however, the Local Government Act had little impact on the voluntary hospitals.

The Stock Market crash of October 1929 had far greater effect. The Great Depression which followed in America rapidly spread to other countries: in Britain unemployment rose sharply and industry declined. St Mark's had been thriving throughout the 1920s, yet by 1931 had acquired a debt of almost £10,000.⁶⁶ In 1932 the Fund's visitors noted that 'as in most hospitals there has been great difficulty in obtaining sufficient funds for daily maintaining the Hospital', but although St Mark's was a 'very deserving institution' no special help should be given.⁶⁷ As the debts mounted, the committee of management asked the surgeons to economise: a list of the most expensive drugs purchased in 1931 was drawn up, and the surgeons were asked to consider reducing quantities or using less expensive substitutes. The surgeons agreed, instructing that no proprietary drugs could be ordered except in special cases and with their express authorisation; cheaper generic equivalents were substituted. *Confectio simplex*, a sweet excipient used in pharmacy, was now made in the hospital. The surgeons also decided that they could manage with one resident officer only, and dispensed with the house surgeon.⁶⁸

As work in the outpatient department increased, Dr Oxford recommended in 1931 that an additional assistant surgeon be appointed. The medical committee deferred the decision for several months and towards the end of the year Charles Gordon-Watson resigned. It was decided that in future full surgeons would take a share of outpatient work and that therefore an additional assistant surgeon was not needed.⁶⁹ In his letter of resignation, Gordon-Watson stated that the claims of St Bartholomew's, together with his work as a member of the Council of the Royal College of Surgeons and his activities in the British Empire Cancer Campaign, made it difficult for him to do justice to St Mark's. He noted that the scientific reputation of the hospital had advanced considerably in recent years and that there was therefore much scope for a younger man of ability and energy to raise the hospital's prestige still higher.⁷⁰

Gabriel took Gordon-Watson's position as full surgeon. Two former house surgeons, Clifford Naunton Morgan and Harold Dodd, were interviewed for the position of assistant surgeon, and Morgan was selected.⁷¹ Clifford Naunton Morgan was born in 1901 in the Rhondda

ST MARK'S HOSPITAL FOR CANCER

Valley, the son of an architect whose two brothers were doctors. His father was a freemason, and he attended the Royal Masonic School. His preclinical training was at University College, Cardiff, and his clinical at St Bartholomew's, where he was a house surgeon under Charles Gordon-Watson. His senior suggested that he act as house surgeon at St Mark's, which he did between 1926 and 1927, as well as holding junior posts at St Bartholomew's. He was also appointed surgeon to the Royal Masonic Hospital, King Edward VII Hospital for Officers and the Hospital for Tropical Diseases, and succeeded Gordon-Watson at St Bartholomew's on his retirement.⁷²

By 1933 the economic position of the hospital was improving.⁷³ The hospital had emerged more rapidly than most from the Depression, and again the committee of management and the surgeons had their eyes on expansion.⁷⁴ An appeal for £30,000 to extend the hospital had been launched at the Annual General Meeting in March 1929, but then fell by the wayside in the Depression.⁷⁵ Plans crystallised again in 1933: it was decided to use the centenary of the hospital in 1935 to launch a massive appeal. The plans included an increase in the number of public beds, a nurses' home, a self-contained paying patients' block, a second operating theatre and improvements to the cancer research, x-ray and outpatient departments. The sum of £60,000 was called for.⁷⁶ Before the public announcement was made, the committee of management stressed that the King's Fund 'must be satisfied there is a real and urgent need for extension'.⁷⁷ The King's Fund approved the scheme, but expressed some reservations about whether the time was opportune, since many hospitals – including the Gordon – were launching appeals.⁷⁸ It was the Gordon's scheme which was probably critical in the eventual inability of St Mark's to raise the necessary sum. In the end it proved fortunate, for the Gordon raised its money, totally rebuilt its premises and therefore – as will be seen later – became a more attractive addition to a larger hospital, after the National Health Service was established.

Throughout the interwar period, the rivalry between the Gordon and St Mark's was acute. A young Australian surgeon, Leslie Le Souëf, who, on Campbell Milligan's advice, came to St Mark's as resident surgical officer, remembered the conflict vividly. In 1928, he entered 'one of those close preserves to be found in London, which apart from the special nature of its horizons of special treatment and diagnosis had accumulated over the years an especially hallowed position in the world of surgery'.⁷⁹ But it was not alone in its traditions and eminence.

To me there was something feudal about these two hospitals. One's mind swung back to those feudal days of castles and how they became centres isolated from one another by more than terrain. . . .

Towering above and piercing the skies were these two hospitals – competitive in their spread of influence. The castles had men who on dark nights went out to illuminate the darkness with fires – and in so doing prevent intruders approaching unseen and besetting their preserves.⁸⁰

Others recorded that the Gordon was under the shadow of St Mark's. The King's Fund reported in 1925 that although the Gordon was doing useful work, it had a gloomy, depressing and poverty-stricken appearance. While St Mark's had 72 beds by 1927, the Gordon had only 29.⁸¹ Some additions were made to the Gordon over the next few years, but the hospital decided that it should celebrate its fiftieth jubilee in 1934 with a completely new building, costing £100,000. It issued a special appeal booklet in which it maintained that it was 'the centre' for the treatment of rectal complaints. It owed its conception, it was maintained, to 'the self-sacrifice' of two Bart's students who in 1884 realised the 'crying need' for the treatment of rectal diseases.⁸² The King's Fund approved the new scheme.

We felt that there was a good deal of weight in the argument ... that General Hospitals do not like rectal cases which occupy a bed for a lengthy period. ...⁸³

Largely through a gift from Lord Dewar, the Gordon raised its money, and through the 1930s rebuilt its premises.

St Mark's lagged slightly behind. Plans were delayed by a controversy over the architect for their scheme. The architect who had planned the extension of the 1920s, P Morley Horder, objected to his traditional status as an honorary governor, who would not be paid a fee except by way of expenses. Moreover, there were complaints about his renovation of the operating theatre and his conversion of two houses in Pickard Street for nurses' rooms: the cost was higher and the work took longer than expected. In 1930 the committee of management decided to abolish the post of honorary architect.⁸⁴ That year Sir Percy Shepherd, a common councillor in the Corporation of the City of London, who was trustee of the estate of William Shepherd, and who directed large amounts of money to hospitals, gave £2,500 to St Mark's to install a new lift. He told the hospital to use an architect named R Kitching Ellison for the work. Shepherd was a patron the hospital was anxious to retain: as the Lord Mayor remarked in 1933, 'To help hospitals is one of his hobbies'.⁸⁵ The committee of management commissioned J E Dixon-Spain to draw up plans for the new extension in 1933. Shepherd was infuriated: he expected the hospital to continue to use Kitching Ellison for future schemes. Ellison's work, he claimed, was 'satisfactory to everybody'.⁸⁶ In fact, Ellison had proved somewhat less than satisfactory, but the committee of management immediately retreated,

and although Dixon-Spain had drawn up detailed schemes for the extension they maintained that they had no particular plans, and moved their business back to Ellison. Dixon-Spain put in a bill for expenses, adding that he regretted 'the unfortunate impact of unforeseen interests which apparently could not be resisted'.⁸⁷ Lawyers on the committee of management anxiously debated the hospital's legal position, and appealed to Dixon-Spain's generosity, but he replied that 'The matter of a Donor making a conditional gift, and the submission of the Committee to this, would seem to give no reasonable grounds for pleading special generosity'. However, he eventually agreed to a lower settlement.⁸⁸

Once the problem of the architect had been settled, the committee of management launched their appeal. In their efforts to secure the support of those most highly-placed socially, they surpassed anything that had been achieved before. In contrast to its decision in the 1920s, in 1934 the BBC agreed to allow Miss Phyllis Neilson-Terry to broadcast an appeal on behalf of the hospital, from which over £400 was raised. A dinner was presided over by the Lord Mayor at the Mansion House on St Mark's Day, 25 April, 1935.⁸⁹ An appeal letter, signed by the treasurer, was sent to thousands of potential benefactors.⁹⁰ Mrs Pulford, the daughter of an active governor, Lieutenant Colonel Cecil Powney, who moved in royal circles, suggested that the support of Freddie Fox, the king's jockey, 'who really owes his good health to Mr Lockhart-Mummery and has always spoken of him with the greatest possible regard and esteem', might help to organise a ball. As she pointed out, there were 'so many rich people connected with the Turf, that it seemed an opportunity not to be missed'.⁹¹ J Norman Daynes and Sir Percy Shepherd successfully approached the Corporation for assistance, and the King's Fund made a special grant in 1936 of £1,500. The Fund's grant was conditional on it being used within two years, and although only about £10,000 had then been raised it was decided to proceed with the work as soon as possible. The private patients' block was therefore postponed but it was planned that the new nurses' home should be built on the site in Pickard Street. A temporary appeals organiser, Lieutenant Arthur Spry, RNVR, was appointed to try to raise an additional £38,000. Dr Oxford used his masonic connections to secure another very prominent freemason, the Earl of Harewood, to lay the foundation stone, and the Earl's wife, Mary, the Princess Royal, promised to open the nurses' home.⁹²

Spry immediately set about his fund-raising tasks: he organised a gala night at the Hammersmith Palais, a theatre matinée, a special benefit night at the London Palladium including such variety artists as Elsie and Doris Waters, Flotsam and Jetsam and Douglas Fairbanks junior, a gala dance at the Astoria, a bridge tournament at Grosvenor House, a film première, and a boxing tournament. The Shepherd Trust made a further

grant of £1,000. An appeals letter signed by Beverley Nichols, popular novelist and playwright, was distributed which raised over £8,000. A film starring Shirley Temple (shown on Sundays when cinemas were usually closed) raised a further £1,300. By 1938 £25,000 had been raised, and there were two hundred new subscribers to the hospital. The date for the Earl of Harewood's visit was moved several times because the hospital was not ready for the ceremony to lay the foundation stone for the home: in the end he laid the stone in a spot from which it later had to be moved. However, no such delays affected the opening of the nurses' home. The Princess Royal's visit was advertised in the personal columns of *The Times* and the *Daily Telegraph*, and on 5 May 1938 she performed the opening ceremony.⁹³

On the ground floor of the nurses' home was a large recreation room, and the three upper floors contained bedrooms for fifty nurses and twenty-seven maids. This released rooms in the older part of the hospital, some of which were used for patients. Plans for a second operating theatre on the third floor, and expansion of the pathology, cancer research, x-ray and outpatients' departments were now drawn up. The self-contained block for paying patients would have to wait.⁹⁴

The hospital's progress was undisturbed by the passing of notable figures: others simply replaced them. On the administrative front, Dr Oxford was ageing, but an equally strong character, J Norman Daynes, a barrister (later a judge) and future prime warden of the Dyers' Company, became deputy chairman of the committee of management in 1938. Percy Shepherd had become an active participant in the hospital's affairs, and when the last of the Merrimans, Mark, resigned through ill health in 1936, he was replaced on the committee by his nephew, also a liveryman of the Dyers' Company, David Roy Balfour Park. Julius A Brewin died in October 1937, after serving on the committee for almost thirty years, but was immediately replaced by his son. Colonel Powney, whose social contacts had proved invaluable in the past, died in April 1936. Others emerged to take his place.⁹⁵

The centenary year saw the official retirement of J P Lockhart-Mummery. An indication of Lockhart-Mummery's contribution to the field of colo-rectal surgery, and of his significance to St Mark's, can be gained from his list of publications. The hospital marked its centenary by issuing a book bound in vellum in which its history was briefly summarised, and a list of publications by past and present surgeons, together with reprinted papers of particular significance, were included. Lockhart-Mummery's publications by 1935 included six books, six contributions to text books, and 166 articles. His contemporary, Charles Gordon-Watson, by contrast, had produced thirty-seven articles, by no means an insignificant number, but nowhere near rivalling his fellow surgeon. Lockhart-

Mummery reached the age limit of sixty in February 1935, but Dr Oxford proposed the unprecedented step that he should be elected as emeritus surgeon for five years, with the charge of six beds, as a token of appreciation of his long and eminent services to the hospital. This was duly agreed.⁹⁶

Milligan replaced Lockhart-Mummery as full surgeon. Oswald Lloyd-Davies, who had served as resident surgical officer in 1933, was selected as assistant surgeon. Lloyd-Davies had been born in 1905, the son of a clergyman. He had attended Caterham School, and then entered The Middlesex Hospital Medical School, where he later served as casualty surgeon, house surgeon and house physician, and worked in the pathology department. It was his senior at The Middlesex, Turner Warwick, former house surgeon at St Mark's, who recommended to Lloyd-Davies that he apply to be resident surgical officer there. Lloyd-Davies had also acted as Lockhart-Mummery's private assistant. With the change in staff, it was decided early in 1936 that a second resident officer should once again be appointed.⁹⁷

The hospital was developing strongly by the late 1930s. On the international front, however, the horizon was far from unclouded. The Second World War, with its air raids and economic stringencies, affected St Mark's far more than the First World War had done. And it was during the war that proposals for a systematically organised structure of medical provision began to be discussed. It was essential, therefore, that St Mark's should retain its identity during the war, in order to find a secure place in the postwar medical world. By March 1939 the Ministry of Health had assigned St Mark's to sector three in its division of London into the Emergency Medical Service. This sector was under the medical control of Sir Girling Ball FRCS of St Bartholomew's Hospital (who had served as a clinical assistant at St Mark's in 1910) and Cecil A Joll FRCS of the Royal Free and Royal Cancer Hospitals. St Mark's was counted as a first aid post. The Voluntary Hospitals Committee for London (VHC), run by the King's Fund, recommended that hospital records should be duplicated and kept in safe custody, and it was decided that a fireproof strong room be converted from a vault in the basement. With war apparently imminent, Dr Oxford resigned in May 1939 as chairman of the committee of management, after an association with the hospital of forty-six years. Daynes was chosen as his successor.⁹⁸

The First World War had disrupted patterns in the medical profession to a considerable degree; attempts were made, particularly by the British Medical Association (BMA), to ensure that the coming war did not. The BMA wrote to hospitals in July 1939 asking them not to make any new appointments on a permanent basis during the war and for a year afterwards. Moreover, the period of war service of an absentee doctor should

be added to the age of retirement. Such measures were designed to protect those already in positions, although they had important ramifications for those who would seek appointments during or soon after the war, creating a backlog of applicants. The committee of management at St Mark's expressed sympathy for the BMA's aims, and although they would not bind themselves they did in effect follow the advice. In June the King's Fund wrote to St Mark's proposing that the hospital's radium be stored in a borehole at St Bartholomew's; the construction of the private patients' block at the hospital was postponed because builders were trying to cope with government contracts.⁹⁹

On 3 September 1939 war broke out. It was immediately expected that there would be extensive air raids, and the first reactions were to prepare for this. St Mark's had been classified as a class 'B' casualty hospital and therefore not the immediate recipient of casualties, but since it was generally feared that there would be immediate massive casualties, changes in the hospital's arrangement were rapidly implemented. Dr Dukes served as medical officer in charge of the hospital, paid by the Ministry of Health, and spent the next few months resident at the hospital (he took the opportunity to analyse all the records of past cancer patients). All but fifteen of the patients were sent home. Henry Thompson, who was then resident surgical officer, left on 4 September to take up an appointment elsewhere under the Emergency Medical Services; a temporary resident surgical officer was appointed in addition to the house surgeon, and three students came from St Bartholomew's as clinical assistants to live in the hospital, together with two clerks. Sandbags were placed in position, the windows were blacked out and curtained, and shutters were fitted over windows in the wards. It was noted that 'This work was tackled by the staff with energy, cheerfulness and enthusiasm'. The outpatients' department was equipped as a first aid post, and orders were received for the hospital to be prepared for wounded soldiers. By 15 September it was already apparent that the air raids were not materialising. Permission was obtained to admit some civilian cases from the waiting list and outpatient department. Outpatient clinics were held on Mondays, Wednesdays and Fridays (and this was soon increased to four days) and by 25 September there were two private and 22 public patients in the wards. By mid-October, there were 44 patients (including nine private cases) in the hospital.¹⁰⁰ An initial grant of £543 was received from the Ministry because beds had been reserved for casualties, and it was decided to ask the Ministry for a grant towards the completion of work on the private patients' block. The Ministry declined, and it was decided that the work should be postponed indefinitely.¹⁰¹

Fewer members of the medical staff volunteered their service in the

Second World War than in the First. There was a greater sense that this could be a prolonged conflict. Norman Henderson, the radiologist, was one of the few to leave. Clifford Naunton Morgan was called up in 1942. A far greater problem, which persisted throughout the war, was the difficulty of obtaining sufficient nurses and other staff. Nurses were employed from agencies, at a greater cost to the hospital, and special dispensations were received for the hospital to employ German Jewish refugees. However, the Ministry also ordered the discharge of 'alien' nurses, for example Nurses Elkan and Knoft in June 1940.¹⁰²

The Ministry decided late in October 1939 that, for the time being, no beds needed to be reserved at St Mark's and certain other small hospitals for emergencies. By May 1940 there were 69 patients in the hospital. The building sub-committee even briefly considered plans to increase paying patients' accommodation on the second floor.¹⁰³ In February 1940, Lockhart-Mummery's extended period as surgeon came to an official end. It was decided that if any of the remaining surgeons was unable to carry out their duties because of the war, Lockhart-Mummery should be asked to assist, as Swinford Edwards had done in the First World War. He was elected honorary consulting surgeon and it was noted that 'his brilliant surgery, judgement and skill have enhanced the reputation and usefulness of the Hospital'.¹⁰⁴

The strain on the hospital's staff was increasingly apparent. An additional nurse was hired to help to cope with the eleven cancer cases in one ward, and the surgeons were instructed to try to avoid such a high concentration. The committee of management decided to close two wards for August and September, despite the medical committee's protest that there were many serious cases on the waiting list. The medical committee therefore recommended that an additional representative of the medical staff should serve on the committee of management, so that they could influence such decisions, but this suggestion was deferred and fell by default.¹⁰⁵

The air raids which had been anticipated at the outset of the war began to take place in the summer of 1940. When an air raid alarm was sounded, patients were supposed to be taken down to the basement, but the number of serious cases in the hospital and the frequency of alarms made this very difficult. None of the top floor was in use because of the danger from raids, and it was decided in August that only those patients who wished to go to the basement should be moved when alarms sounded. All beds were drawn away from the windows to the centre of the wards, and the shutters closed when there was a raid. The nurses were instructed to stay with the patients in the wards. Over the next month air raids became very intensive. The committee of management therefore decided that only minor cases could be admitted: by mid-September there were only 16

inpatients, including four private cases. In addition, the Ministry of Health reserved thirty beds for air raid casualties from 19 September 1940. The surgeons became increasingly concerned about this policy. Lionel Norbury, on behalf of his colleagues, wrote on 5 October that they were very worried about the cancer cases: St Mark's was the only functioning rectal hospital (the Gordon was being used for emergencies). The committee of management acquiesced: they decided that 20 minor cases could be admitted, together with six cancer cases in the public wards, and such additional private cancer patients as would agree not to go to the basement during air raids. Even then, the surgeons found it difficult to adhere to this quota, and the committee was forced to authorize them to make temporary increases in these numbers. The death rate among patients at the hospital rose considerably, because of the high proportion of severe cases. Through the 1930s, there was a death rate of around two per cent. In 1941 the average for the year had risen to six per cent – in July it was 14 per cent.¹⁰⁶

Tensions became apparent: some members of staff went absent without leave, although most made enormous efforts to cope with the problems of war. Suicide among the patients was an extremely rare phenomenon, yet in the run-up to the war a patient jumped from the fire escape and in August 1940 another patient threw herself out of the bathroom window of Fournier ward. Much of the East End of London was heavily bombed. Bombs fell frequently in the vicinity of the hospital and at 6.30 pm on Sunday 29 December 1940 an incendiary device fell through the roof of the operating theatre and anaesthetic room. Damage was limited to a small fire. However, it was decided that the Ministry of Health should be asked if they would meet the cost of erecting a blast wall in the forecourt, outside the outpatient department, since the sandbags were constantly in need of repair and replacement. In its turn, Finsbury Borough Council asked the hospital for permission to create an emergency exit from one of their shelters through the hospital's outside wall. The hospital agreed, provided that the Council make good the wall at the end of the war.¹⁰⁷

In 1941 staff shortages began to reach a critical stage. Wages for daily women and maids were raised from 8d an hour to 10d. No replies were received from eight weeks of advertising for nurses and the number of patients was limited once more, to 26. In April the Minister of Health announced increased rates of pay for the Civil Nursing Reserve (CNR), which had implications for the voluntary sector. The Ministry agreed that the CNR would not accept probationers until they had finished their training, to assist voluntary hospitals in retaining the services of those paid at the lowest level. However, at other levels the higher pay of the CNR was bound to draw nurses away. St Mark's, like other voluntary hospitals, increased the nurses' salaries by about 10 per cent, and Lionel

Norbury agreed to investigate whether the nurses' diet could be improved.¹⁰⁸ Even with these changes, the shortage of nurses remained critical, and there was constant tension over the number of patients that could be admitted, with numbers fluctuating between about 25 and 35, depending on the nursing staff complement.¹⁰⁹

Nursing salaries were increased again in 1942, to bring them in line with the British Hospital Association's recommendations. Despite this, the matron shortly afterwards called the attention of the medical committee to the 'serious shortage' of nurses. The surgeons in reply urged the matron to make further efforts (which she had already been doing) to recruit nurses from the Civil Nursing Reserve and the Voluntary Aid Detachment. By this stage, about 40 per cent of all inpatients were suffering from cancer. The ladies' committee suggested that if a convalescent home could be secured, the discharge of patients could be accelerated. Places were reserved through the Ministry of Health at Queen Mary's Hospital, Sidcup, for some patients with colostomies. The surgeons recommended in August 1942 that the College of Nursing be approached to establish a board of control for the protection of hospitals, to prevent nursing staff from leaving their positions without the consent of the hospitals. In fact, most of the nurses went through the proper channels in applying to move to other positions. That very month, the night sister and three staff nurses applied for permission to join the Army Nursing Service.¹¹⁰

Some relief was secured in 1942, as Lloyd-Davies, who was attached to Hampstead General Hospital and the North Western Fever Hospital through the Emergency Medical Service, was allowed to use facilities at the Fever Hospital to carry out five hundred operations for minor complaints. This arrangement continued throughout the war, but since it only applied to minor complaints the call upon St Mark's to accommodate major cases remained undiminished.¹¹¹ By the autumn of 1943, difficulties at the hospital were mounting. There was a waiting list of almost 250, rats had been seen in the hospital, and there was such a shortage of kitchen and house maids that it was suggested that the matron 'might approach Homes for the Feeble Minded, as it is possible they may carry out a maid's duties'.¹¹² In November 1943 Ernest Bevin announced in the House of Commons the decisions of the Hetherington Committee to relieve the staff shortages in hospitals: minimum wages and conditions of employment for domestic help in hospitals and similar institutions were recommended. The rates were not compulsory, but if a hospital asked the Ministry of Labour for staff, they would be sent only on condition that these rates were paid. St Mark's implemented these minimum rates, which resulted in massive wage increases, in some cases of 100 per cent. Shortages of staff continued, however. The hospital secretary, Raymond

Bull, was instructed to write to *The Times*, the Ministry of Labour, the local MP, the Lord Mayor and the British Hospitals Association about the hospital's plight. A large notice was put in the outpatient department requesting volunteers for the kitchen.¹¹³

The air raids of the early years of the war had lessened in their intensity after the Battle of Britain. In the summer of 1944 the first flying bombs (V1s) began to hit Britain, to be followed in September by the first rockets (V2s) which could not be spotted and which struck without warning. Once again London's medical services were thrown into a state of extreme emergency. A bomb blast damaged the nurses' home at St Mark's in June 1944, but the damage was not extensive. However, on 31 July a letter was sent to the hospital containing secret information which anticipated an increase of casualties in London due to enemy action. The Ministry of Health had decided to evacuate all patients from London sector hospitals, to allow them to be casualty reception hospitals. Beds were to be labelled with coloured letters according to whether their occupants were unfit to be moved (A), able to be discharged in 21 days (B), or unable to be discharged but able to be moved (C). Daily returns were to be made to the sector hospital officer. Within three weeks categories B and C were to be out of the hospital. Hospital staff were to remain, but only acute emergency and service cases were to be admitted. St Mark's decided to convert a room in the basement into an emergency operating theatre. The contractors had just finished repairing the nurses' home and had set about installing the temporary theatre when the Ministry of Works and Buildings ordered construction companies to refrain from anything other than first aid repairs. In August 1944 eleven of the 22 patients in the hospital were cancer cases; there had been three deaths that month.¹¹⁴

The massive evacuation, however, did not occur. On 19 September 1944 the committee of management instructed Raymond Bull to submit plans for the installation of private wards on the third floor and contributory wards on the second floor, 'in view of the approaching end of the war'.¹¹⁵ Within a month the medical committee had made its own recommendations: the present private wards should be converted into public wards, and a new architect with experience of hospital design should be appointed to draw up plans for a private block.¹¹⁶ The war in Europe came to an end on 8 May 1945. Those at the hospital breathed a sigh of relief, but turned to face immediate problems. It was now possible to recruit from the continent to fill staff positions and four Belgian women were employed as domestics from the end of July. Some of the administrative staff, such as Miss Miller, who kept the records, had become resident during the war and were now asked to return to private accommodation. Lionel Norbury had reached retirement age during the war,

but had been asked to stay on, thus delaying the appointment of a new surgeon. He was now asked to retire and become a consulting surgeon with no responsibilities. (It was said of Norbury that he – or perhaps his patients – got through his operations 'by the grace of God'.) After Norbury's retirement, the position of assistant surgeon was not immediately advertised because of the number of beds that still remained closed.¹¹⁷

There was, however, a much more radical change in medical provision in Britain to which the hospital needed to give detailed attention: the proposed National Health Service. Whenever it was considered, the medical profession expressed strong opposition to plans for nationally coordinated health provision. However, as medical costs rose, voluntary hospitals were forced to give fundamental consideration to the traditional methods by which they supported themselves. Moreover, during the war, the Ministry of Health had planned health care on a national basis, legally enforcing the cooperation of the voluntary hospitals. The Ministry, the hospitals, the profession and the public therefore had had a foretaste of how things might be coordinated. In addition, wartime conditions both increased costs and undermined the links between subscribers and the hospitals. Government help proved essential, and made it plain that it would be difficult to return to the earlier situation. The change of attitude towards state help can be clearly charted at St Mark's: governors and surgeons alike opposed plans for a national health service but found that they badly needed to draw upon the government for financial assistance. By the middle of the war, the efforts of those at St Mark's were directed to ensure that when, as now seemed inevitable, some coordination was planned for the post-war period, St Mark's should play a prominent role in providing its specialised care.

There had been a few areas in which St Mark's had acted in conjunction with other hospitals. Nurse training had been undertaken with the National Temperance Hospital from 1930.¹¹⁸ St Mark's was also happy to be a beneficiary of a joint advertising campaign on behalf of the voluntary hospitals organised by the propaganda committee of the King's Fund in 1931.¹¹⁹ The special hospitals had their own representatives on the Voluntary Hospitals Committee for London, which sought greater coordination between hospitals, and in 1933 J P Lockhart-Mummery was elected as one of these. In 1937 the VHC developed a scheme for centralising emergency admissions through a London County Council ambulance service. Initially the special hospitals stressed that no patient could assume to gain admission regardless of social origin or nature of ailment, but eventually they accepted the idea.¹²⁰

As the problem of financing the hospitals became more acute by the end of the 1930s, so the discussion of a long term solution to their

funding grew. The Lord Mayor in 1937, Sir George Broadbridge, reflected the opinions at St Mark's when he expressed the hope that the voluntary system would be maintained, but that the government should make a very substantial grant to the hospitals.¹²¹ It was not easy to see how London's special hospitals would fit into a nationally coordinated system, a factor which encouraged several of them to band together for mutual protection. The National Hospital for Epilepsy and Paralysis, Queen Square, the National Hospital for Diseases of the Heart, the Royal London Ophthalmic Hospital, the Royal National Orthopaedic Hospital and the West End Hospital for Nervous Diseases called a meeting in 1937 of representatives of London special hospitals. From this emerged the Association of Special Hospitals, which St Mark's initially decided not to join, although changing its mind in 1943.¹²²

During the war those associated with St Mark's spoke out forcibly in support of the voluntary system. The Lord Mayor, speaking at the St Mark's Annual General Meeting in 1940, stressed that public interest in voluntary hospitals had been, from the time of Rahere, 'a strong British characteristic'.¹²³ J Norman Daynes, as chairman of the committee of management, wrote in 1941 of the 'complete faith' of hospitals in the voluntary system, 'which was created by the British people, and sustained in the face of difficulties and dangers'.¹²⁴ However, the hospital could not turn a blind eye to developments. The King's Fund in 1941 issued a questionnaire which assumed that 'in any plan for post war reconstruction the coordination of the Hospital Services of the Country will form a major item'. Current recommendations were that health care should be organised on a regional basis. The Fund suggested that a separate division of voluntary and public hospitals should be maintained in each of three categories: teaching, special and general hospitals. The committee of management at St Mark's agreed, although commenting that

... we do not see how a special Hospital, of a unique character, which serves the whole country, not to mention places outside, can be effectively regionalised.¹²⁵

The King's Fund also sought the hospital's opinion on having a large general hospital, well-equipped, capable of undertaking expensive examinations and affording specialist advice as the 'key' hospital in the region. In addition, it asked about close cooperation between hospitals in the same specialty and naming certain of them as 'key' ones. St Mark's argued that this could not apply to their case since they were the only rectal hospital then in operation.¹²⁶ When a regionalisation sub-committee was suggested by the King's Fund early in 1942, it was felt that the hospital should be directly represented. A deputation from St Mark's, William Gabriel, ETC Milligan and Raymond Bull, went to the



St Mark's in the 1920s



Proposed extension, 1927

MAY FAIR HOTEL

Friday, December 2nd, 1927,
from 10 p.m. to 3 a.m.

The Greyhound Ball

in aid of

St. Mark's Hospital, E.C.1

Under the distinguished patronage of
H.H. PRINCESS MARIE LOUISE
who will attend

Patrons:

The Lady Alington	Lady Hulton
Major-General N. G. Anderson, C.B.	Mrs. J. O. Lawson Johnston
C.M.G., D.S.O.	The Marchioness of Lansdowne
Miss Ruby M. Ayres	The Lady Leigh
Lt.-Colonel Romer Baginall	Sir Tresham Lever, Bt.
Miss Tellulah Bankhead	The Marchioness of Linlithgow
Mrs. Charles Birkin	The Earl of Lonsdale, G.C.V.O.
Edith, Lady Bradford	Miss Violet Lorraine
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Hon. Mrs. Maurice Brett	Lady Robert Manners
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Countess of Carlisle	Mrs. Owen Mocatta
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Miss Gladys Cooper	Mrs. Harriet Neill
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Lady (Trevor) Dawson	H.H. the Rance of Pudokota
The Baroness de Belabre	The Marquis of Reading
Captain Humphrey de Trafford	P.C., G.C.H., G.C.V.O.
The Countess de la Warr	The Marchioness of Reading
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*Programme for
Greyhound Ball, 1927*

ST MARK'S HOSPITAL FOR CANCER

King's Fund to explain their position: they argued that St Mark's had a world wide reputation and therefore could not be grouped with other hospitals. They were anxious that if a regional scheme was implemented their catchment area for patients should not be limited to London, claiming that only about 75 per cent of their patients came from London, with the remainder from the rest of Britain and abroad. If the Gordon reopened for rectal cases, amalgamation, they said, should not be considered. St Mark's and the Gordon each carried on research in their separate laboratories, by their own methods: '... in this way different results were reached, and much valuable data was collated and compared'. What was termed 'friendly opposition' was a healthy stimulus. Since it had been suggested that postgraduate hospitals might be grouped separately, it was stressed that the hospital undertook postgraduate teaching, with students coming from the Hammersmith Postgraduate School. Although some of the surgeons held positions at general hospitals, it was emphasised that they often preferred to undertake serious operations at St Mark's, since the hospital now had two 'excellent' theatres, with better equipment for rectal work than elsewhere, assistants who were familiar with rectal cases, and nursing staff who were fully trained in the specialty. It was also stressed that financially the hospital was relatively secure. Those from the King's Fund were impressed; they concluded that the value and position of special hospitals should be kept in mind in future deliberations.¹²⁷

In May 1942 the BMA Medical Planning Commission made an interim report which suggested regional authorities supervising group general practices as well as hospitals. However, it regarded these as long-term proposals, to be discussed with the medical profession. A much greater boost to plans for a unified health service was given by the Beveridge Report on social insurance in December 1942. Beveridge proposed a single universal social security scheme, to protect against sickness, disability, old age or unemployment, administered by a new ministry. One of his assumptions was that there would also be a comprehensive health service for all, separate from the social security system. His proposals soon became very widely known among the general public, and when the report was debated in the House of Commons in February 1943, there were great expectations that it would be implemented.¹²⁸

At St Mark's the medical staff were far quicker off the mark than the committee of management. In January 1943 the medical committee put the resolution to the committee of management:

That the Hospital should take an active part in post-war planning of proctological services for the country, and one of the first steps should be the increase in the size of the Hospital to 200 or 250 beds, and that

active steps should be taken now with regard to methods, means and possible sites.¹²⁹

The committee of management's initial reaction was that the plan was unrealistic, but the medical committee would not let the matter rest, and in July 1943 again urged that the scheme for enlarging the hospital to 250 beds be fully explored.¹³⁰

The Reconstruction Priorities Committee of the Cabinet published a White Paper outlining possible options on 17 February 1944.¹³¹ At the St Mark's Annual General Meeting in March 1944 it was noted that the future hospital policy of the country was 'engaging the attention' of the government and reference was made to the White Paper. St Mark's, it was maintained, held a unique position as the pioneer hospital for the investigation of cancer and other diseases of the rectum and large bowel. 'With its world-wide reputation and notable record of achievement since 1835' it should take its 'rightful place amongst the leading Special Hospitals in this post war development'.¹³² If key special hospitals were to be identified, it was important that St Mark's became one, rather than the Gordon.¹³³

The Association of Special Hospitals, debating the White Paper in March 1944, concluded that the retention and development of the voluntary hospital system was of 'paramount value to the liberal development of British Medicine'. They recommended that the BMA therefore should try to secure several points, among which were that beds within the hospitals should be contracted to the Ministry, which should reimburse full costs, and that patients should be given 'benefits' to use according to their discretion in choosing hospitals, consultants or even private care.¹³⁴ The Association sought the reactions of special hospitals. When asked about cooperation between groups of specialised hospitals and special units in other hospitals, those at St Mark's replied that anyone attached to such units was eligible to take a clinical assistantship or resident post at the hospital, and that the meetings of the proctological section of the Royal Society of Medicine allowed the interchange of ideas: 'We cannot think of any better way than these of achieving cooperation'.¹³⁵

Controversy over current proposals raged through 1944, as the BMA came down firmly against the government's White Paper. Gradually concessions were made to the medical profession, in order to be able to formulate a Bill. Before this could happen, however, the war was coming to an end, Labour left the coalition government and a general election was on the horizon. Labour's victory in the election of July 1945 meant that compromise would be difficult to achieve by the critics of the new schemes.¹³⁶ As the negotiations over the health service continued, the medical committee at St Mark's showed impatience with their slow-

moving lay committee of management. This met only once a month, and was concerned with a variety of administrative affairs. Its members were involved in other activities, and although they voluntarily gave a considerable amount of time and effort to the hospital, in a crisis it was difficult to achieve and implement far-reaching decisions quickly. The medical committee itself had let the notion of a new hospital slide for a number of months, but in December 1944 it returned to it with a sense of urgency. The committee of management responded that no action was possible yet. The medical committee therefore successfully proposed that a small, equally balanced sub-committee of three lay and three medical members should be established to enquire into the possibility of expanding the hospital on its present site.¹³⁷

The fears of St Mark's were crystallised in May 1945, after members of the staff had examined a hospital survey issued by the Ministry of Health which noted that two proctological hospitals existed: St Mark's, with 72 beds largely in old premises, and the Gordon Hospital, with 102 beds in new premises (although closed). It recommended that they should be amalgamated, 'and the work might conveniently be concentrated in the new Gordon Hospital'. There was an alternative proposal: that the Gordon might amalgamate with the Westminster Hospital and St Mark's might be rebuilt on a slightly larger scale as part of a projected postgraduate group on a site near the University of London.¹³⁸

The medical committee rapidly responded to the Ministry of Health survey by declaring that they had no desire to amalgamate with the Gordon Hospital, but that they would agree to affiliate with a postgraduate general hospital, 'maintaining our own independence on the present site on which we intend to rebuild'.¹³⁹ Priorities now changed: postgraduate teaching must be immediately resumed. The risk to their independence – even their existence – as an institution was felt more strongly by the medical staff than by the committee of management. When in July 1945 the committee of management became very worried about the size of the waiting list, which included 28 cancer cases and almost 400 others, they recommended that some of these patients should be admitted to other hospitals. The medical committee was adamantly averse to this: the special nature of the cases should be stressed (they could not be treated elsewhere) and it was imperative that the hospital be expanded. The strain between the objectives of the two committees showed at a joint meeting in November 1945. The medical committee declared that it was essential that wards remaining closed after the war be reopened immediately, but the chairman, Daynes, pointed to the difficulty of getting staff. The medical committee again recommended that an additional medical member, Campbell Milligan, be added to the committee of management, and that a propaganda committee be established

to look after the hospital's interests. In addition the medical committee recommended that the bed complement must be brought up to a hundred, thus equalling the Gordon, very rapidly.¹⁴⁰

The need to move quickly had been enhanced by the change in government in July 1945. However, for St Mark's it also brought an unexpected benefit. The new Minister of Health was Aneurin Bevan, who had been treated at St Mark's by Lloyd-Davies as a private patient just before the war (and again in the late 1940s). The nursing staff remembered Bevan as a very pleasant patient, and believed too that he retained an affection for the hospital. Bevan was not a man easily amenable to influence, as the medical profession as a whole generally found. Moreover, he declared that:

Although I am not myself a devotee of bigness for bigness' sake I would rather be kept alive in the efficient if cold altruism of a large hospital than expire in a gush of warm sympathy in a small one.¹⁴¹

However, Lloyd-Davies remembered Bevan saying that St Mark's was to be a 'jewel' in his health service.¹⁴² Moreover, Bevan wooed the hospital surgeons and physicians so that they would support him in his battles with the profession as a whole. Through Lloyd-Davies' appeal to him, Bevan played an important part in ensuring that St Mark's was granted postgraduate status and linked to the Hammersmith.¹⁴³

For a few months after the election, little action was taken on the proposed health service. Then, in October, Bevan proposed a far more radical approach even than that of the White Paper. Voluntary and local authority hospitals should all be taken into state ownership, to be administered by local bodies with voluntary membership exercising powers delegated by central government. Only the teaching hospitals should be exempt, subject directly to the Ministry of Health. Pushing his proposals through the Cabinet, and brooking little opposition, Bevan's Bill was published on 20 March 1946. The new service was to be divided into three parts; the Minister was responsible for hospital and specialist services, acting through new regional and local bodies, which would administer them: the counties and county boroughs would run health centres, clinics and domiciliary services; and executive councils (half lay and half professional) would run the general practitioner services. Teaching hospitals would be run by boards of governors. The endowments of the teaching hospitals would be retained by their new boards, but those of other hospitals would be pooled. Consultants and specialists could be whole-time or part-time and would be appointed by the hospital boards, on the advice of appointments committees. There would be two kinds of pay beds: ones in which services were free, but the patient could pay for the privilege of a small or single room, and others in which both services

and accommodation were paid for.¹⁴⁴ Reactions to the Bill were strong. Sir Bernard Docker, of the British Hospitals Association, proclaimed that 'this mass murder of the hospitals and their replacement by State institutions is wholly unnecessary'.¹⁴⁵ The British Medical Association also condemned the scheme. Interestingly, however, when the British Hospitals Association and the King's Fund urged St Mark's, among other hospitals, to campaign to amend the Bill, the committee of management refused to do so.¹⁴⁶ Possibly their own negotiations were at a delicate stage.

The medical committee now urged a further boost to the teaching side of the hospital, since teaching hospitals looked as though they would secure particular benefits under the new system. It was decided that there should be a dean of postgraduate studies, that Cuthbert Dukes should be appointed to this position, organise that side of the hospital's work, and be paid an honorarium for his new duties. The survey of hospitals by the Ministry of Health had shown that about one-third had under a hundred beds, which was regarded as inefficient. St Mark's, therefore, again felt it imperative to expand before the National Health Service came into existence. The medical committee, with its increased emphasis on teaching, recommended that any proposed new buildings should include a lecture theatre and a library for use by postgraduates. Meanwhile, negotiations with the Hammersmith Hospital were set in motion. The Hammersmith was a London County Council hospital rather than a voluntary hospital. In 1935 the British Postgraduate Medical School had opened in association with the hospital, and St Mark's had taken pupils from there. The Goodenough Committee which reported on medical education in 1944 recommended that the British Postgraduate Medical School should be reconstituted as a federal organisation, in which the Hammersmith and its school should be one unit, with the other units consisting of a series of institutes in each of what were considered to be the principal special subjects. Each of these institutes was to be based on a leading special hospital.

The British Postgraduate Medical Federation was established by the Senate of the University of London in 1945, and admitted as a school of the University in December 1947, to provide postgraduate medical and dental education for prospective consultants and specialists, instruction for other practitioners requiring advanced training, and courses for general practitioners. There was no suggestion that St Mark's should form the basis of a proctological institute, despite recommendations to that effect from the surgeons. However, the director of the British Postgraduate Medical Federation, Sir Francis Fraser, favoured the idea of St Mark's affiliating with the Hammersmith Hospital, as suggested by the Ministry of Health survey.¹⁴⁷ The hospital sent a memorandum to Bevan

stating that it was a 'world centre for the advancement in the treatment of diseases of the rectum and colon'. It mentioned that there had been a steady increase in the number of surgeons from Europe, the USA and the Commonwealth who came to the hospital for intensive training in colorectal surgery. The operability rate was nearly 90 per cent for cancer of the rectum and 'this figure is only approached by the best clinics in the United States of America'. It was suggested that the current site would be ideally situated for a large hospital, with 250 beds.¹⁴⁸ The distance between the Hammersmith (on the west side of London) and St Mark's (on the east) appealed to those at the smaller hospital who hoped that its independence would be preserved. A few changes were introduced at St Mark's to improve its postgraduate status. By January 1947, three students were attending the hospital each week for specialised instruction.¹⁴⁹

Other changes were implemented as the National Health Service drew nearer. In view of the uncertain position of the surgeons, it was decided that Milligan's appointment be extended by three years, despite his reaching retirement age. However, Lloyd-Davies was nonetheless promoted to full surgeon. In November 1946 the medical committee declared that 'the time was ripe' for altering the description of the hospital from St Mark's Hospital for Cancer, Fistula and other Diseases of the Rectum to St Mark's Hospital for Diseases of the Rectum and Colon. It was recognised that under the new system, the emotive word, cancer, had lost much of its importance since the charitable public would no longer be funding the institution. What was now of greater importance was to demonstrate that the hospital treated an extensive part of the body, and possibly justified being made into an institute. However, the committee of management initially decided against the alteration. In confidential proceedings of the nursing and house sub-committee, the NHS Bill was discussed. It was decided that an assistant night sister, an assistant secretary, and an additional 28 nurses should be appointed: the hospital did not want its shortages enshrined in the new system. It was suggested that two additional floors be added to the nurses' home: new private wards were already being built. The medical committee, too, recommended expansion in the number of staff. The registry department should be enlarged to cover not only cancer but all the work of the hospital. A full-time employee would be needed, and they recommended that Miss Miller, who now acted as almoner, should be appointed.¹⁵⁰

In December 1946 the NHS Bill became law. Almost twenty months passed before the Act came into operation, on the 'Appointed Day', 5 July 1948. Opposition from the BMA continued, but the local authorities and the voluntary hospitals largely set about adapting themselves to the new circumstances. Negotiations over where institutions fitted into the overall scheme continued.¹⁵¹ It was only in 1947 that the committee of

ST MARK'S HOSPITAL FOR CANCER

management at St Mark's finally agreed to the medical committee's request that they should include a second medical representative, Lloyd-Davies. There was still much to do, as the place of St Mark's within the NHS, and the place of staff within the hospital, were not certain. The first staff problem came over Miss Rivers, who had acted as dispenser since the First World War. She was now required to qualify as a pharmacist, but refused. The nursing and house sub-committee argued that a fully qualified pharmacist must be employed for four reasons: the protection of patients, the protection of resident medical staff, economy in drugs and the prestige of the hospital. An attempt was made to advertise the position, only to have the advertisement rejected by the Journal of the Pharmaceutical Society of Great Britain because the salary offered was not at the appropriate level. This was amended, and A H Whitehead was duly appointed as chief pharmacist at a salary in accordance with the scale recommended by the joint negotiating committee.¹⁵²

It was also decided in 1947 by the medical committee that a new assistant surgeon should be appointed. The surgeons decided that they wished to appoint both Henry R Thompson and John C Goligher, who had both served as resident surgical officers. The decision to increase the number of surgeons from five to six would hardly have been feasible under the NHS. Henry Thompson was born in 1908, received his BA from Cambridge in 1929 and undertook his clinical training at The London Hospital, securing his FRCS in 1934. He served as a surgical assistant and registrar at The London as well as RSO at St Mark's, and became a lieutenant-colonel in the Royal Army Medical Corps during the war. John C Goligher was born in 1912 and trained in Edinburgh, gaining his MB ChB in 1934, his FRCS of Edinburgh and England in 1938 and his ChM (Edinburgh) in 1948. He was appointed surgeon to St Mary's Hospital in 1946.¹⁵³

A marker of a new era in the running of the hospital occurred in the summer of 1947. A letter was received from the Transport and General Workers Union (TGWU) regarding retrospective payments to domestic staff. The keynote of the dispute was its undiplomatic management: the organisation of industrial relations through union/management negotiation was clearly a thing of the future. An officer from the TGWU pointed out to the hospital that an agreement on the matter had been reached with representatives from the British Hospitals Association, of which St Mark's was a member, which was binding on the hospital. Those at St Mark's wrote that they regarded back pay as 'demoralising' to those who received it and 'inflationary (and therefore unpatriotic) as regards the State'. However, the secretary of the BHA then reminded the hospital that it was committed to accepting the arrangement – and that domestic staff should not be allowed to suffer as a result of the slowness of the new

machinery. After consulting other hospitals, and discovering that the vast majority had already made the retrospective payments, the committee of management reluctantly sanctioned them, although only to those members of the domestic staff still in their employ.¹⁵⁴

By the middle of 1947 the Ministry of Health decided that it wished to accept a plan to centre all post-graduate teaching in Bloomsbury. The medical committee at St Mark's immediately recommended that the hospital join the British Postgraduate Medical Federation, and urgently find a site in the Bloomsbury area sufficient to house a 300-bedded hospital. (No site, however, was forthcoming).¹⁵⁵ The medical committee noted in October that Sir Francis Fraser had refused to recognise proctology as a specialty and help was sought from the president and three members of the Council of the Royal College of Surgeons who were colo-rectal surgeons: St Mark's wished to remain as an independent special hospital. Coordinating with the Gordon was not acceptable to the St Mark's surgeons. In January 1948 an appeal for help was received from the Gordon, suggesting that the two hospitals link up for the postgraduate teaching of proctology. St Mark's sent a cool reply.¹⁵⁶ At the next meeting of the medical committee a second appeal from the Gordon was considered: the surgeons replied that the Gordon's request would be 'kept in mind', but 'in view of the complicated state of Medical affairs we propose to examine their request at a later date'.¹⁵⁷ The delaying tactic was effective. Within a week St Mark's received confirmation that it had been bracketed with the Hammersmith and West London as part of a postgraduate teaching group. The Gordon suffered the fate of being joined to a large undergraduate teaching hospital, the Westminster, which eventually swallowed it up. The medical committee responded to the Ministry's recommendation, which of course they had helped to negotiate, by stating that the intention to make St Mark's a postgraduate teaching hospital 'coincides with [our] views'. It would mean, they held, that St Mark's could retain its national and international status and identity. Moreover, they had already had a close liaison with the Hammersmith for many years. The committee of management added that they hoped that the hospital's link with the Lord Mayor could be retained.¹⁵⁸

On 30 May 1948 Dr A W Oxford died. His death marked the end of an era. He had served on the committee of management from the 1890s until the Second World War, and as its chairman and a freemason, had presided over the most successful period in the hospital's ability to secure charitable support. The hospital entered the new era with a sense of trepidation and sadness, particularly amongst the lay supporters of the hospital, whose place in the future was more threatened than that of the doctors. Judge J Norman Daynes bowed out as chairman of the old

ST MARK'S HOSPITAL FOR CANCER

committee of management in the *Annual Report* issued early in 1948: on the Appointed Day

Voluntary Hospitals will cease to exist as such, and will become part of a system of Hospitals owned and maintained by the State. As this will be, in all probability, the last occasion upon which your Committee will have the honour of reporting to the Governors under the existing constitution of the Hospital, they take this opportunity to express the hope that the traditions of St Mark's . . . will be maintained under the new régime.¹⁵⁹

CHAPTER XII

An established specialty

Colo-rectal surgery at St Mark's 1900-1948

In the first half of the twentieth century, surgery changed considerably. At St Mark's, concentration finally shifted from the treatment of fistula and haemorrhoids to major abdominal operations. Although the minor complaints still figured on a large scale in the surgeons' work, the period was dominated by radical operations for cancer. As before, developments in technical expertise were based on other changes in medicine. Diagnostic facilities became increasingly sophisticated with the evolution of pathology, radiology and anaesthesia as special areas of medicine. The acceptance of aseptic procedures and methods to combat shock and, at the end of this period, the refinement of blood transfusion methods and the development of sulfa drugs, helped to lower operative mortality.

By the time of the First World War, surgeons increasingly aimed to operate in aseptic surroundings. Joseph Lister had used antiseptic means to kill bacteria, which he thought were mainly airborne. German surgeons in particular, however, argued that a healthy individual could counter germs except when they invaded on a massive scale, not from the air so much as on the hands or instruments of the surgeon: scrubbing hands and fore-arms with soap and water was more important than using Lister's highly irritating carbolic acid spray. In 1880 Merke reaffirmed that microorganisms were killed by boiling, and Robert Koch began to sterilise instruments, although his method was not easy to use. By the mid-1880s a combination of Lister's antiseptic methods and an earlier tradition which stressed great cleanliness, modified by the German practices, was used in Britain. By the end of the century some instruments were boiled, while others were soaked in carbolic acid. However, it was only in the second decade of the twentieth century that the paraphernalia of the surgeon and operating theatre began to change markedly.

Although the stories of surgeons operating in morning coats stiff with blood were no doubt somewhat apocryphal, a late nineteenth century operating theatre would have looked very different from its successors. Gradually gloves, masks, white coats and aseptic surroundings were introduced. From 1885 at least one surgeon who was performing major abdominal surgery, von Mikulicz, wore cotton gloves. Another, William Halsted, introduced rubber gloves at Johns Hopkins in 1894, apparently to protect against the ravages of the carbolic acid spray.¹ Many surgeons opposed the use of these thick rubber gloves as too great an interference

with operative work; the St Mark's surgeons did not readily adopt them. Gordon-Watson first used rubber gloves in 1903 when at the Metropolitan Hospital and remembered 'how awkward they seemed!'² However, Frederick Wallis was using rubber gloves during operations by 1907 (he also used Lister's carbolic acid spray) and Lockhart-Mummery, who probably used gloves from an early stage since he was a strong proponent of aseptic precautions, mentioned introducing 'a gloved finger' during an operation for prolapse in 1914.³ Halsted wore a cap to cover his hair, and von Mikulicz and a French surgeon, Paul Berger, wore face masks from about 1896, but again these protective coverings were slow to be accepted. The use of rubber boots came about to protect against carbolic acid rather than to help create an aseptic environment. Some surgeons in the early twentieth century took elaborate aseptic precautions: William Arbuthnot Lane of Guy's Hospital used a 'no touch' technique in which his hands had no contact with the wound – he used needles in specially designed holders, and operated in clothes dripping with antiseptic.⁴ Most surgeons, however, thought these measures were unnecessary and adopted some amalgam of aseptic and antiseptic techniques.

When St Mark's had expanded in the 1890s, a new operating theatre was built on the top floor. In the first reference to special clothing for operating, in May 1896 the matron bought four linen jackets for the surgeons. Wooden furniture seemed acceptable in the theatre, and a teak cupboard was bought in 1897.⁵ The dressings, gowns and towels were not sterilised, but antiseptic gauze and swabs were soaked in dilute perchloride of mercury. The operating table consisted of an ordinary iron bedstead with the ends removed and with the legs lengthened to raise its level. The patients lay on a mattress covered with a mackintosh. All operations except colostomy were performed with the patient in the left lateral position, and instruments were taken from a drawer under the table. The operating theatre was heated by an open coal fire, although the danger of open flames in the theatre was demonstrated in 1904 when anaesthetic ether ignited.⁶

Despite increasing aseptic precautions, septic infection remained a problem, particularly before the First World War. In 1905, for example, a case of erysipelas developed three weeks after operation which 'necessitated the closing and disinfecting of all the wards' for two weeks. Erysipelas was not the only post-operative complication that arose – in 1907 one patient, Wilfred Buck, underwent a minor operation, but succumbed to tetanus.⁷ War invariably gave great impetus to medical development, and the First World War was no exception – shell wounds and sepsis were major problems among soldiers in the Flanders trenches. Charles Gordon-Watson remembered that:

The severely lacerated and heavily infected war wounds made it evident that we had to remodel our views on the use of antiseptics in wounds, on the treatment of wounds in general and especially of fractures.⁸

Surgeons once again stressed antiseptic rather than simply aseptic precautions. At first most surgeons in the war treated wounds as conservatively as possible. Others, including Edward Campbell Milligan, believed that only radical excision (*débridement*) would prevent gangrene, but they were sharply admonished – Milligan was rebuked for his 'wild colonial practices'. By the second half of the war, however, such grossly mutilating treatments were seen as the only way to check mortality.⁹ Experience with such radical treatments meant that surgeons became more skilled in handling patients during and after major operations.

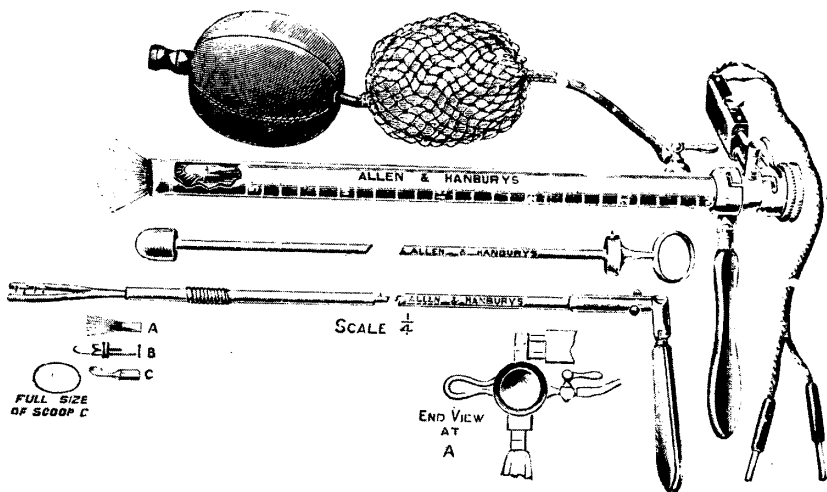
Changes in anaesthesia also had a great impact on surgery. Gradually various monitoring instruments were used to estimate the amount of anaesthesia administered to a patient, and devices for more effective inhalation were developed. During the First World War, it became accepted practice to mix nitrous oxide and oxygen, which allowed longer operations and was less dangerous than other forms of anaesthesia. The patient was often sent to sleep by the administration of ether or chloroform, and this was followed by giving gas and oxygen during the operation. At each stage in the development of anaesthesia the surgeons would stress that rapidity in operating was no longer as crucial a factor as before. The use of gas and oxygen allowed operations of up to about two hours; if the surgeon was reaching this point, however, the anaesthetist became very anxious. Surgeons such as Charles Gordon-Watson therefore continued to pride themselves on their rapidity of operation, and the time necessary for most procedures continued to be given in text books.

The use of injections was developed in the nineteenth century, and it was then found that an anaesthetic could be given locally. Spinal anaesthesia was first given, albeit inadvertently, in 1885, and was later seen as a useful adjunct to general anaesthesia. Crile argued in 1913 that spinal anaesthesia was of use in major surgery because it paralysed all the nerves, not just the sensory nerves, and, he thought, protected the brain from shock. Shortly afterwards, and more consistently from the 1920s, surgeons at St Mark's advocated the use of spinal in addition to general anaesthesia. Spinal anaesthesia also lowered the blood pressure, which meant that abdominal operations could be carried out in a relatively bloodless zone.¹⁰ This had its drawbacks, however, as the blood pressure could be dangerously reduced. In the 1930s low spinal anaesthesia, which was advocated by J K Hasler at St Mark's, began to be used, at least for perianal operations. It was argued that a spinal anaesthetic solution moved within the sub-arachnoid space according to its specific gravity: if

AN ESTABLISHED SPECIALTY

a spinal anaesthetic had a higher specific gravity than the cerebro-spinal fluid the anaesthesia was confined to the sacral region and involved only a small portion of the sympathetic nervous system. Hasler maintained that consequently there was no drop in blood pressure.¹¹

New diagnostic tools were introduced into medicine in the first half of the twentieth century. One of the most important for the diagnosis of rectal diseases, in particular cancer, was the sigmoidoscope. Various specula had long been available for viewing the lower part of the rectum, and Alfred Cooper and Frederick Swinford Edwards (1892) mentioned using Leiter's Panelectroscope, which illuminated up to about four inches from the anus.¹² From the 1890s a number of experimental instruments capable of reaching the sigmoid flexure were devised; some were equipped with lights and mirrors, and some inflated the rectum with air. In 1895 Howard Kelly of Johns Hopkins devised a set of rectal tubes of different calibres and lengths: his sigmoidoscope was 35 cm long. From 1902, Tuttle in New York used a modification of this which used electric light and inflated the rectum with air.¹³



The Strauss sigmoidoscope with Lockhart-Mummery's modifications

The instrument favoured in Britain, however, was that of a Berlin professor, Strauss. Lockhart-Mummery immediately realised the significance of the sigmoidoscope and sought to popularise it in a paper in 1904 and a small clinical handbook in 1906.¹⁴ His colleagues also began to use the instrument as a routine diagnostic tool: when Tuttle visited St Mark's in 1907 he demonstrated his own instrument for Swinford Edwards, but the latter had already developed a preference for the Strauss

model.¹⁵ Lockhart-Mummery claimed that if all patients who complained of symptoms suggestive of cancer of the upper rectum or sigmoid flexure were examined with the sigmoidoscope, many cases of malignant disease would be detected at a stage when complete removal was still possible instead of being diagnosed 'when removal is very dangerous or altogether impossible'.¹⁶

Wilhelm Konrad Roentgen, Professor of Physics at Würzburg, discovered x-rays in 1895, and the technique was put to immediate diagnostic use.¹⁷ Gradually x-rays were used for wider diagnostic purposes than simply, for example, establishing whether bones were broken. In 1904 Schule performed an opaque enema to examine the colon in a patient, and in 1911 Haenisch established the contrast enema examination as a method of diagnosis of colonic diseases. According to the simple barium enema technique, the patient was screened as the bowel gradually filled with barium, and again after the enema had evacuated the bowel leaving the colon in a collapsed state with a trace of the barium. Filling the colon with air to assist the detection of small mucosal lesions had been suggested before the First World War, but Hugo Laurell in Uppsala, Sweden, was probably the first to use the double-contrast method in 1921. However, it was AW Fischer of Frankfurt, in 1923, who developed and popularised the method used more commonly from the 1920s.¹⁸ This technique was not adopted at St Mark's until it was considerably refined in Malmö in the 1950s: neither Gabriel nor Lockhart-Mummery mentioned air insufflation in their texts of 1932 and 1934. In 1945 Gabriel recorded that the radiologist, Norman Henderson, preferred not to inflate the bowel with air, but rather to administer a 'reduction density enema'.¹⁹

The surgeons at St Mark's were particularly sceptical of the use of x-rays. It was not until 1922 that an x-ray department was established at the hospital.²⁰ X-ray pictures were often of poor definition: Lockhart-Mummery (1923) described their use as very difficult – when they were first introduced, many mistakes were made and patients were operated upon for strictures which appeared obvious in the x-ray but which did not exist. 'One has to bear in mind that x-ray photographs are only photographs of shadows, and that their interpretation is therefore open to serious doubt.'²¹ He never made a diagnosis simply on x-ray findings. Although the x-ray department at St Mark's expanded in the 1920s, this did not mean that the surgeons placed much reliance on its endeavours. Gabriel (1932) included x-rays under 'subsidiary methods of examination': he thought that x-rays of the colon could be useful, but only in the hands of an expert radiologist who should personally supervise the examination.²² Lockhart-Mummery in 1934 declared that 60 per cent of x-rays of the rectum and colon were worthless.²³ In fact both surgeons made

their own interpretations of Norman Henderson's x-rays, paying little attention to his diagnoses.²⁴

Developments in bacteriology and morbid anatomy in the first half of the twentieth century also had their impact on surgery. Pathology had played a very limited part before 1900: laboratory work was not seen as an integral part of diagnosis and those serving as pathologists in hospitals often saw this as a stepping stone to a position in surgery. Particularly from the 1920s, analyses were extended from largely bacteriological work to include some pathological examination of operative specimens. Clinical pathologists fought in the 1920s and 1930s for improvements in their status, to establish their specialty on a par with other branches in medicine.²⁵ In 1921 the pathology department was established at St Mark's, and Cuthbert Dukes was appointed. Dukes played a far greater part in the hospital's work than had his predecessors. Whereas they concentrated on bacteriological analyses, he developed the histopathological side of the work until it became by far the major component. It was through him that systematic research was initiated at the hospital, building up the reputation of the hospital for its research in addition to its clinical practice.²⁶

At first Dukes could only carry out blood and urine tests in a part of the administrative office. He had to send tissue samples to his old laboratory at University College Hospital for analyses, where Wasserman tests for syphilis were also carried out. He immediately expanded the scope of pathological analyses undertaken at St Mark's. He took on a 'skilled laboratory attendant to prepare culture material and for cleaning infected material' for four hours a week, improved the record-keeping, and turned his own attention to cancer. It was the first grant from the British Empire Cancer Campaign in 1924 that enabled Cuthbert Dukes to develop the hospital's medical research. In October he engaged a full-time assistant for his cancer research. His recruit was HJR Bussey, from his old laboratory.²⁷ Bussey was then 17, but proved to be the longest-serving member of the staff of St Mark's. He later acquired a BSc and PhD (and was awarded an OBE) and was still at the hospital after 60 years of working for Dukes and his successor Basil Morson, and on his own research (in particular familial polyposis).

Shortly after Bussey's appointment, and as an indication of the amount of research envisaged, a Cancer Research Committee was formed, consisting of Dr Oxford, Lockhart-Mummery, Dukes and the hospital secretary, Raymond Bull.²⁸ In 1925 the Campaign made a £400 grant towards cancer research at the hospital. Part of the outpatient waiting room was partitioned off for use by the pathology department and an application was made to the Home Secretary for permission to carry out vivisection experiments.²⁹ It was Bussey's task to look after the mice. He remem-

bered consternation amongst the outpatients when, on the laboratory side of the partition, Naunton Morgan was heard to say: 'That's the third one you've killed today!'³⁰

The pathology department was expanded in 1927: Dukes now had three full-time assistants; the first, Bussey, and the third were engaged on research, supported by the Campaign. Only the second assistant was paid out of hospital funds to be engaged exclusively on routine hospital work.³¹ From being a largely peripheral position, the pathologist was now the one member of the medical staff who spent much of his working day within the hospital.³²

Developments in surgery were also influenced by the introduction of systematic blood transfusion. Experiments in blood transfusion between and among animals and people had been carried out from the seventeenth century and various attempts were made in the nineteenth century to replenish the blood of patients who had bled.³³ A major problem was that the transfused blood clotted, and attempts were made in the last third of the nineteenth century to counter this. In 1914 a method was devised whereby blood was drawn from the donor, sodium citrate was added and the citrated blood was transfused to the recipient. Both animal and human blood were used in early transfusions but, in 1874, a German physiologist, Landois, argued that the blood of one animal could break down the cells of another, causing death. In 1902 Karl Landsteiner found that the blood serum from one patient might cause the corpuscles of another to agglutinate and he established four blood groups. Blood transfusion, using citrated, grouped blood, was employed in the First World War. (To a far greater extent, however, intravenous injections of more readily available saline solution were used to reduce shock, both during the war and after it.) From 1921 the Red Cross compiled and organised a register of potential blood donors; at St Mark's and many other hospitals, however, blood tended to be transfused from relatives to patients. From the late 1930s St Mark's used the Red Cross donor service and, particularly during the war, there were records of donors coming to the hospital to give blood.³⁴

The hospital's records were regularised in the first half of the twentieth century. From 1904, after JP Lockhart-Mummery's appointment, records were kept more systematically, with each patient listed in a book. In addition each outpatient record was stamped with the surgeon's name, giving continuity to treatment. When the secretary requested in 1918 that 'obsolete' outpatient records should be destroyed, it was decided that all inpatient records from 1900 and outpatient records from 1908 should be kept.³⁵ In 1922 a policy of following up cancer patients to monitor results was initiated by William Gabriel, with financial assistance from the Medical Research Council. A card index system was introduced for out-

patients in 1923 and seven years later the record system was reorganised 'along modern lines', with each patient's records being kept in a folder. In the research department cards continued to be kept, being refined over the years and allowing systematic research into types of cases.³⁶ It was only in 1945 that St Mark's began to follow a system, which had earlier been recommended by the National Radium Commission, allowing comparative trials between hospitals. It was first used for cancer records, but in 1946 the system was implemented for all records. The registry department was enlarged, and Miss Miller, who had been serving both as keeper of records and lady almoner, and who was exceptionally precise, began to work full time on records.³⁷

Changes in the potential of abdominal surgery slowly began to affect practice. In 1904 St Mark's issued a surgical report which classified inpatients according to disease: of the 477 patients, 47 per cent suffered from haemorrhoids, 32 per cent from fistula and only 6 per cent from cancer. By 1948, 26 per cent of inpatients had cancer, while 30 per cent had haemorrhoids and only about 12 per cent fistula.³⁸ Since cancer patients usually remained in the hospital for longer periods than the more minor cases, they accounted for a larger proportion of the hospital's work than even the percentages indicate.

As major operations became more frequent, changes in the theatre arrangements at St Mark's were made. The surgeons complained in 1898 of inadequate lighting: they operated either in daylight (the theatre had large windows) or with additional gaslight. The house committee considered introducing electric lighting only in the theatre and outpatient department, eventually installing it throughout the hospital with a grant from the King's Fund.³⁹ As the number and complexity of operations increased, tension occasionally arose between the surgeons and the house committee, as the guardians of the hospital's finances. In 1904 Frederick Wallis bought equipment costing £7 for the theatre, including a new operating stool, without asking permission, and found himself footing the bill. Despite this, a steady stream of new equipment was requested and generally approved. Financial curbs were often applied: when the steriliser in the theatre broke down in 1905, the surgical instrument makers sent another one costing £48, but the house committee refused to pay more than £8 for such an item. A new 'and more up-to-date' operating table was bought in 1905, and in 1910 a small steriliser was purchased for the outpatient department instruments.⁴⁰

By 1920 the surgeons were carrying out about 700 operations a year, and by 1930 that had risen to over 1,000.⁴¹ At the end of the 1920s further changes were made to the operating theatre: a larger steriliser for instruments was bought in 1927, and the first recorded dressings steriliser, measuring five feet by two feet six inches, was installed in a nearby

room. A new operating table with lithotomy crutches was bought and in 1928 the whole theatre was renovated at a cost of £2,000. It was lined with easily cleaned surfaces which would not harbour germs, and Zeiss lighting was installed. The theatre was equipped with an electric clock, an important feature since anaesthesia had to be limited to about two hours. From 1930, sterile towels of fine green cotton material were bought from a Manchester cloth maker.⁴² A third anaesthetist, Dr Frankis Evans, and a permanent theatre staff nurse (in addition to the theatre sister) were appointed in 1934.⁴³ A request for a second operating theatre was first voiced by the surgeons in 1930, reiterated in 1933, but not included in the architect's plans until 1938 after the nurses' home had opened; it was completed in 1939 just before the war began. A measure of the increasing technological costs of medicine was revealed when the hospital insured itself during the war: its technical equipment was valued at over £8,000 while its non-technical goods amounted to less than half that amount.⁴⁴

It required constant negotiation on the part of the surgeons to secure the equipment now demanded by their specialty. The hospital was, after all, run as a charitable endeavour largely by businessmen: they had no reason to expect exponential increases in the cost of medicine, and it was upon them that the burden fell for raising the necessary money. In 1919 Gordon-Watson requested an ultra-violet lamp which he, and later Gabriel, used for treating tuberculosis of the anus. The committee of management referred the request back to the medical committee for their general consideration before agreeing.⁴⁵ The x-ray, pathology and anaesthetics departments seemed to have an insatiable demand for equipment, although the pathology department could generally look to the British Empire Cancer Campaign for help. Intensifying screens, a Vattenborg colonic irrigator and viewing boxes were among the requests from the x-ray department.⁴⁶ The surgeons requested diathermy apparatus in 1925 and again just after the Second World War.⁴⁷ There were also new instruments, such as Maingot forceps, biopsy forceps, a Lloyd-Davies sigmoidoscope in 1945, a small-bore sigmoidoscope with a magnifying lens in 1948, a new instrument for measuring blood pressure in 1944 and a laryngoscope for the anaesthetist in 1945.⁴⁸ It was rare that equipment was actually sold. However, in 1945 the x-ray therapy unit, which was no longer used by the surgeons, was sold. A 'subaqueous intestinal bath apparatus' was requested for colitis patients in 1929 but the committee of management asked the surgeons to think again. The surgeons therefore officially declared that they were about to undertake special research into ulcerative colitis, and that the bath would be 'an extremely useful adjunct' to the hospital.⁴⁹ The committee of management duly agreed to purchase it out of a special £200 bequest, but monitored its use. They drew the attention of the surgeons to the fact that, by October 1932, it had not

been used for the past six months and that only 34 patients in all had ever used it since its purchase.⁵⁰ During the Second World War the committee of management questioned the surgeons about their extensive use of sulphadiazine tablets which cost almost £9 per 1,000. It was agreed that they should be bought as needed, but not stockpiled.⁵¹

The surgeons placed increasing importance on their work at the hospital: this was where they tried out new treatments, and demonstrated their work for visiting surgeons. As a reflection of this, they began to see the *Annual Reports* as a vehicle for publicising the types of treatment undertaken at St Mark's. In the nineteenth century the *Reports* had been the preserve of the governors, mainly listing subscribers. Salmon had included a list of patients' ailments in the first *Reports*, but this was subsequently dropped, although they continued to give the number of patients treated. In 1904, however, a surgical report was added, giving inpatients divided according to diagnosis and the final results of treatment. From 1908 a special report on malignancy was included, listing how many patients underwent particular operations, with their results, and in 1913 the types of operations for all other complaints were added. Early in 1928 it was decided to copy the format of the St Peter's Hospital reports, and a four page written description by the resident surgical officer of each category of complaint and treatment was added. There was also a page about the cancer follow-up scheme, and a table listing each death, with diagnosis, operation and cause of death. By 1947 the surgical section formed 35 per cent of the *Annual Report*.⁵²

The written output of the surgeons also rose considerably between 1900 and 1948. Textbooks were produced which established St Mark's as the leader in its field by the First World War. David Goodsall wrote a book with Ernest Miles on rectal diseases, published in two parts, in 1900 and 1905. Frederick Wallis wrote on *Surgery of the Rectum* (1907), and Swinford Edwards issued a third edition of the work on *Diseases of the Rectum, Anus and Sigmoid Colon* in 1908 which he had earlier co-authored with Alfred Cooper.⁵³ Lockhart-Mummery proved the most prolific of all, producing a book on the after-treatment of operations first issued in 1903, and into its fifth edition by 1929 (with a translation into Arabic), the book on the sigmoidoscope (1906), two works on diseases of the anus, rectum and colon, which also went through several editions, and what he considered to be possibly his greatest contribution to his field, *The Origin of Cancer* (1934). Herbert Allingham had given Lockhart-Mummery, his former assistant, a copy of his and his father's book; this copy, now at St Mark's, indicates that Lockhart-Mummery used this as the basis of his own books on colo-rectal diseases: he marked and edited large sections of the earlier work.⁵⁴ William Gabriel's *The Principles and Practice of Rectal Surgery* first issued in 1932 and passing

into a fifth edition by 1963, became a standard textbook on the subject. In addition, the surgeons, pathologists, radiologists and anaesthetists all produced a very large number of articles and contributions to other books.⁵⁵ Through all these publications it is possible to assess changes in theory and practice at St Mark's.

Abscess and fistula

The treatment of perianal complaints, such as fistula, had been established along pragmatic lines in the nineteenth century. It was only in the 1930s that anatomical studies by the surgeons began to be carried out which influenced treatment. In 1900 the procedure of laying open fistulae and draining abscesses was conventional practice. There was, however, increasing speculation about the possible causes of fistulae.

Abscesses were believed to be closely associated with fistulae, the latter being the result of the former. With the germ theory on the ascendant in the early twentieth century, bacteria were now thought to play an important part in such problems. Abscesses were caused, Goodsall and Miles (1900) argued, by 'pus-producing organisms', which invaded from a lesion in the bowel such as an ulcer, stricture, fissure, internal pile or tear in the mucous membrane, or via the blood stream. They referred to one report which indicated that the tubercle bacillus was present in seven out of twelve cases of abscess. Other bacteria to be found were the *Bacillus coli communis*, *Streptococcus pyogenes* and *Staphylococcus pyogenes*. Goodsall and Miles had found that more men than women seemed to suffer from abscesses, with a ratio of six to one in private cases. Occupations involving much sitting or standing seemed predisposing. They based this generalisation on a wide variety of occupations: they declared that brewer's draymen, servants, bricklayers, carpenters, clerks, packers, printers and publicans were all particularly prone to the problem. They classified abscesses according to where they were found: subcutaneous, ischio-rectal, submucous, pelvi-rectal and labial, strongly advising that they were freely and immediately incised, to lessen the likelihood of fistula. Great care in after-treatment was needed, with the patient having baths, hot boracic fomentations every two hours and antiseptic irrigations every day, lest a fistula develop.⁵⁶ The importance of free incision was stressed by other surgeons at St Mark's, and from the 1920s Gabriel advocated such extensive open drainage that he followed this with a Thiersch skin graft.⁵⁷

The relationship between tuberculosis and fistula continued to be disputed. Lockhart-Mummery (1914) argued that tuberculosis was not as important a cause as was often made out: even when the tubercle bacillus was found in a patient's stool, he held that this did not necessarily mean that the patient manifested the disease.⁵⁸ William Gabriel (1921), under-

took an investigation into 75 cases of rectal fistula to establish the proportionate correlation with tuberculosis. He found that examination of discharge from fistulae was an unsatisfactory means of ascertaining the presence of tubercle bacilli, and therefore inoculated guinea pigs with the discharge. The disease developed in 20 per cent of the animals, although a histological examination of the fistulae had only confirmed tuberculosis in 9 per cent of the cases.⁵⁹ The surgeons at St Mark's noted in the first half of the twentieth century a marked decline in the number of fistula cases, which may have reflected a decline in incidence of tuberculosis. Lockhart-Mummery (1923) noted that between 1909 and 1911 fistula represented 30 per cent of cases coming to the hospital, but that this had declined to 17 per cent by 1918–1921. In 1945 Gabriel also recorded that there was 'no doubt that the incidence of fistula has decreased a good deal in recent years'.⁶⁰ He put this down to earlier treatment of ano-rectal abscesses, but it might also be noted that mortality from tuberculosis had dropped from nearly 28,000 in 1937 to below 20,000 in 1949.⁶¹

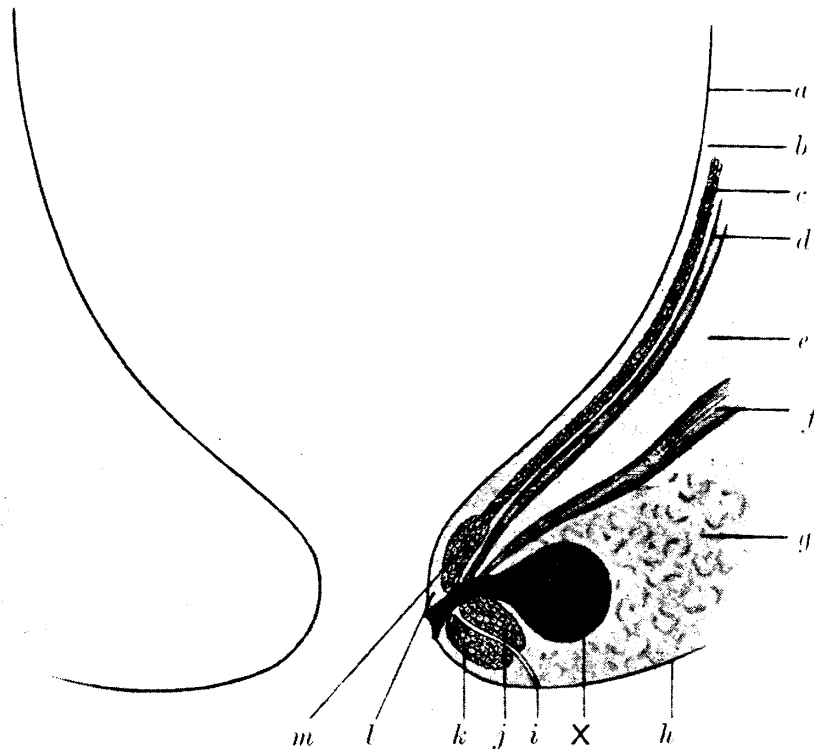
The surgeons at St Mark's regarded tearing in the anal canal as a possible cause of fistula. However, Lockhart-Mummery (1923) rejected one prevalent idea, that fistulae were the result of 'tearing down of the anal papillae' which were to be seen between the valves of Morgagni. In Lockhart-Mummery's experience these anal papillae did not tear down 'and there is no earthly reason why they should'.⁶² Fistulae, he maintained, formed from abscesses, usually in the neighbourhood of the anus. When the abscess reached a certain size it either burst into the bowel or out to the skin, or both.⁶³

There was increasing speculation, however, about how the abscess which preceded a fistula might form, and the route by which bacteria caused infection beyond the bowel wall. Ano-rectal glands had been described in 1880 by Hermann and Desfosses, who had suggested that they might be related to the development of fistula. However, it was not an idea that gained ready acceptance. At St Mark's, Cuthbert Dukes noted that intramuscular glands could often be seen in complete sections of the anal region and suggested that they might be a possible cause of fistula. Lockhart-Mummery mentioned this theory in 1929 during a discussion at the Royal Society of Medicine, arguing that infection might pass along the glands through the wall of the anal canal.⁶⁴ Gabriel picked up the idea in his textbook of 1932 in relation both to fistula and abscess, and Charles Gordon-Watson (1934) stressed that an explanation for fistulae and abscesses that arose for no apparent cause or that were chronic might be found along these lines. He had found clinical evidence of communication between the glands and both abscesses and fistulae.⁶⁵ Lockhart-Mummery (1934) noted that 'these glands, communicating as they do

with the bowel lumen, afford a path for infective organisms to reach the connective tissue of the ischio-rectal fossae and so set up an abscess in this region'.⁶⁶ He also thought that abscesses might be caused by congenital cysts, fissures and ulcers, injury, or tuberculosis.⁶⁷

In laying open a fistula, it was stressed that incision should not be made at too high a level, lest incontinence result. Wallis (1907) argued that high-lying openings were secondary and need not be incised: incision would cause either temporary or permanent incontinence. Lockhart-Mummery (1914) stressed that fistulae with high openings should only be operated upon by specialists.⁶⁸ There was continued controversy over how much of the sphincter muscles could be divided, largely because views were changing on the relative arrangements of the internal and external sphincters. Discussants were therefore not necessarily talking about the same thing when they held that the internal sphincter must be preserved, but the external sphincter could be divided, or vice versa. The Allingham, Wallis, Goodsall and Miles held that division of the internal sphincter caused incontinence. In the diagram (see page 231) it can be seen that Goodsall and Miles regarded the internal sphincter as being higher up the anal canal, with the external sphincter below it. The muscles were therefore internal and external to each other in relation to the anal verge rather than the anal canal. The internal sphincter was described as above the levator ani, and below both were two parallel muscles, the superficial and the deep portion of the external sphincters. They described a complete fistula as usually running between the internal and external sphincter: the internal opening could usually be found in what they described as the interval between the two muscles, on what was also described as Hilton's white line. In laying open the fistula it was possible to divide the external sphincter with no danger of incontinence. Frederick Wallis also described the internal opening of fistulae as always being situated between the two sphincters: he, too, placed them one above the other.⁶⁹

Lockhart-Mummery, however, described the muscle arrangement differently and argued that the fistula followed a different track from that indicated by Goodsall and Miles. His drawing also showed the internal sphincter as being largely above the external, but showed the levator ani as being continuous with the external sphincter. He argued that it was dangerous to sever the external sphincter but this was not necessary as fistulae passed superficial to it.⁷⁰ Lockhart-Mummery's diagrams were not always consistent: he sometimes included ones which showed the levator ani lying between the internal and external sphincters, while others showed the levator ani attached to the bottom of the internal sphincter and at other times attached to the external sphincter (see page 232). Whatever their description of muscle arrangements, however,



A BLIND INTERNAL FISTULA DIAGRAMMATICALLY REPRESENTED.

a Mucous membrane: *b* submucous tissue: *c* circular muscular fibres: *d* longitudinal muscular fibres: *e* pelvi-rectal space: *f* levator ani: *g* ischio-rectal fossa: *h* integument: *i* tendinous insertion of the longitudinal muscular fibres: *j* deep portion of the external sphincter: *k* superficial portion of the external sphincter: *l* interval between the internal and the external sphincters: *m* the internal sphincter: *x* main track of fistula.

The blind internal fistula here represented is the result of an ischio-rectal abscess, the track passing between the internal and external sphincters to open into the rectum.

Diagram of a blind internal fistula, showing muscle arrangement, according to Goodsall and Miles (1900)

all the surgeons agreed that the greatest danger was in dividing at a high level.

Several of the St Mark's surgeons experimented with techniques for treating fistulae. Swinford Edwards applied his experience as a urologist at St Peter's Hospital by treating indurated fistulous tracks from within the bowel, with an incision on to a director 'in the same way as one performs external urethrotomy on a staff'.⁷¹ Unlike several of his predecessors in the nineteenth century, Edwards (1918) did not regard fistula as necessarily easy to cure:

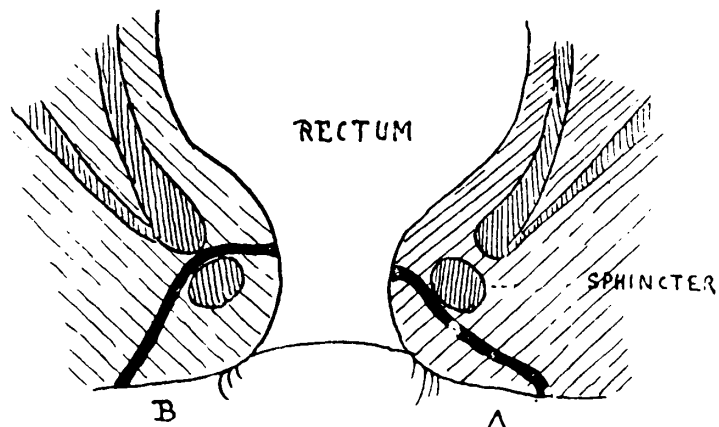


FIG. 59.—DIAGRAM OF RECTUM, SHOWING, *A*, USUAL RELATIONSHIP OF A FISTULA TO THE INTERNAL SPHINCTER, AND *B*, LESS USUAL, BUT COMMONLY DESCRIBED RELATIONSHIP.

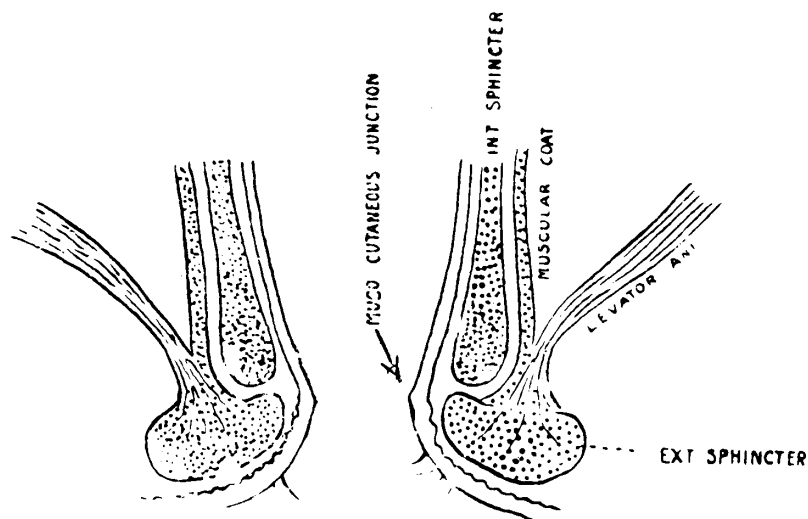


FIG. 60.—DIAGRAM TO SHOW ARRANGEMENT OF THE MUSCLES SURROUNDING THE ANAL CANAL.

Diagrams of muscles surrounding anal canal, according to Lockhart-Mummery (1914) showing contradictory muscle arrangements, although the diagrams are on the same page in his textbook

Perhaps I may surprise a good many of my professional brethren by suggesting that operation often fails to cure excepting in the simpler forms of fistula.⁷²

He argued that thorough forcible dilatation of the sphincter helped to promote healing: 'it is astonishing how soon the sphincter recovers its power even after what appears to be a most thorough forcible dilatation'. After treatment he recommended walking 'rather than taking the air in a motor or carriage'.⁷³ Gordon-Watson (1921) experimented with suturing the wound to promote more rapid healing. Lionel Norbury and Clifford Naunton Morgan (1927) looked at whether radiology could be used to elucidate the track of the fistula, leading to easier treatment, but to little effect.⁷⁴

In 1934 Campbell Milligan and Naunton Morgan published a very influential study of the surgical anatomy of the anal canal in relation to the treatment of fistula. Their conclusions were based on Peter Thompson's *Myology of the Pelvic Floor* (1899), their own dissections, sections of the anal canal removed at operation and clinical observations. Although the term 'anal canal' had been in use since the beginning of the century it was only in the 1930s that the term was generally used by surgeons at St Mark's and elsewhere. There tended to be lack of influence, even suspicion, between anatomists and clinicians: although Thompson's work had been published in 1899 it was 35 years before it was applied by surgeons. Once clinicians were through their training, there was little incentive to read works on anatomy. The experience of anatomists in dissecting cadavers and that of clinicians working with anaesthetised patients often led to conflicting conclusions. This was illustrated in descriptions of the anal canal: anatomists held that its upper limit was at the level of the valves of Morgagni, but surgeons such as Milligan and Morgan placed this at a level more in line with the puborectalis muscle. The muscles, too, appeared to be seen differently arranged in anaesthetised patients.⁷⁵

Surgical drawings were gradually showing the internal sphincter reaching to a lower level, with the external running parallel to it to a certain degree. Milligan and Morgan took this further: they argued that the two sphincters were largely parallel, and internal and external to the anal canal rather than the anal verge, although they drew the external sphincter as curving below the internal sphincter (see page 240). They placed greater emphasis for continence on the external than the internal sphincter. Together with the puborectalis portion of the levator ani it formed, they stated, a strong muscular cylinder encircling the longitudinal muscle, the internal sphincter and, below this level, the lower part of the anal canal. Like earlier surgeons they argued that the external sphincter had

several parts – in their case, they defined these as the subcutaneous, superficialis and profundus. They held that it was the puborectalis muscle that was 'so important in rectal function' and that it formed a sling at the anorectal junction – it was the composite anorectal ring that secured continence.⁷⁶ The anorectal ring, they argued, could be palpated with a finger, and was composed of the upper portion of the internal sphincter, the longitudinal muscle, the puborectalis and the external sphincter ani profundus muscles. It required only a narrow but complete ring of muscle to maintain continence. All the anal sphincter muscle below this ring could be divided in any manner without loss of control.⁷⁷

Allingham had earlier decided that a better classification of fistulae than 'complete', 'blind internal' and 'blind external' was based on how high their openings were, rather than on the number of openings. Milligan and Morgan reclassified fistulae once again in a way that had implications for treatment. Their first category included both subcutaneous and sub-mucous fistulae; their second category consisted of anal fistulae (both low-level and high-level) with main tracks entering the anal canal below the anorectal ring; and the third category consisted of anorectal fistulae with tracks extending above the anorectal ring, either with internal openings into the rectum, or apparently without internal openings or with the main track entering the anal canal below the anorectal ring. Fistulae in the first category could safely be laid open, as also could low-level anal fistulae. High-level anal fistulae, with tracks close to the anorectal ring, should be opened with great care, while anorectal fistulae should be treated by means other than the traditional laying-open from the anus. An approach through the coccyx could be made, with the anorectal ring being guarded during the procedure with a finger.⁷⁸ Milligan declared in 1943 that 90 per cent of fistulae were in fact below the anorectal ring.

Milligan and Morgan's work became very influential, at St Mark's and elsewhere. Gabriel (1945) changed his textbook to concentrate on their classification of fistulae and to stress the importance of the anorectal ring.⁷⁹ Since many visitors from all over the world came to St Mark's, Milligan and Morgan's methods became widely popularised.

Haemorrhoids

It was generally agreed that external piles, if they needed operation, should be excised. Ligature and excision was also used for internal piles by most of the surgeons, in addition to other treatments. The surgeons earlier in the century tended to stress palliative treatments as an initial course of action more strongly than did their later colleagues. Herbert Allingham had advised that a variety of approaches should be pursued in the treatment of piles, depending on their severity, and this was a feature of his successors' practice.

When the piles were prolapsed but easily returnable, a few of the surgeons in the early twentieth century recommended injection treatment. Swinford Edwards had been the main advocate of the method in the 1890s, but by 1908 his enthusiasm had slightly waned – he stressed that there was a possibility of recurrence after injection and total cure could not be promised. He now used a solution of 20 per cent phenol. Frederick Wallis (1907) used the method far less than his colleague, ascribing to it merely temporary relief, which enabled patients to live only in comparative comfort. Goodsall and Miles (1900) on the other hand advised against the injection method, arguing that it was ineffective and could be followed by abscess and fistula. In many instances, in fact, very strong concentrations of carbolic acid were used. Lockhart-Mummery (1914) thought that injection treatment was useful when piles were not very big, as it did not incapacitate patients, and they could almost immediately go about their daily business. Its bad reputation, he argued, was based largely on its use and apparent misuse by American quacks.⁸⁰

Where operative intervention seemed necessary, and it is difficult to know what percentage of cases this represented, Salmon's procedure of ligature and excision, with various modifications, was generally preferred. Salmon had made his incision at the mucocutaneous junction, an important feature in pre-anaesthetic days since pain was not experienced above this line. With the use of anaesthesia it was possible to make this incision closer to the anus. Where there was a skin tag, David Goodsall (1900) modified Salmon's procedure by making the incision at the outer margin, rather than at the mucocutaneous junction. The incision was U-shaped and a large amount of tissue was included in the ligature. He argued that this procedure reduced the risk of haemorrhage resulting from additional removal of skin.⁸¹ Wallis (1907) practised ligature and excision, but warned of the dangers of haemorrhage, sepsis, contraction and recurrence. Edwards (1908) inserted a rubber tube into the anus after operation, to enable the passage of flatus, reveal any haemorrhage and serve as a conduit for olive oil as an aid for the first bowel action. He had also, independently, adopted a similar modification to that of Goodsall: if an external tag accompanied an internal pile, he made a curved incision and ligated both at a low level. Unlike some of his colleagues, in particular Wallis, he held that ligated piles should never be cut off, unless extremely large, and then only at the apex, lest concealed haemorrhage took place.⁸² Lockhart-Mummery initially favoured excision of piles, suturing the wound afterwards in a manner similar to that of Mitchell (1903) in Belfast and Earle (1911) in America, but by 1914 he was reverting to the favoured practice at St Mark's of ligature and excision. Unlike several of his colleagues, however, he believed it not only unnecessary but highly

undesirable to dilate the sphincters before tying piles. He also endeavoured to limit bleeding by removing less of the pile from the bowel wall.⁸³

There were two other operations in regular use at St Mark's in the early years of the twentieth century: Whitehead's procedure and clamp and cautery. The surgeons expressed very forceful opinions about both: those surgeons who used them were strong in their defence while those who did not were equally vociferous in their condemnation. Goodsall and Miles (1900) thought that Whitehead's operation was fraught with danger and could result in much haemorrhage or contraction of the anal canal.⁸⁴ Edwards (1908), too, saw far greater problems than advantages with the procedure, and Lockhart-Mummery (1914) was a particularly uncompromising opponent of it. Frederick Wallis (1907), on the other hand, recommended Whitehead's operation, claiming that it was the only one after which recurrence could not occur, and that it was less painful and less prone to sepsis than ligature. Against those who held that there was a greater blood loss and danger of stricture, he maintained that neither was necessary in the hands of a good operator. He had performed the operation over two hundred times during the previous decade, with apparently excellent results, although he argued that patients needed special nursing care post-operatively which it was not always possible to provide in hospital. Some critics had argued that the operation took too long, but Wallis held that it usually took between 15 and 25 minutes but could be done in 12.⁸⁵ Wallis argued that clamp and cautery and the crushing operations were now obsolete. Frederick Swinford Edwards (1908), on the other hand, did not agree: he recommended clamp and cautery in particular when treating only one or two haemorrhoids, as pain seemed less and healing quicker than in ligature and excision.⁸⁶

Wallis' apparent unawareness of Edwards' practice was an indication of lack of contact between some of the surgeons at St Mark's. Although some practices were common between them, and lines of influence can be seen, in other cases no knowledge of each other's practice existed. However, where an assistant surgeon helped a full surgeon, he would learn his practice and pass this on to his own assistants. At the very time that Wallis claimed that clamp and cautery was obsolete and Swinford Edwards said that there were no advantages to Whitehead's operation, H Graeme Anderson, then house surgeon, reviewed all operations for piles conducted at St Mark's in 1908 and the first half of 1909. These would mostly have been carried out by Wallis and Edwards, who were then the two full surgeons, with responsibility for all operations on inpatients. Of the 300 cases, 150 underwent Salmon's operation, 100 Whitehead's procedure (presumably Wallis' cases) and the remaining 50, clamp and

cautery (presumably Edwards' cases). Anderson assessed the aftermath of each treatment. Clamp and cautery proved far less painful than the other methods, with 70 per cent of patients suffering little pain, and none severe pain. Of those undergoing ligature, 10 per cent suffered severe pain, 57 per cent moderate pain and 33 per cent little pain compared with 16 per cent, 56 per cent and 28 per cent for Whitehead's operation. Anderson noted that the female patients endured the pain better than did males. Use of a catheter for urine retention was required by 10 per cent of patients with ligature, 6 per cent of those undergoing Whitehead's operation, and none following clamp and cautery. Return of sphincteric control was quicker in patients after the clamp and cautery operation and there was no subsequent contraction of the anal canal. Slight contraction occurred in well over a third of the other cases, with marked contraction in 5 per cent of ligature and excision cases and 8 per cent after Whitehead's operation. No case of Whitehead's operation healed by first intention. Ligature had the greatest incidence of post-operative haemorrhage, while four of the Whitehead operation cases suffered from sepsis. No sepsis resulted from clamp and cautery. Cases treated by clamp and cautery remained in hospital for an average of ten days, ligature 21 days and Whitehead cases 26 days. Anderson concluded that clamp and cautery should be recommended where there were no more than three piles and no external tags, ligature in the majority of cases, and the Whitehead procedure where the whole circumference of the anal canal seemed to be involved, especially where the piles were much prolapsed. He also recommended Whitehead's procedure in a condition described by Wallis, in which the anal valves were enlarged, which seemed to be a starting point for fistulae and fissures.⁸⁷

Treatments were less varied by the interwar period. Fewer cases of haemorrhoids seem to have been treated palliatively, a much larger proportion was treated by injection, and those that underwent operation were mostly treated by ligature and excision. As the reputation of treatment by injection was losing its quack overtones, so the procedure became more popular among mainstream practitioners. In 1924, H Graeme Anderson assessed current opinions on injection treatment. He had learned the practice from Swinford Edwards and regarded it as excellent, provided that the proper solution and quantity of carbolic acid was used. He described how three schools of thought had developed on the subject by 1900: the first school, headed by Mathews in Louisville, Andrews in Chicago, and the Allinghams, had regarded it as unsafe and dangerous, the second, 'strong' school had believed in injecting strong solutions – ranging from 20-95 per cent of carbolic acid, which had caused the piles to slough – while the third, 'weak' school had injected between 5-20 per cent, aiming at fibrosis and shrinking the 'tumours'.

The strong school was now gradually losing ground to the weak school, which Anderson himself favoured. Anderson emphasised two points: external piles should not be injected, neither should complicated internal piles. However, he regarded about 50 per cent of internal piles as suitable for injection, recommending ligature for the rest. Anderson injected the piles through a speculum, and argued that no local anaesthetic was necessary if the injection went into the mucosa: he usually injected into the upper part of the pile, about half an inch to an inch above the anal valves. If recurrence took place, patients were usually happy to undergo a second course of injections. Sloughing only occurred if too strong a solution of carbolic acid was used. Anderson recommended 10 per cent carbolic acid in equal parts of glycerin and distilled water although he had tried various other substances, including quinine with urea, which was popular in America.⁸⁸ Cuthbert Dukes held that the acid acted as an irritant producing aseptic inflammation. After about five days intravascular clotting occurred with subsequent fibrosis.⁸⁹ An even milder version became popular from the 1930s. Blanchard (1928), in America, publicised the method of another surgeon, Albright, injecting above the pile rather than into it, using a solution of 5 per cent carbolic acid in almond oil in 3-5 ml doses. The method was introduced to Britain by Morley (1928) and quickly taken up by surgeons at St Mark's: Gabriel tried the new method in 1929, preferred it, devised a special syringe for it – still used today – and taught it to those who followed him.⁹⁰

Despite Anderson's conclusion that only 50 per cent of cases of haemorrhoids were suitable for injection treatment, by 1921 over three-quarters of the cases at St Mark's were being treated by injection in the outpatient department:⁹¹ in the financial crisis of 1930 injection was used in 90 per cent of cases to allow beds to be reserved for more serious cases. The method fell somewhat in popularity in the 1930s as disappointment over recurrence grew, especially where the pile was already partly prolapsed. However, the need to reserve hospital beds for more serious cases during the Second World War renewed interest in the method: Gabriel noted that in 1944 out of 100 consecutive new cases of piles, 82 were treated by injection.⁹²

It was in the 1930s, particularly in relation to choice of treatment, that distinctions were increasingly drawn between 'degrees' of piles. As Gabriel described it in 1939, in the first degree there was bleeding at defaecation but no prolapse, in the second there was prolapse at stool but spontaneous return, and in the third degree the haemorrhoids needed manual replacement, and the 'prolapse' could occur with ordinary exertion as well. Gabriel maintained that injection treatment was appropriate for first and second degree, and operation for third degree piles.⁹³

Stenosis, haemorrhage and pain were all associated with the operative

treatment, which helped to explain the popularity of injection. Surgeons felt that patients could not even be assured that recurrence would not take place after operations. Attempts were made to combat all these problems. With Wallis' death and Edwards' retirement, clamp and cautery and Whitehead's operation had by 1920 largely passed out of fashion. Lionel Norbury recorded that Charles Gordon-Watson was a staunch advocate of the clamp and cautery method, in cases where not more than three piles were present and when the skin was not involved. He regarded the method as the most suitable for cases of gangrenous or thrombosed piles, in order to avoid the possible danger of sepsis after a cutting operation. He referred to the cautery as his 'fiery furnace'.⁹⁴ Despite such advocacy, Gordon-Watson in fact used the method in few cases. Gabriel (1920), when house surgeon at St Mark's, published a similar account to that of Anderson in 1909, on the operative treatment of haemorrhoids. Of the 500 cases over the previous 16 months, 470 were treated by ligature and excision, only 18 by clamp and cautery and 12 by Whitehead's operation. A great effort was now made to render the bowel aseptic in advance of the operation. The patient was admitted two days in advance and the bowel emptied. Just before the operation the bowel was washed out with soap and lysol and the piles were swabbed with biniodide in spirit. When the bowels were opened on the third day it was hoped that the raw surfaces would be well covered with granulation tissue.⁹⁵

Wallis had held that Whitehead's operation offered the best chance of complete cure. In 1923 Lockhart-Mummery described an operation which he maintained was a compromise between the ligature operation and Whitehead's procedure. He argued that it allowed free removal of mucous membrane, but without the disadvantages of Whitehead's operation. The prolapsed mass was drawn down, and lateral cuts were made to create a large pile, a ligature was passed through the pedicle and tied; most of the pile was cut off. The ends of the ligature were sutured to the edges of the strip wound below, and tied to bring the skin and ligatured stump together. By applying this procedure around the circumference of the anal canal, an extensive area of prolapsing piles was removed but only a very small area was left to granulate. Lockhart-Mummery also suggested that this method was useful in covering the raw areas left after ligature and excision by Salmon's method. His method, however, was not widely adopted.⁹⁶

It had long been known that piles most commonly came in threes – Salmon himself had referred to this. However, in the nineteenth and early twentieth centuries, surgeons often referred to five or more piles. In 1919 Ernest Miles argued that there were three main piles, corresponding to 3, 7 and 11 o'clock on the face of a clock, and to the position of the branches of the superior haemorrhoidal artery. Smaller secondary piles could be

found between these primary piles.⁹⁷ This description encouraged the ligation of only the three main piles and did not necessarily dictate more extensive removal of the mucosa of the anal canal. Lockhart-Mummery (1923, 1934), whose rivalry with Miles was legendary and not limited only to their respective operations for cancer, made no reference to Miles' description. Gabriel (1932), however, stated that he found Miles' description helpful when ligating piles.⁹⁸

A danger with high ligation as recommended by Salmon was stenosis in the upper anal canal. To avoid this, Ernest Miles made his cut through the perianal and anal skin, rather than incising at the mucocutaneous junction, taking his cut up to the mucocutaneous junction, pulling the mucosa down to this level and ligating it.⁹⁹ In 1937 Milligan, Morgan,

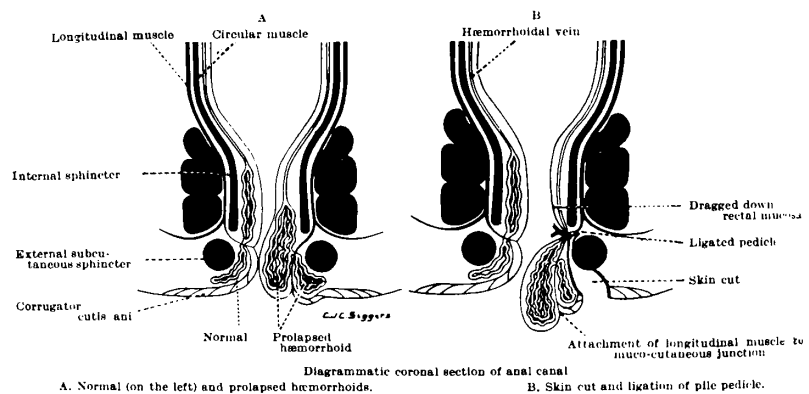


Diagram of surgical treatment of haemorrhoids according to Milligan, Morgan et al (1937), showing the muscle arrangements of the anal canal

Jones and Officer published an account of the removal of haemorrhoids based on their anatomical study of the component parts of a haemorrhoid and of related muscles. They tethered the pile pedicle in the lower part of the anal canal to avoid stricture formation at a higher level. They dragged the rectal mucosa down, made a cut from the mucocutaneous line to the outer border of the external haemorrhoidal plexus in a V-shape, laying bare what they described as the subcutaneous external sphincter. The pile pedicle was ligated: they held that it could not slide upwards because it was fixed by including in it the attachment of the longitudinal muscle which, they argued, passed between the external subcutaneous sphincter and the internal sphincter to the lining of the anal canal. This prevented the retraction of the pedicle upwards which would leave extensive raw areas in the anal canal, with the danger of stricture at the anorectal ring. They argued that areas of anal mucosa and skin should be left intact between the wounds to allow regeneration and to guard against stricture,

and that removal of portions of the external haemorrhoidal plexus minimised postoperative skin oedema and the formation of skin tags.¹⁰⁰

Again, it was Milligan and Morgan's method that became most widely accepted both at St Mark's and more generally in Britain. As Gabriel (1945) put it in typically categorical terms:

In the operative treatment of internal haemorrhoids only one method will be described, namely ligature and excision by the technique described by Milligan and co-workers in 1937. This method is correct anatomically and is a great advance on what was usually known as Salmon's operation, in which ... a variable amount of 'stripping' resulted.¹⁰¹

W W Davey, an Australian surgeon, remarked:

Up till the time I saw Milligan perform this operation I always considered haemorrhoidectomy a mess, a nasty little operation done at the end of the list, which you preferred to do quickly and hoped no one was watching.¹⁰²

When he saw Milligan performing the operation, 'with every anatomical structure clearly demonstrated' it became 'a surgical art form'.¹⁰³ Those at St Mark's competed with each other to see who could make the end result look most pleasing, and the following couplet was devised: 'If it looks like a clover the trouble is over, if it looks like a dahlia, it is surely a failure'.¹⁰⁴

Fissure

There were two schools of thought in the early twentieth century on the possible aetiology of chronic fissure. Some thought that it related to muscle spasm and others that infection followed damage to the anal canal. However, in Britain, the treatments advocated by the two groups were often similar. Récamier's procedure for stretching the anal sphincters to correct the muscle spasm was mainly favoured in France: surgeons at St Mark's and the Gordon Hospitals who sought to curb spasm argued that an incision in the sphincters was necessary. Those who maintained that fissures were due to infection argued that the best treatment was to lay them open to allow adequate drainage – they therefore used similar means to those who divided part of the sphincters, even though they based their practice on a different theory. The controversy over aetiology was therefore not easy to resolve.

Goodsall and Miles (1900) noted that most fissures were posterior, to the immediate right or left of the midline. They recorded the theory of Ball of Dublin, that fissures were produced by tearing down the lateral attachments of one of the valves of Morgagni, but although they regarded this as an ingenious idea, they thought that this was rarely the case. They

were more sympathetic to Alexis Boyer's theory that sphincter spasms were always antecedent to fissures, if he meant that the lesion 'is produced by an hypertrophied and indurated sphincter contracting spasmodically upon a hardened faecal mass during its transit through the anal orifice'.¹⁰⁵ In all persistent cases, they argued, there was so much spasm of the sphincters that only operative measures would cure the problem. According to Goodsall and Miles, both Récamier's method and Boyer's method (incision) aimed at paralysing the sphincters for a time to allow 'the physiological rest so essential for the repair of the fissure'.¹⁰⁶ They preferred to divide part of the musculature. It was important, they argued, to divide the muscles sufficiently to prevent the spasm but not so much that incontinence resulted. They argued that it was the external sphincter which needed to be divided, because it was this muscle which responded readily to stimulation at the anal margin. On no account should the internal sphincter (higher up the anal canal) be divided: Boyer's operation had fallen into disuse, they argued, because he had made too large an incision and 'conferred the misery of incontinence upon his patients'; his opponents on the other hand 'did too little and failed to cure the disease'.¹⁰⁷

Frederick Wallis (1907) argued that muscle spasm resulted from the pain caused when the bowel acted once a patient already had a fissure. The only certain cure, he argued, was incision, completely dividing 'the outer part of the sphincter'.¹⁰⁸ He maintained that stretching the sphincters brought only temporary relief. Swinford Edwards (1908) thought that congenital contraction of the anus was frequently a predisposing cause and that spasmodic contraction of the sphincter resulted. Dilatation of the sphincter could be useful in comparatively recent and uncomplicated cases, but Edwards recommended a limited incision after dilatation for more persistent cases. The incision should be made through the fissure, from slightly above to slightly below it.¹⁰⁹

Lockhart-Mummery in 1914 also followed the plan of first stretching the anal sphincters and then making an incision. If the fissure was small, he excised it completely.¹¹⁰ However, he did not agree that treatment should aim at correcting muscle spasm. In 1923 he argued that fissures were simply due to 'traumatism such as tearing', and that their location was explained by the structure of the muscles: the tear in the mucous membrane occurred at the weakest point, where the anal canal was relatively unsupported. He maintained that many fissures could be cured without operation and that the chief aim of any operation should be to provide adequate drainage.¹¹¹

During the 1920s and 1930s, surgeons debated whether they were curing fissures by reducing muscle spasm or providing free drainage. Miles put forward another theory: he maintained that long-standing fissures exposed fibrous tissue at their base – what he termed the 'pecten

band'. Pressure on the haemorrhoidal veins by solid masses of faeces and ... passive congestion of the capillary plexus in the submucosa of the pecten leads to the formation of a fibrous ring surrounding the lower part of the anal canal (the pecten band) which narrows the anal orifice and necessitates straining at stool.¹¹²

Miles therefore recommended 'pectenotomy', arguing that the pecten band should be divided 'strand by strand', but that the operation involved no divisions of muscle fibres.¹¹³

William Gabriel (1932) agreed with Lockhart-Mummery that effective treatment of fissures depended mainly on free drainage. In less persistent cases he suggested palliative measures such as the application of silver nitrate or the deep posterior injection of an anaesthetic solution in oil. If these were not effective, he made a large triangular incision from the anal margin with lateral edges of at least two inches in length to allow free drainage. He regarded it as a secondary consideration to treat a contracted fibrous external sphincter.¹¹⁴ In 1937 Lockhart-Mummery's theory that fissures were due to a Y-shaped arrangement of the muscle was criticised by Blaisdell. He argued that fissures did not occur at the level in the anal canal suggested by Lockhart-Mummery, but at a lower point, over what was identified as the subcutaneous external sphincter, which was 'stretched like a bar'.¹¹⁵ Both Gabriel and Milligan accepted this point and Milligan argued that fissures were due to the passage of a hard stool which pushed the contracted muscle in front of it, tearing the skin. Gabriel subsequently recommended that the subcutaneous external sphincter should be divided or stretched to eliminate Blaisdell's 'bar'. He now removed a smaller triangle of perianal skin to effect drainage, with lateral incisions limited to $1\frac{1}{4}$ or $1\frac{1}{2}$ inches.¹¹⁶

Pruritus Ani

From the end of the nineteenth century distinctions were increasingly made between what were seen as specific disease entities and symptoms of other afflictions. Pruritus ani was a condition that tended to be considered as a distinct category in the nineteenth century but as a symptom of a variety of afflictions in the twentieth. The first step, therefore, was to rule out other problems. Where none could be found, cleanliness and a simple diet continued to be stressed.

Goodsall and Miles (1905) thought that the most frequent cause of pruritus ani was lack of cleanliness, but the surgeons should first see whether the patient had haemorrhoids or a fistula. In intractable cases, where no other disease was found, they recommended the application of silver nitrate.¹¹⁷ Frederick Wallis had a novel theory of the aetiology of pruritus, maintaining that in 90 per cent of cases a shallow ulcer could be

found 'between the two sphincters', that is, half way up the anal canal. In the outpatient department he cauterised these ulcers under local anaesthetic. In persistent cases he thought that there was a ring of ulceration, which he dissected off, stitching the healthy mucous membrane to the skin edge.¹¹⁸ However, his fellow surgeon, Swinford Edwards (1908), regarded this as an ingenious but erroneous theory: 'I am sorry to say that after a considerable number of examinations, made with a perfectly open mind, I am not in a position to confirm my colleague's statements.'¹¹⁹ He thought Wallis' method probably worked because of other features of the treatment, for example the subsequent application of lotions, and changes of diet. He himself recommended an application of lead and milk, and thought that bathing the anus in a lotion of carbolic acid, dilatation, or even the use of cautery could also be useful. Threadworms could cause the problem, and should be cleared by injections of salt and water or a weak solution of perchloride of iron.¹²⁰

Lockhart-Mummery (1914) stressed that pruritus was 'no more a disease than is headache or vomiting': it had no pathological existence.¹²¹ Parasites were an important cause of pruritus, he argued, and he suggested various possibilities in addition to threadworms. Other cases were more perplexing, and there were no simple answers to them. He argued for operative treatment in very bad cases, and since 1905 had used Ball's operation, in which the nerves to the affected area were divided. Eventually sensation returned but Lockhart-Mummery maintained that the procedure generally cured the itching. Some surgeons were using x-ray exposure for this complaint, and in 1914 Lockhart-Mummery thought that this was worth trying, although he had had little success with it. 'As, however, it puts the patient to very little inconvenience,' he recommended it when the patient objected to operation.¹²² In 1923, however, Lockhart-Mummery warned against the dangers of lengthy treatments with x-rays: serious burning, possible sterilisation or even skin cancer could result. By 1934 he had totally abandoned this treatment: the patient ran far less of a risk with Ball's operation.¹²³

From the 1920s some surgeons advocated the use of subcutaneous injections in the treatment of pruritus. The object, according to Gabriel (1932), was 'either the obliteration of tissue spaces and channels filled with irritating fluid that are alleged to be present in severe pruritus, or the production of cutaneous anaesthesia'.¹²⁴ The injection of alcohol was suggested by Stone of Baltimore in 1919, Hanes (1922) recommended hydrochloric acid and Golbacher (1930) carbolic acid. From 1929 Gabriel recommended the injection of an oil-soluble local anaesthetic in the treatment of various rectal complaints, including pruritus ani. Other surgeons found that his solutions were too painful, and Clifford Naunton Morgan experimented with other substances, strongly recommending

their use in the treatment of pruritus as well as fissure and anal spasm.¹²⁵ However, by 1945 Gabriel argued that the main aim of the surgeon should be to cure any conditions causing anal moisture or discharge.¹²⁶

Prolapse

The treatment of prolapse of the rectum in the first half of the twentieth century was influenced more by the extension of operative procedures than by developments in the study of anatomy. The surgeons at St Mark's were becoming highly skilled in perineal operations, and their operations for prolapse reflected their perineal approach. Others, such as Ernest Miles, were more interested in abdominal operations, and their treatments for prolapse tended to emphasise an abdominal approach. Various perineal methods were in vogue: encircling the anus with silver wire, as developed by Carl Thiersch, rectopexy, or fixing the rectum posteriorly, as practised by Lange (1887), Verneuil (1891) and Tuttle (1903), and excision of part of the rectum, as favoured by von Mikulicz (1889) and Delorme (1900). Approaching from the abdomen, colopexy was used by Jeannel (1896) and Ball (1908), who fixed the pelvic colon in the left iliac fossa, to hold the rectum up.¹²⁷

Goodsall and Miles in 1905 were using earlier methods, such as the application of nitric acid or of cautery to constrict the anal canal, and a procedure of ligature and excision which Salmon had used and was similar to that for the treatment of haemorrhoids. They had heard of colopexy but had never practised it.¹²⁸ Wallis (1907) recommended either cautery, rectal excision in a manner similar to Whitehead's operation for piles, or sigmoidopexy, according to the degree of severity of the prolapse. Edwards (1908) agreed with him, recommending sigmoidopexy in severe cases in preference to the other generally recommended treatment for severe rectal prolapse, amputation, which he thought was far more dangerous and less likely to be effective.¹²⁹

There was a subsequent polarisation between those who advocated fixing the bowel by colopexy or rectopexy and those who argued that amputation of the rectum was required. As in other procedures, Lockhart-Mummery at St Mark's strongly supported one operation while his rival at the Gordon and the Cancer Hospitals, Ernest Miles, supported the other. Their disagreement reflected their conflict over their operations for cancer. Like Edwards, Lockhart-Mummery, who was particularly concerned about aseptic and antiseptic precautions, judged it unwise to open the peritoneal cavity, while Miles from 1904 argued that only recto-sigmoidectomy, or rectal amputation, would cure the problem. Lockhart-Mummery, on the other hand, fixed the rectum into the hollow of the sacrum, with the help of stitches or adhesions produced by introducing temporary gauze packing. He argued that he had few recurrences, and advocated this method throughout his career: it was reported in 1949,

however, that most of his cases had in fact suffered recurrence.¹³⁰ Lockhart-Mummery himself ascribed recurrence to rectosigmoidectomy; he noted in 1923 that such 'amputation' had been advocated by 'several well-known surgeons' – he tended not to name Miles in his texts – but that there was also a serious risk of sepsis with it.¹³¹ Miles (1933) remarked that 'when an internal organ persists in an endeavour to become an external organ, it generally causes a great deal of trouble'.¹³² He delivered some back-handed praise to Lockhart-Mummery: of the many cures tried, 'Mummery's operation' was the most successful – but only in the milder forms of prolapse. In severe cases (the very instances for which Lockhart-Mummery recommended it), recurrence was apt to occur after a year or two: the only uniformly effective method, according to Miles, was rectosigmoidectomy. He noted that some 'might assume' that there was a risk of peritonitis, but this had never occurred in any of the 31 cases of severe procidentia in which he had used it. Interestingly, Sir Charles Gordon-Watson, Lockhart-Mummery's colleague at St Mark's, used Miles' procedure for very severe cases, using Lockhart-Mummery's for less difficult ones after trying cautery first. He had performed rectosigmoidectomy four times, and his main concern was the loss of blood and shock resulting from the operation; Lawrence Abel, also a surgeon at the Gordon, had few such qualms – he had even carried out the procedure successfully on a prize French dog.¹³³

For a period in the 1930s there was a reaction against both rectopexy and rectosigmoidectomy: Gabriel (1932) declared them both 'unnecessarily severe' and recommended instead a series of injections into the rectum of a solution of phenol or quinine, followed by a course of sphincter exercises. It was a treatment which had been suggested in 1919 by Swinford Edwards to secure rectal fixation, and another surgeon at St Mark's, Lionel Norbury, favoured it as well.¹³⁴ Gabriel subsequently decided that this method was ineffective, returning to the view that only two methods were effective for complete prolapse: colopexy or rectopexy and rectosigmoidectomy. By 1945 he had performed the latter operation in 40 cases, with two deaths, one from an apparently indirect cause, and for a time he became a major exponent of it.¹³⁵ The problematic nature of the treatment of rectal prolapse was illustrated, however, by Gabriel's subsequent adoption of Thiersch's method of encircling the anus with a silver wire. Just as the aetiology of prolapse seemed uncertain, so too did the treatment.

Incontinence

If prolapse was a difficult problem, incontinence seemed even more so. Goodsall and Miles (1900, 1905), Wallis and Edwards (1907, 1908) did not even address the affliction as a separate subject, although they warned throughout their works of the dangers of incontinence resulting from particular procedures. There seemed to be little hope of curing the prob-

lem. Lockhart-Mummery (1914) addressed it directly: 'Rectal incontinence is one of the most distressing conditions for which the surgeon is consulted, and although most books on rectal diseases dismiss the subject in a couple of pages, it deserves our most careful consideration'.¹³⁶ (In later works he amended this statement, noting that Yeomans and the Allinghams had dealt extensively with the subject.¹³⁷)

Incontinence to a greater or lesser degree accompanied many complaints, Lockhart-Mummery maintained, and surgeons could be held to blame for many other cases. Electrical treatment to stimulate the sphincter was, he thought, a waste of time and money whereas he optimistically claimed that, in almost all cases, a properly performed operation would enormously improve the condition and in most cases completely restore function. However, he stressed that such operations should only be undertaken by rectal specialists. Most of his operations were designed to correct previous operative problems, and aimed at removing fibrous tissue or reuniting muscles. Where the sphincter seemed to be completely 'absent' he advocated narrowing the anus by a plastic operation.¹³⁸ By 1934, Lockhart-Mummery, who actively promoted specialisation, argued that 'these days the patient who is operated upon by a skilled proctologist runs no risk whatever of losing control of his sphincter': the surgeon might 'occasionally' fail to cure, but the patient was never left incontinent.¹³⁹ Where the sphincter had been badly stretched he recommended a currently favoured operation, plecting the muscle.¹⁴⁰

Lockhart-Mummery's younger colleague, William Gabriel, did not deal separately with incontinence, or even list it in the index, of the 1932, 1937, and 1945 editions of his book. In 1948, however, he introduced a special chapter on the subject, pointing to the anatomical studies of Milligan and Morgan which stressed that the anorectal ring was crucially important for continence. Again his stress was on how to avoid making a patient incontinent through surgical procedure, and on how to restore continence when operations had damaged the patient, rather than on curing incontinence in other cases.¹⁴¹

Cancer and its causes

Concern over cancer grew rapidly from the early years of the twentieth century, apparently mirroring a growth in the incidence of the disease itself. The Registrar-General's figures indicated that 879 per million died from the disease in 1904 but that this had risen to 1,563 per million in 1934. To make this more concrete, in the year 1931-32, 60,000 people died of cancer. Whether or not there was an actual increase in the incidence of the disease, or whether there was under-registration in earlier periods, with the disease being overlooked by previous generations, or that shorter life-spans meant that it was less frequently a cause of death, the disease

nevertheless seemed to be dramatically on the increase. As one commentator remarked in the early 1920s, five million of Britain's population of around fifty million would die of cancer.

The very notion of social progress seemed threatened by the disease: cancer was frequently seen as a disease of civilisation. Commentators pointed to seemingly more primitive societies where cancer appeared to be almost unknown. The blacks in the southern states of the United States of America had a lower incidence of cancer, an advantage which receded as they moved into the northern cities and became more assimilated. Some suggested that civilised life itself was the key: communities broke down, people's minds broke down and perhaps even their bodies broke down. The only remedy therefore was to address social problems. Others argued that cancer was caused by more specific developments of civilisation: in particular, modern foods. A champion of both points of view was William Arbuthnot Lane, who held that constipation, or intestinal stasis, was responsible for cancer.

Everyone can avoid cancer who is prepared to keep internally clean by eating natural foods and drinking plenty of water. I have never yet operated for cancer upon a healthy person.¹⁴²

The large intestine was the 'cesspool' of the gastrointestinal tract: stasis resulted in auto-intoxication, the cause of many diseases. He advised colectomy, pointing out that patients easily survived with large parts of their colon removed.¹⁴³ However, he also advocated more radical measures than operative ones, saying that society would enter a golden age if his rules were followed. If in civilisation regular bowel actions were to be achieved, he argued that plenty of water and large amounts of roughage should be consumed; and during the Depression of the late 1920s he wrote that the unemployed should be encouraged to return to the country, to undertake natural cultivation of the land to provide both for themselves and those in the cities.

By enabling them to get good food and to live in healthy surroundings, a great deal can be effected to stem the threatening tide of social unrest and upheaval, which are the natural consequences of ill-health.¹⁴⁴

In every sense, Lane believed that people were made by their environment. Others also suggested that modern diet was wrong, and that elements in it caused cancer: people ate too much meat and too much tinned food, which contained dangerous chemicals and preservatives. They too harked back to a more natural past.

With the germ theory applied to almost every disease, it is not surprising that it was also suggested for cancer. Such an explanation, too, did not have the social connotations of the condemnations of civilised living.

Researchers in the early twentieth century endeavoured to culture bacteria from cancers: they were encouraged in their experiments by the apparent tendency of cancer to recur in suture lines, as if infection was spread by contagion.¹⁴⁵ Such investigations continued well into the 1920s and 1930s: an attempt to culture cancer was one of the first studies that Dukes undertook. By the 1920s a new explanation was being explored: some chemicals, particularly tar, were shown to be carcinogenic – and the theory fitted the notion that certain foods were carcinogenic. In the late 1920s Dukes used chemical means to produce cancer in rats, seeking to trace a sequence between benign and malignant tumours in a manner which he hoped would cast light on the stages of cancer in humans.

With the growth of mass newspapers and periodicals, sensational and widely publicised accounts of cancer cures had become commonplace by the 1920s. For some writers, however, discussions of the cause of cancer were yet other means by which doctors sought to control the destinies of ordinary people.¹⁴⁶ As one critic of the British Empire Cancer Campaign remarked, 'man has an inalienable right to die of something'.¹⁴⁷

Lockhart-Mummery in his time had a number of theories on the origin of cancer, hinting in 1914 that 'our disgusting habit of burying our dead has much to do with its prevalence'.¹⁴⁸ As editor of the annual British Empire Cancer Campaign reports he was able to gather information from the forefront of investigations, and by the early 1930s he concluded, basing his ideas on the hereditary nature of polyposis and research by scientists, that the key to cancer lay in genetics. He regarded his *Origin of Cancer* (1934) as perhaps on a par with Pasteur's and Lister's work on the germ theory. The quest for the cause of cancer had at last proved successful, he held: the explanation of the origin of cancer was now at hand.¹⁴⁹ Cancer was the result of a genetic change in a normal somatic cell. The problem was to explain why such a cell suddenly stopped obeying normal laws.

The cancer cell may aptly be compared with the citizen of a community who having previously been a good citizen suddenly becomes a Communist and, believing in the destruction of all law and order, commences to live independently of his fellow citizens to his own advantage and to their detriment and destruction.¹⁵⁰

He argued that mutation explained why the cell acted in such an anti-social way, explaining at the same time that external factors such as exposure to carcinogenic substances like tar could, in susceptible people, stimulate a normal cell's chromosomes to undergo mutation, a line which Jacques Loeb and others were pursuing. Lockhart-Mummery believed that if an explanation of the cause of cancer had now been reached, a cure must surely be in sight. He suggested ways in which the somatic mutation theory might be applied. It had been proved in animals, he argued, that controlled

breeding influenced the incidence of cancer in a particular organ. 'We can hardly doubt that what is true of animals must also be true of human beings in this respect.'¹⁵¹ However, although there was every probability that the incidence of cancer could be materially reduced by controlled breeding, he argued that

... there does not seem to be any prospect of such a step being taken in the immediate future. Many people are beginning to think that the time has come when man should begin intelligently to control the breeding of his own stock, as he has for long been doing with his domestic animals. But the world does not appear to have yet reached a general level of intelligence which renders possible such a step. True, some slight efforts in this direction have been made in America, and just recently in Germany, but it is likely to be many years before any general advance will be made in controlling the breeding of human beings on scientific lines.¹⁵²

In the absence of acceptance of such eugenic measures to combat cancer, he recommended that a careful watch be kept on those families with a susceptibility to cancer, so that the disease could be treated at an early stage. Radium, he thought, might prove to be the best treatment, as it seemed to have some mutative effect.

Treatment of cancer of the rectum and colon

Changing the environment or implementing eugenic notions might play a role in theory but they had little effect on practice. The solutions to cancer became increasingly surgical. In the first twenty years of the century, the surgeons worked out what they considered to be the most effective procedures; this was followed by a further two decades of intense competition over results as methods were refined and changes in anaesthesia and the beginnings of blood transfusion helped to increase operability. It was over the treatment of cancer in particular that the fights between the surgeons at St Mark's and the Gordon took place.

By the first decade of the twentieth century it was accepted that excision offered the only hope of cure for cancer, but only a small percentage of cases were treated in this way because of the difficulty and dangers of operation. Between 1900 and 1920, excision of the rectum became increasingly radical, encouraged by better aseptic precautions, but death from sepsis or loss of blood was a very real danger. Lockhart-Mummery favoured an extension of Allingham's perineal excision, while his competitor, Ernest Miles, put forward an abdomino-perineal operation which later became standard practice. However, the apparently less advanced operation of Lockhart-Mummery resulted in a lower operative mortality and could be performed on a larger proportion of cases than Miles' operation: not surprisingly, these became major factors in Lockhart-Mummery's defence of his procedure.

Goodsall and Miles (1905) held that 80 per cent of cancers in the alimentary tract were found in the ano-rectal region. It had been known for some years that cancer spread to the lymph glands, and Goodsall and Miles recommended that if the inguinal lymphatic glands were involved, or subsequently became so, they should be completely removed. They estimated that it took two to three years from primary occurrence to full lymphatic and liver involvement. They recommended what they termed 'wide removal' of the diseased area: the rectum should be completely 'extirpated' from about two inches above the growth, together with all the lymphatic glands 'in the neighbourhood'. Before risking such an operation, the patient should be in good general health, as serious blood loss might occur. Preservation of the anus was possible in a few cases; anastomosis with Murphy's button or Mayo Robson's bobbin was then used. Goodsall and Miles mentioned three possible operations for excision of the rectum: perineal excision with an artificial anus in 'the natural position' (as recommended by the Allinghams and Harrison Cripps), Kraske's sacral operation, and their preferred method of removal of part or all of the rectum and creation of an abdominal artificial anus. They noted that local recurrence was, however, the rule rather than the exception.¹⁵³

Wallis (1907) recommended perineal excision for growths up to two inches from the anus, but for higher lesions Kraske's operation was best. He also used what was known as a combined operation in which the abdomen was opened and explored, and later the bowel was resected through the sacrum.¹⁵⁴ Edwards (1908) preferred Kraske's method to perineal excision since he considered it impossible to maintain asepsis, and also to bring the rectum to the skin after operation, therefore leaving a large perineal wound. He often performed a laparotomy first, and if he found cancer in the sigmoid colon, he excised it and performed an end-to-end anastomosis. He had also occasionally performed what he called an abdomino-perineal excision. In this he opened the abdomen and divided the bowel above the growth; he then divided the mesentery of the lower segment and wrapped it in antiseptic gauze and pushed it below the peritoneal reflexion. He repaired the pelvic floor, closed the abdominal wound and removed the distal section by a perineal operation. Edwards quoted Tuttle's results for the various operations which showed a mortality of 23 per cent for the sacral operation, 13.5 per cent for the perineal, 36.7 per cent for the abdominal and almost 41 per cent for the combined abdominal and perineal operation.¹⁵⁵ By 1908 Swinford Edwards distinguished between the terms colotomy and colostomy. The former, he declared, was a temporary artificial anus, and the latter a permanent one. In fact the use of the terms did not simply reflect this, as in the nineteenth century it was almost invariably termed colotomy, even when the surgeon could not hope to close it, and from about the First World War it became

generally known as colostomy, even when temporary. However, this change of terminology did represent the fact that earlier a colotomy was regarded as an unsatisfactory protective measure rather than a necessary end result.¹⁵⁶

Lockhart-Mummery stressed in 1907 that the results from treatment of cancer of the rectum were far from satisfactory. His main concerns, however, were that excision of the rectum usually resulted in incontinence and that sepsis frequently occurred, accounting for 80 per cent of the mortality. He thought that the operability rate could only be improved if patients presented earlier, and he did not refer to subsequent recurrence. He stated that 'from the patient's point of view, the restoration of the parts so as to obtain good functional control is of the greatest importance'.¹⁵⁷ The patient, Lockhart-Mummery maintained, expected to be able to control defaecation, whether through a colostomy aperture or a perineal anus, 'and he will never be contented with any result, however successful as regards freedom from recurrence of the growth, which falls short of this'.¹⁵⁸ Lockhart-Mummery argued that the anal sphincters should be preserved unless diseased, and that the bowel should be brought down and sewn to the skin edge. Only where the sphincters were involved did he recommend an inguinal colostomy. He made a preliminary colostomy, to wash out the distal colon with antiseptic lotions; a few weeks later he made his perineal excision, approaching from the anus, removing the coccyx and dissecting up into the peritoneum. Ligating the superior haemorrhoidal arteries as high as possible, he severed the colon, closing the divided proximal end, and claimed to be able to remove nine or ten inches of bowel in this way. He argued that the chief point in the operation was the complete removal of the rectum: merely local removal of malignant disease was not usually satisfactory. Excellent results had been achieved in the treatment of cancer of the breast and uterus when the whole organ was removed, he maintained; this included 'the neighbouring lymphatics'.¹⁵⁹

The necessary extent of radical excision became a hotly debated topic over the following decades, with Lockhart-Mummery leading one school of thought and Ernest Miles another. Goodsall had stressed the necessity of wide removal of the lymphatics: Ernest Miles, who had worked with him, took this much further. Miles stressed that the crucial part of a cancer operation was the extensive removal of lymph glands and that all else should be subordinated to this. He noted in 1908 that various surgeons from Vincenz Czerny in 1884 onwards, including Frederick Wallis, had used methods of removing the rectum by the combined abdominal and perineal approach, but that their main aim had been to facilitate the removal of high-lying cancers. They had, he claimed, failed in one important respect in their treatment of rectal cancer: the complete eradication of 'the zone of upward spread' of cancer through the lymphatics. Until the end of 1906 Miles relied solely on perineal excision, but found that 'even after the most

complete and extensive removal possible' recurrence usually occurred: from his personal experience of 57 excisions, 54 patients had had recurrences. Although improvement in technique reduced the proportion of recurrences in the immediate vicinity, they developed elsewhere, in the pelvic peritoneum, the pelvic mesocolon and the lymph nodes situated over the bifurcation of the left common iliac artery.¹⁶⁰ According to his observations on the sites of recurrence and appearances at operation and postmortem Miles concluded that cancer spread downwards along the bowel wall below the growth, the external sphincter muscle, the perianal skin and the fat in the ischiorectal fossa. It spread laterally through the levator ani muscles, the fascia propria of the rectum, the pre-sacral connective tissue, and its lymphatic glands. In the male the capsule of the prostate gland, the vesiculae seminales, and the base of the bladder and in the female the posterior wall of the vagina and the cervix uteri were frequently involved in lateral spread. He defined the zone of upward spread as the bowel above the growth, the pelvic peritoneum, the pelvic mesocolon, particularly the border attached to the pelvic parietes with the adjacent peritoneum, and the lymph nodes situated at the bifurcation of the left common iliac artery.¹⁶¹ In 1907 Miles had therefore abandoned perineal excision for abdomino-perineal excision, arguing that this brought the treatment of cancer of the rectum into line with that for uterine cancer (abdominal hysterectomy). It was necessary, he maintained, to form an artificial anus, to remove the whole of the pelvic colon (since its blood supply was in the zone of upward spread), the whole of the pelvic mesocolon below the point where it crossed the common iliac artery together with a strip of peritoneum at least one inch wide on either side, and the group of lymph nodes situated over the bifurcation of the common iliac artery. He also recommended that the perineal portion of the operation should be carried out as widely as possible 'so that the lateral and downward zones of spread may be effectively extirpated'.¹⁶² In his procedure Miles placed the patient in the Trendelenburg position to open the abdomen. When he had completed the abdominal dissection he pushed the bowel down into the pelvis and repaired the pelvic peritoneum. For the perineal part of the operation the patient was turned on one side, but turned again at the end of this for an incision to be made in the proximal colon which had been delivered through an inguinal opening during the first stage. He stressed, however, that once the inferior mesenteric artery had been ligated, the remainder of the operation was 'practically bloodless and should be rapidly proceeded with'. He warned 'that it should be borne in mind that every minute that can be saved is of the greatest importance to the patient'.¹⁶³

Miles reported in 1908 that the operation took him an hour and a quarter to an hour and a half and 'so far as my experience goes, the patient suffers no more shock than after an ordinary perineal excision'.¹⁶⁴ How-

ever, he himself recognised that his radical procedure was 'one of the most formidable operations in surgery'.¹⁶⁵ Between 1907 and 1908 he had performed it 12 times, with a mortality of 41.6 per cent. By 1910 he had treated 26 patients, with a mortality of 38.5 per cent; of those who survived, none had suffered recurrence – four patients had by then survived for four years.¹⁶⁶

In 1910 Miles presented his conclusions to a medical meeting and noted that there seemed to be 'a decided prejudice' among surgeons about the establishment of an abdominal anus and the loss of natural sphincteric control in patients. However, he believed that if surgeons left sufficient of the pelvic colon to allow it to be brought down to the anus, much of the upward lymphatic spread would be left behind. He thought that such operations were 'ingenious', but little was heard about the after-results.¹⁶⁷ In the discussion on Miles' paper, Lockhart-Mummery agreed that the only operation for cancer of the rectum which could now be considered was one in which the whole rectum and neighbouring lymphatic area were removed. However, he argued that it was still possible to restore bowel continuity: 'most patients in his experience would refuse any operation at all if a permanent colostomy was the best they could be promised'.¹⁶⁸ The aim should be to improve and develop operations which restored function: the patient should not be left with a permanent colostomy. Miles reiterated that he did not think it was possible to perform an adequate operation if the tissues forming the pelvic floor were left in place.

It was true that patients did not like the idea of having a permanent colostomy, but at the same time they should not be allowed to choose an operation which was bound, it seemed to him, to be followed by recurrence.¹⁶⁹

In 1914 Lockhart-Mummery argued that cancer seemed to be localised for quite a time before spreading to the lymph glands. The study of lymphatic spread at postmortem had, he thought,

led some surgeons to the performance of quite unnecessarily extensive operations in cases where the same result could have been obtained with less mutilation.¹⁷⁰

Lockhart-Mummery himself had now adopted an abdomino-perineal approach although, like Miles, warning that the operation was very formidable and therefore that it 'should not be performed in a private house, except under very special circumstances, nor in any place where any of the facilities for modern operative surgery are lacking'.¹⁷¹ He recommended that spinal anaesthesia should be used; however, when the operation was attempted under spinal anaesthesia alone at St Mark's the patients

died of shock soon afterwards and Lockhart-Mummery therefore held that it should be combined with general anaesthesia. He also used Arbuthnot Lane's procedure of infusing a warm saline solution under the skin during the whole operation to reduce shock.¹⁷²

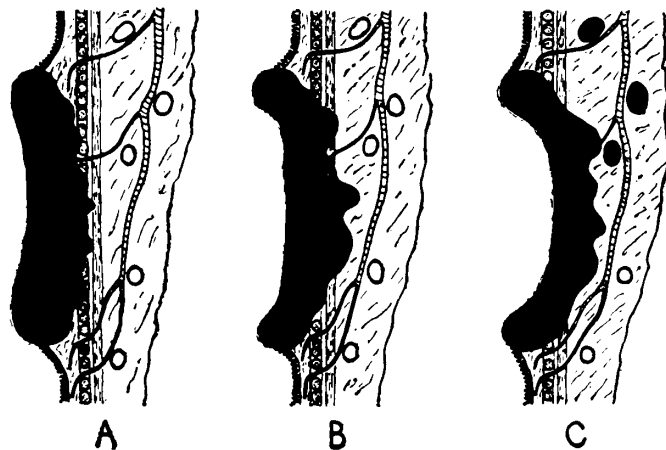
The mortality rate with the abdomino-perineal operation was so high that in 1915 Lockhart-Mummery abandoned it once more for an 'extended perineal excision', which was a development from the operation he devised in 1907. He took the removal as high as possible, removing the lymphatic glands widely as well. He did not attempt to restore the continuity of the bowel and established a permanent colostomy. By 1918 he had used it in 24 cases with no operative deaths. He maintained that it was easier with his operation than the abdomino-perineal to achieve asepsis, because it was largely performed outside the peritoneal cavity, and with the use of spinal anaesthesia as well as gas and oxygen to minimise shock and vomiting after the operation, more cases became operable. He argued that no operation could be regarded as satisfactory if it could not be used for 'bad' cases; he claimed to be able to perform his operation in 35 minutes. He also remarked that the disability of a permanent colostomy seemed to be surprisingly little.¹⁷³

Investigation into cancer intensified after the First World War. In 1922 William Gabriel established a system of following-up patients who had been treated at St Mark's for cancer, supported by a grant from the Medical Research Council. Using records dating back to 1910, six-monthly letters were sent to patients who had undergone excision of the rectum. Information was therefore gathered which began to demonstrate the survival pattern among such patients. In the first group, 142 patients treated by perineal excision between 1910 and 1923, 22 (16 per cent) did not survive the operation, 44 (32 per cent) had since died, 15 (10 per cent) had survived for at least five years, 43 (32 per cent) were still alive for a shorter period and 18 (13 per cent) were untraced.¹⁷⁴

In the 1920s, Cuthbert Dukes devised a system of classifying rectal cancer by stage of spread, and he was able to correlate this with information from Gabriel's system of follow-up to indicate prognosis for patients with each stage. Harold Rodgers, then at St Bartholomew's, recalled that Gordon-Watson and Lockhart-Mummery, like Ernest Miles and Lawrence Abel at the Gordon, were very intelligent but unsystematic. At St Mark's, Dukes provided the necessary systematic backing in pathology while those at the Gordon did not have such meticulous and probing assistance, and Miles' theories on the spread and treatment of cancer suffered as a result.¹⁷⁵

Most rectal cancers were still regarded as inoperable after the First World War, and surgeons increasingly tried to decide in advance which cases looked most favourable. In the early 1920s Lockhart-Mummery attempted before operation to make a clinical classification of cancer of the rectum as

A, B and C to serve as a guide to operability and prognosis. He kept a note of his classification of each case, with his forecast. Cuthbert Dukes asked him for these clinical assessments and soon found that he was too sanguine in his prognoses: malignant growth had generally spread further than Lockhart-Mummery anticipated. Dukes therefore suggested that the A, B and C classification should be made on the basis of careful examination of operative specimens, after dissection and microscopy. This method soon proved useful in two respects: it provided information for prognosis and it enabled comparisons to be made between different surgical procedures.¹⁷⁶ A further incentive to Dukes' development of his staging system was the use of radium, since the extent and direction of spread needed to be known if radium needles were to be placed in the most effective places.¹⁷⁷



Dukes' classification of the stages of rectal cancer (1936)

Dukes argued that the possible paths for the spread of cancer were by direct extension through the tissue, via the lymphatic system and via the blood stream. However, he argued that it should not be assumed that each path was equally available from the beginning of the disease. Extension through continuity of tissue was the first mode of spread and as long as this was the only means of extension, cancer remained a local disease, capable of local eradication. Of 100 cases analysed by Dukes in 1929, only 40 per cent had lymphatic involvement, from which he concluded that metastases did not immediately form in the lymphatic glands, but only after the cancer had spread by direct continuity into the perirectal tissues.¹⁷⁸ Dukes defined his groups in a manner which allowed inclusion of a significant number of cases in each: A cases were limited to the wall of the rectum, B cases extended through the rectal wall, while C cases had lymph node involvement. Of the first 100 cases classified in this way at St Mark's,

25 were at stage A, 35 at stage B, and 40 at stage C.¹⁷⁹ Using the information from Gabriel's follow-up, Dukes concluded that the prognosis was reasonable if the tumour was at stage A or B, but very poor if at stage C. Perineal excision was adequate for A and B cases but not for C cases.¹⁸⁰ Most crucially, however, Dukes found that Lockhart-Mummery's attempt to classify tumours before operation was fallacious: it could not be detected in advance whether the tumour was at stage A, B or C and that therefore the scope of the operation could not be geared accordingly. The lymph glands had to be removed in case the cancer had spread to stage C.

By the early 1930s another system of classifying rectal cancers had been introduced at St Mark's. In 1925 Albert C Broders argued that the malignancy of a tumour seemed to be inversely proportional to the degree of differentiation of its component cells.¹⁸¹ Before the late 1920s it had not been regular practice to take biopsies of rectal tumours, although taking biopsies to confirm a diagnosis of rectal cancer had been mentioned by surgeons at St Mark's from Cooper and Edwards in 1897 onwards. William Gabriel visited Alfred Bensaude's rectal clinic in Paris in 1929, and on his return recommended that biopsy should become a routine procedure before operation. In 1931 he reported that the clinical diagnosis of cancer had been confirmed by biopsy in the 40 cases examined.¹⁸² It was found that it was easier to take such material from rectal cancers without pain or danger than it was in cancers of other parts of the body. With Broders' system, Dukes now graded the tumour from tissues taken in the outpatient department, in the hope that this would clarify whether a tumour was advanced.¹⁸³ It was subsequently found that it was difficult to correlate grading of a biopsy specimen with extent of spread, although Dukes found that most of Broders' grade 1 tumours (greatest cell differentiation) corresponded with grade A cases, and most of the grades 3 or 4 (least cell differentiation) with grade C cases. However, he discovered that biopsies did not necessarily produce specimens that could be accurately graded. Moreover, even if a cancer was well differentiated, if it had spread to the lymphatics prognosis was poor.¹⁸⁴ Even though biopsies seemed not to shed light on the extent of spread, the procedure became routine pre-operatively in suspected cancer, not only to confirm clinical diagnosis but also to elucidate the diagnosis in obscure and adenomatous lesions.¹⁸⁵

Dukes had noted that some C cases survived for several years, and in 1933 he began a meticulous analysis of the distribution of diseased glands. He dissected out all the glands separately, marking their exact position on a map. This could result in sectioning 20 or more glands but he felt that it was worthwhile if it showed the exact course and sequence of carcinomatous spread.¹⁸⁶ Clifford Naunton Morgan suggested to

Dukes that it might be worth refining his staging to allow for different prognoses between cases with little gland involvement compared with those with extensive involvement. Dukes therefore divided the C cases into two groups, describing C1 cases as those with malignant deposits only in the 'regional' glands, while C2 cases had 'distant' metastases. Although he did not define this in his description of the two groups, in the pathology department C2 cases were taken to include only those which had metastases in the gland at the point of ligation of the vascular pedicle, indicating that the cancer had spread beyond the excised specimen. During his observations Dukes noticed that in some cases small clumps of cancer cells were found in the terminal branches of the superior haemorrhoidal vein. Vascular spread could, he thought, be of vital importance.¹⁸⁷ Dukes' investigations also showed that lymphatic spread proceeded from below upwards along the chain of glands accompanying the superior haemorrhoidal artery. Irregular or interrupted spread was uncommon. Lateral or downward lymphatic spread was only found in a late stage of the disease when the haemorrhoidal lymphatics were blocked by metastases.¹⁸⁸

By 1939 Dukes had accumulated information on 1,000 cases, of which 650 were male and 350 female. The disease seemed to afflict women earlier than men, and younger patients tended to have a higher grade of malignancy. As many had argued before him, Dukes found that in his sample the commonest site for rectal cancer was the distal end, with the incidence decreasing higher in the colon. In seeking to assess the prognoses of cancer at different stages, and the relative success of various operations, Dukes stressed that consideration needed to be given to the resectability rate and the operative and subsequent mortality corrected according to intercurrent mortality rate, not simply crude survival figures. As operability increased, he found by 1939 that about 15 per cent of the cases operated upon were at stage A, 35 per cent at B and 50 per cent at C.¹⁸⁹ Correcting for the intercurrent mortality rate, the period 1925–1939 showed a five year survival rate of about 50 per cent after excision for rectal cancer. After five years, life expectation was parallel to a control population not suffering from cancer. This conclusion provided Dukes with statistical support for 'the well known clinical fact that patients who have lived to celebrate the fifth anniversary' of their operation rarely succumbed to a recurrence. Moreover, the removal of the rectum did not decrease life expectancy. Following up almost 500 patients treated by palliative colostomy showed that more than half died within a year, only three (0.6 per cent) lived five years and none reached the sixth anniversary of the operation.¹⁹⁰ Dukes found that in the proximal colon, cancer was more common in women than in men, but that this ratio was reversed at the distal end; overall the incidence was higher in the left colon than the

right. As others had also done, he speculated that this might relate to the rate of flow of intestinal contents, which was more rapid in the right colon than the left, and almost stationary in the pelvic colon and rectum.¹⁹¹

Dukes' research was wide-ranging: he sought to establish whether cancer cells could be implanted by accident at operative sites, and to elucidate the development of cancer, trying to identify a pre-malignant phase. Dukes paid particular attention to familial polyposis, as will be discussed later, concluding that patients with multiple polyps often developed cancer subsequently. He noted the adenoma/carcinoma sequence which seemed to occur in this disease, and held that this same sequence occurred in other cases of cancer. He undertook a systematic study of the incidence of adenomas found in patients dying from diseases other than cancer as well as studies of specimens of bowel with carcinoma removed at St Mark's. He concluded from this that there was a higher incidence of adenomas in patients with carcinoma than those without, and that adenomas seemed to precede carcinomas. Using chemical carcinogens, he also carried out experiments on mice which again indicated that carcinomas developed from adenomas.¹⁹²

Dukes also applied himself to improving operative results in other ways. He argued that surgeons underestimated the incidence of urinary infection after excision and that daily tests needed to be made. He found that the use of a catheter fitted with a wooden plug was an important source of infection and devised an apparatus to avoid urinary infections. The urine flowed into a collecting bottle, the tubing was rinsed from a bottle of antiseptic, the bladder was irrigated and the tubing rinsed again. He also recommended pre-operative inoculation with the strains of bacteria that caused urinary infections as a protective measure: the principle was the same as inoculations against typhoid and cholera.¹⁹³

While Dukes was gradually working out his staging system and its relation to prognosis, the battles between Lockhart-Mummery and Miles over their respective operations intensified. Miles argued that no operations besides abdomino-perineal excision were safe, since, he claimed, they did not remove sufficient of the zones of spread, while Lockhart-Mummery argued that his operation of perineal excision produced good results and that the operative mortality in Miles' procedure was so high that it should largely prohibit its performance. The overall results, operatively and in the longer term, he argued, meant that his was the preferable procedure. At St Mark's, H Graeme Anderson agreed that Miles' operation was sounder on pathological grounds but he thought that the operative mortality in the hands of surgeons other than Miles was likely to be at least 55 per cent. Aiming to reduce such a mortality level, in 1921 Anderson advocated a three-stage abdomino-perineal excision. He

performed a colostomy, two weeks later a perineal excision and then a fortnight later more of the bowel was removed via the abdomen.¹⁹⁴ Other surgeons also urged that the operation should be done in stages to reduce its mortality. In particular, Grey Turner in Newcastle argued for a perineo-abdominal operation in stages, arguing that if most of the operation was carried out from the perineum, there was less risk of sepsis. Gordon-Watson, on the other hand, assessed the two operations (as Harold Rodgers saw it) rather like the odds at a horse race: since Lockhart-Mummery apparently had a 7 per cent and Miles a 33 per cent operative mortality rate, the final number of patients cured would be about the same even if half of Lockhart-Mummery's patients later died from recurrence as opposed to one-third of Miles'. He therefore used perineal excision, unless the growth was above the peritoneal reflexion when he used Hartmann's operation, resecting the bowel, closing the rectal stump and bringing out the upper end of the bowel as a colostomy. If the growth was sufficiently high to permit anastomosis, he did not give the patient a colostomy.¹⁹⁵

Gordon-Watson used various gadgets when performing a perineal excision. One was a piece of wood, shaped like an egg, which he inserted into the rectum before sewing up the anus, finding it useful during the separation of the rectum from the surrounding structures. A characteristic split in the rectal wall following the use of the egg meant that Dukes had no trouble in identifying the surgeon in charge of the operation when the specimen reached him (see illustration facing page 273). Gordon-Watson also used an 'inflation bag' which he inserted into the perineal wound after excision and before partial closure. The bag had a tube and tap for inflation and when distended it helped to support the pelvic floor and control haemorrhage.¹⁹⁶

In 1923 Miles re-emphasised that it was essential to remove the rectum completely, even when the cancer was at a high level, because of its supposed zones of spread. He claimed that his operability rate was now 30 per cent, and therefore the argument that perineal excision could be used for a larger proportion of patients was not accurate: its operability rate was about the same. He also reported that the operative mortality in his procedure had fallen to 25 per cent, and that the recurrence rate was only 30 per cent. Referring back to his experiences up to 1906, he argued that recurrence rate from the most extensive perineal excision possible was 94.4 per cent.¹⁹⁷

Lockhart-Mummery on the other hand claimed that Miles' operation was stage three of a four stage historical development in the removal of rectal cancers, with his as the fourth. The first was that of Herbert Allingham's time, when only part of the rectum was removed, from the perineum, usually resulting in sepsis, incontinence and recurrence. Then there was Kraske's operation, with a sacral anus or bowel anastomosis;

again sepsis was very common and recurrence likely. The abdomino-perineal operation was a great advance because it allowed free removal of the growth and surrounding tissues, and a technique which meant that it was possible to reduce sepsis. However, he did not regard as acceptable an operation which could not easily be used on people over 60, and with a mortality level of 30 per cent. His own extended perineal operation, therefore, should become the method of choice. Addressing the heart of Miles' argument against the perineal operation, he reported his results from 200 consecutive cases. One hundred were 'hospital cases', the other 100 private. He claimed to have a mortality rate of 14 per cent in the first and only 3 per cent in the second. Ninety-five cases had been operated upon more than five years previously and showed a 55 per cent survival rate. He claimed to have a higher operability rate than Miles and that his operation compared favourably with the results of operations on other organs in the body.¹⁹⁸

The riskiness of both Miles' and Lockhart-Mummery's operations was undeniable; recurrence was also frequent. In the 1920s and 1930s an alternative method of treating rectal cancer was used: radium. At St Mark's it was Charles Gordon-Watson who took up radium treatment most enthusiastically. He believed that N S Finzi, in 1909, was the first in London to use radium for medical treatment and he himself followed shortly afterwards, using radium for the first time in 1910 when treating a patient with sarcoma of the ilium: he drilled holes in the bone and inserted 'three tubes of radium'.¹⁹⁹ He first used radium in the treatment of rectal cancer in 1913, when treating a medical man who already had a palliative colostomy, but was suffering great pain. Initially he treated him (at his home) by cauterising the growth. Three months later the pain returned and Gordon-Watson therefore removed as much as he could of the growth with a Volkmann's spoon before inserting radium in a thick platinum tube into the lumen. He noted that the patient derived considerable temporary benefit, although he survived only for a few months.²⁰⁰

From 1924 Gordon-Watson began to use the method with increasing frequency, noting that radium often reduced the size of the cancer if not destroying it completely. It was used in the form of needles, placed in or around a tumour. It began to be seen as an appropriate treatment for limited tumours, to obviate the need for surgery and a permanent colostomy, rather than simply for relief in inoperable cases, and therefore competed directly with surgery. Its results were very mixed. Gordon-Watson described treating in October 1925 a woman of 54 with cancer of the rectum, with no apparent gland involvement. After performing a preliminary colostomy, he inserted radium needles via the posterior vaginal wall; four months later there was no trace of the growth but the

patient had a rectovaginal fistula. In July 1926 he suspected recurrence and was certain of this early in 1927; he therefore performed a perineal excision, but although the operation went well and was fairly quickly performed 'she showed little resistance and unfortunately died of shock'.²⁰¹ He remarked that the course of her treatment was not unusual: the immediate result of irradiation was 'successful', but recurrence later followed. He wondered at the time whether recurrence could have been avoided by a wider area of irradiation, a policy which he later followed.²⁰²

In 1925 Gordon-Watson went to Brussels and Paris to view the use of radium there. He was particularly impressed in Brussels by the treatment of cancer of the rectum by interstitial radium after surgical exposure via the sacrum. Although he subsequently discovered that several of the cases that he saw proved not to have been permanent cures, the results encouraged him to give the method a trial. At the Radium Institute in Paris he saw pioneers work on the 10 gramme radium bomb. Professor Régaud who headed the Institute thought that cancer of the rectum was not sufficiently radio-sensitive to justify being treated, but Gordon-Watson thought otherwise. As he later noted, much seemed to depend on grade of malignancy: he found Broders' grades 3 and 4 to be much more sensitive than 1 or 2, which needed a higher dose for a longer period.

It is this fact which makes the treatment with radium of rectal carcinoma so difficult, because the great majority of the cases fall into the grade 2 group. An insufficient dose is not much use and an overdose may be disastrous, resulting in damage to the healthy tissues, and may be followed by a painful radium burn with severe ulceration which is very slow to heal.²⁰³

Sloughing and perforation might result, possibly causing death from sepsis. 'If the happy medium can be secured brilliant results may follow.'²⁰⁴

When Gordon-Watson gave the president's address to the sub-section of proctology at the Royal Society of Medicine in November 1927, he spoke as a proselytiser for radium. Its use in the treatment of cancer of the lip, tongue and cervix had been particularly effective, he claimed. However, he was anxious 'not to raise false hopes or to give false impressions, either good or bad' regarding its use in the treatment of rectal carcinoma.²⁰⁵ He had treated 15 cases by radium barrage since 1925, of whom five had subsequently died. He performed a preliminary colostomy, examined the liver and removed a portion of the growth for biopsy. Two weeks later he explored the growth from behind and barraged it by inserting needles of equal strength which he attempted to place at an equal distance and parallel to each other over the whole area of the cancer; he also treated the lymphatic glands. Strings were attached to the needles

so that they could be removed about a week or fortnight later. Healing was very slow, and suppuration might be severe, although post-operative pain was not marked. His preliminary results indicated that although the primary growth could be destroyed, there was as yet no evidence that lymphatic spread could be checked or local recurrence prevented. However, he argued that progress in the irradiation of cancer had been very rapid and there was every reason to suppose that the future promised further advance. Much more study was required to establish whether 'distant radium therapy' could be useful.

The time is surely not far distant when *clinical*, as distinct from laboratory, research in this country will receive a larger measure of financial support from the State than it does now.²⁰⁶

In the subsequent discussion, Lockhart-Mummery revealed that he had treated only a few cases. He had tended to use large doses for short periods, unlike Gordon-Watson's practice of using smaller doses for longer periods. He emphasised that it was important to place the radium on the growing edge of the tumour. Sampson Handley, of The Middlesex Hospital, hoped that ultimately operations for rectal cancer would be superseded by improvements in radium treatment.²⁰⁷ A pioneer of radium treatment, Malcolm Donaldson, remarked that surgery 'had reached its zenith' but that radiotherapy was 'comparatively a new science'.²⁰⁸

A typical case of a 55-year-old man treated by Gordon-Watson in 1928 showed the problems encountered. He had had a colostomy and perineal excision in 1926 but in 1928 it was found that he had a local recurrence. The whole of the involved area was barraged with radium needles passed through the skin. Thirty-eight milligrammes of radium were used for ten days. This was followed three days later by distant irradiation. Then columbia paste was moulded to fit the perineal area in which sixty milligrammes of radium were embedded. This was applied for two weeks, with lead sheeting placed as protection between the radium and the organs in front. The cancer contracted and the patient's health improved but two years later there was a recurrence which was treated with further irradiation. Using a combination of diathermy, radon seeds and excision, further recurrences were treated over the next four years, but in 1934 the patient developed signs of secondary deposits in the liver and died.²⁰⁹ However, a woman of 42 'who resolutely refused radical surgery' for cancer of the rectum was treated in 1928 with radium needles and radon seeds, and was still alive in 1940.²¹⁰

The years 1928 to 1930 saw the peak in the use of radium at St Mark's. By 1930 poor long-term results were appearing through the St Mark's follow-up. Gordon-Watson reported to the Royal Society of Medicine in 1930 that

Increased experience has . . . demonstrated that, though . . . favourable results are possible, the percentage of failures in operable growths does not justify treatment with radium in preference to surgery in the present state of our knowledge, unless surgery is contra-indicated on general grounds, or the patient is unwilling to submit to colostomy and excision.²¹¹

Even in such cases, he felt that he needed much more experience before pronouncing on particular methods of using radium. Gabriel (1932) described 'the feeling of uncertainty and disappointment' regarding the use of radium.²¹² In 1929, 44 new cases had been treated with radium at the hospital, but in 1930 this declined to 31 and in 1931 it was only nine. When Gabriel compared treatment by perineal excision with that of radium, only two of the operable cases treated by radium alone had achieved good results. Where radium had been used in addition to perineal excision, he concluded that it was not required in B cases and of no use in C cases. Where it was used for recurrent carcinoma it seemed to achieve little more than a temporary improvement. Apparently, however, it had been effective in four out of eight operable cases of squamous carcinoma of the anus and anal canal.²¹³

Gordon-Watson persisted longer in the use of radium than his colleagues at St Mark's but by 1939 he recorded grave reservations. If the radium failed, surgery could be hampered by fixation. Although in small early growths there was a temptation to avoid radical surgery, 'yet it is in such cases that radical surgery offers the brightest hopes of a cure'.²¹⁴ Harold Rodgers, who worked with Gordon-Watson in the 1930s, thought that he was not given sufficient credit for his work on radium. Some had suggested that he had 'a bee in his bonnet' on the subject, but Rodgers felt that he had been measured in the way that he assessed his results.²¹⁵

The failure of radium to provide an alternative mode of treatment re-directed attention back to the relative merits of perineal and abdomino-perineal excision. Information from the follow-up of patients, correlated with Dukes' staging, continued to confirm that perineal excision was not sufficiently extensive. In 1932 Gabriel reported on 370 cases of perineal excision performed at St Mark's between 1910 and 1931. The operability rate rose from 41.6 per cent between 1910 and 1920 to 54 per cent between 1921 and 1931, while the operative mortality declined from 16 per cent to 4 per cent. Three year survival rates were 86 per cent for Dukes' A cases, 73 per cent for B cases and 19 per cent for C cases (with an overall mean of 60 per cent).²¹⁶ The survival rate for C cases dropped to 16.6 per cent at five years. Gabriel concluded that perineal excision was indeed not sufficiently radical, especially for C cases. Dukes' demonstration that,

however experienced the surgeon, the extent of lymphatic spread could not be ascertained pre-operatively, meant that wide excision was necessary. Moreover, the majority of lesions seemed to be in the rectosigmoid which itself argued for a combined abdominal and perineal operation.

Gabriel therefore argued for a more extensive operation than perineal excision, and devised a perineo-abdominal procedure, which was similar to that recommended by Grey Turner in 1920. Gabriel argued that the combined route allowed a ligature to be placed around the inferior mesenteric pedicle three or four inches above the level possible in the purely perineal approach. Using the perineal route at most nine inches of rectum (and often considerably less) could be removed, while in the combined operation the average length of bowel removed was eighteen inches. Moreover any benign adenomas above the cancer could also be removed, a factor which Dukes increasingly regarded as important. There might also be a second carcinoma.²¹⁷ Gabriel remained critical of Miles' procedure, and like Lockhart-Mummery identified it with a high incidence of sepsis and shock. In the perineo-abdominal operation Gabriel hoped to reduce both: he avoided intraperitoneal section of the colon, and reduced the risk of shock by closing the perineal wound first so that the patient did not have to be turned again after completion of the abdominal operation. The operation also drew on the skills at St Mark's: the surgeons were well-versed in perineal operations, while their skills at abdominal operations were less highly developed. In Gabriel's procedure, an abdominal exploration was made with the patient lying on his or her back, then the patient was turned into the left lateral position for the perineal excision after anal suture. Before opening the peritoneum the anus and rectum were enveloped in antiseptic gauze, tied into a sterile glove, and pushed into the pelvis. The abdominal wound was reopened with the patient back in the Trendelenburg position and the rectum and pelvic colon stripped up; the pelvic floor was then closed, and the rectum and pelvic colon were brought out of the abdomen through a left iliac incision. The bowel was finally divided by cautery between clamps. In some cases Gabriel dispensed with the initial laparotomy where the carcinoma seemed to be clearly mobile and the liver, from palpation, seemed not to have deposits.²¹⁸ Gabriel achieved a slightly lower mortality level with his operation than did Miles.

Miles noted with interest in 1939 that

... the diehard adherents of the perineal method of excision have become dissatisfied with the recurrence rate and have extended the operation field upwards into the abdomen so as to include the tissues of

the upward zone of spread which had been left behind by the less radical procedure.²¹⁹

However, he criticised the new approach, which he himself had not performed, holding that 'the dangerous tissues are not so widely removed'.²²⁰ His own operability rate was now apparently 65 per cent, which he thought was higher than for perineal excision, and operative mortality was now 'remarkably low', around 17 per cent. By 1939 he made blood transfusion a routine measure on completion of his operation. Five years' survival from his operation, he held, was 69.3 per cent. This he put in marked contrast to the 5.6 per cent five-year survival rate which he still ascribed to perineal operations.²²¹ William Gabriel adamantly refused to use blood transfusion, it was said because Miles did so. There were dangers inherent in transfusion, as blood from the donor and recipient were simply tested on a tile to see whether any agglutination occurred, and many surgeons opposed its use because of occasional disastrous consequences.²²²

As the battle between those at St Mark's and the Gordon continued, with vastly different figures being thrown around, and neither side assessing the other on the same criteria, a few other operations for rectal cancer were attempted at St Mark's. Hartmann's operation was used for some cases, but the follow-up at St Mark's later highlighted the danger of recurrence in the rectal stump, and the number of cases treated in this manner remained a mere handful each year.²²³

One of the problems with operations which involved both the abdomen and the perineum was that the patient had to be turned. Lloyd-Davies throughout his career developed a range of new instruments especially adapted for procedures undertaken at St Mark's, including sigmoidoscopes, forceps, scissors, a clamp, an enterotome and a needle holder; he had only just joined the staff when he developed a new operating position which combined the lithotomy and Trendelenburg positions and which was subsequently used for most procedures, not simply cancer operations. His intention was to devise a method which made it easier to perform pull-through operations with low anastomoses; however, the position was subsequently used to allow synchronous combined excision of the rectum, with one surgeon performing the abdominal part and another the perineal part of the operation, in order to speed the procedure. The idea of a combined lithotomy-Trendelenburg position had been suggested early in the century by an American surgeon, but it was not generally adopted. Martin Kirschner in Heidelberg suggested the idea again in the early 1930s and an Australian surgeon, Devine, published an article on its use in 1937. Working independently, and with a somewhat different intention, Lloyd-Davies addressed the same

problem, and it was his solution which became widely adopted, partly through the influence of St Mark's around the world. In 1937 Lloyd-Davies devised new leg rests and a pelvic support which could be attached to the operating table, to create a combined position. In the lithotomy position the patient lay on the back with legs and thighs flexed and the knees widely apart. The position had been developed to remove stones from the bladder, but also allowed an approach to the rectum from the perineum. The Trendelenburg position placed the patient at an angle of about 45 degrees, with the pelvis higher than the head, which facilitated colon surgery. Most surgeons when operating on the perineum placed the patient in a left lateral position, but some, like Mayo, had already advocated a lithotomy position.²²⁴ In the new position, both the abdomen and the perineum could be approached at the same time and there was no necessity to turn the patient when performing a combined abdominal and perineal operation. It also allowed the suture of the peritoneum over an empty pelvis. It was more feasible, however, to perform synchronous combined excision by two surgeons at a hospital like St Mark's or a large American or Australian clinic, where there would be more than one surgeon well-versed in colo-rectal work, rather than at smaller general hospitals.

By 1947, synchronous combined excision was becoming increasingly favoured at St Mark's, although Gabriel never adopted it. Surgeons at St Mark's now began to develop skills in the perineal dissection of the rectum in the lithotomy position, something which had previously always been done in the left lateral position. Operability rose to 86 per cent, partly due to improved anaesthesia and the increased use of blood transfusion. The operative mortality rate now stood at 8.2 per cent. Among patients treated in 1947, just over half underwent synchronous combined excision, a quarter Gabriel's perineo-abdominal excision, and only just under three per cent Lockhart-Mummery's perineal excision.²²⁵ The most likely possibility for progress now seemed to depend on whether more cases could be rendered operable. To achieve this, it was necessary, Goligher argued in 1941, to have several radical procedures of varying severity available.²²⁶

The highest incidence of colo-rectal cancer was in the rectum. There was general agreement that most colonic tumours were found in the sigmoid colon, and then in those parts of the colon where, as Lockhart-Mummery (1910) put it, the contents of the bowel 'stagnated', the caecum, ascending colon and transverse colon.²²⁷ Operations for cancer of the colon did not change as much, or receive as much attention, as those for cancer of the rectum. Two main types of operation were favoured early in the century: the extraperitoneal resections devised by Paul, Bloch and von Mikulicz, and the intraperitoneal resection with

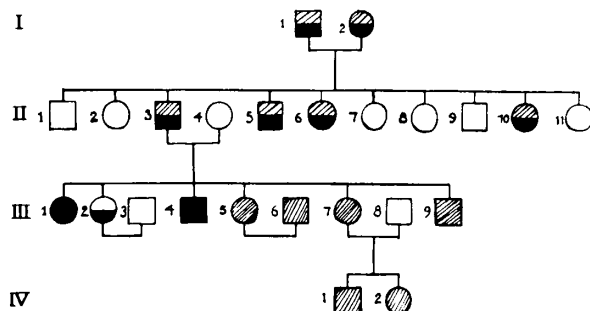
anastomosis, using buttons or bobbins, of Halsted and others. It was generally held that intraperitoneal procedures were less safe, because of the risk of leakage from the suture lines. In Lockhart-Mummery's series of five cases of immediate end-to-end anastomosis, four died post-operatively, while eight cases treated by Paul's method all survived.²²⁸ Gordon-Watson also used Paul's operation, although using an abdomino-perineal operation if the growth was at the sigmoid colon.²²⁹ It was a well-established principle by 1920 that no attempt should be made to resect the bowel when obstructed but to form a preliminary colostomy, resecting the bowel at a later stage. Exploratory laparotomy to establish the site of obstruction, however, was carried out, but with significant danger. To circumvent this problem some surgeons, including Lockhart-Mummery (1922), recommended establishing a blind caecostomy in obstruction, with no laparotomy.²³⁰

The treatment of colo-rectal cancer caused a great deal of interest among the surgeons at St Mark's in the first half of the twentieth century. It was for this disease that operations were extended to the greatest degree. The surgeons in 1948 could be more optimistic than their nineteenth century predecessors. It was not simply a matter of easing the passage of the patient to the grave (as Salmon had suggested).²³¹ However, the expectations of the 1920s that medicine would find a solution to the problem of cancer had been somewhat dampened. The main aim in 1948 was to improve operability even further. Increasingly, too, the necessity of a permanent colostomy was questioned.

Polyposis coli

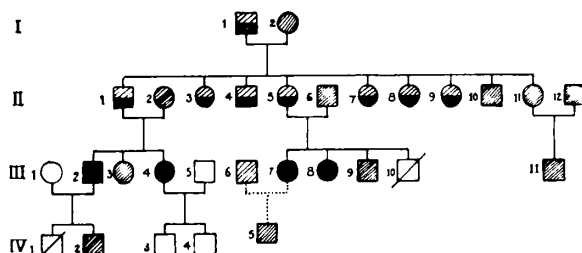
Some of the conclusions on the aetiology of cancer were derived from the study of polyposis coli, a disease in which the bowel was studded with numerous polyps. This disease, although rare, became inextricably associated with the pathology department at St Mark's. In the nineteenth century Harrison Cripps had shown particular interest in the disease, and noted a tendency for it to run in families. (The two cases that he presented to the Pathological Society of London were, however, probably instances of juvenile polyposis.²³²) Cooper and Swinford Edwards (1892) noted that there were a few reported cases of multiple polyps which later developed cancer. Other surgeons at St Mark's also showed interest in the disease: Wallis, Gordon-Watson and Lockhart-Mummery collected specimens of disseminated or multiple polyps. By 1910 the link between multiple polyps and cancer was generally accepted.²³³

By the time of the First World War, some commentators were explicitly drawing out the apparently hereditary nature of the disease and in 1925 Lockhart-Mummery published a paper giving the pedigrees of three families afflicted with the disease: it was his work that directed Dukes



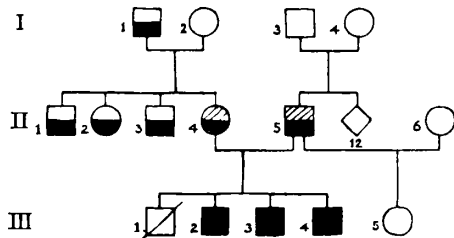
M. FAMILY.

I. (1) and (2) Both died of cancer of the rectum. II. (3), (5), (6) and (10) All died of cancer of the rectum. III. (1) Developed adenomatosis at the age of fourteen, and had the whole colon removed in 1918. She is well now, fifteen years later. (4) Died of cancer of the rectum, aged thirty-six. (3) Died of cancer (probably rectal).



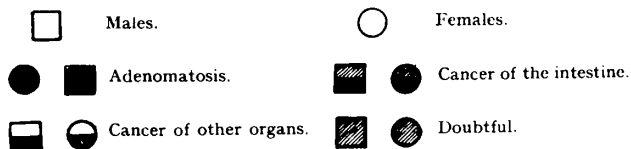
N. FAMILY.

I. (1) Died of cancer, aged forty-two. II. Of nine children, seven died from cancer of the rectum, and the other two have not been traced. III. (2) Developed adenomatosis at forty-five. (3) Had not been examined. (4) Developed adenomatosis at forty. (7) Developed adenomatosis at thirty, and had colectomy performed; is well to-day, ten years later. (8) Died of cancer, aged thirty-three.



L. FAMILY.

In this family III. the condition of adenomatosis appears to have been inherited from both parents. III. (2) Adenomatosis, aged twenty-four. (3) Adenomatosis, aged twenty-three; died after colectomy. (4) Adenomatosis, aged twenty; cancer a year later. The family of II. by the second wife have not been traced.



The genealogies of Lockhart-Mummery's first three polyposis families

towards further study of the problem. Lockhart-Mummery concluded that it was indeed an inheritable complaint, and also that patients with multiple polyps had a tendency to develop colo-rectal cancer.²³⁴ Cuthbert Dukes collected the family histories of all the cases recorded in the literature and drew up genetic charts.²³⁵ From this he concluded that the disease was certainly inheritable, was transmitted by both males and females, that both sexes suffered from the disease and that the inheritance could be traced through several generations. 'If members of these families survive the other complications of polyposis and ordinary risks of life, they develop cancer of the rectum or colon, usually in the early thirties or forties.'²³⁶ Many members of these families thought that cancer of the intestine itself was inherited, but Dukes argued that this was not the case. The cancer was not inherited, but rather a tendency to epithelial proliferations leading to polyps and secondarily to carcinoma.

Polyposis families were followed up with particular care. Dukes and his assistant, H J R Bussey, worked out an elaborate filing system to enable new cases to be entered and their families traced. Dukes found that the disease tended not to manifest itself until childhood or puberty. By 1939 the youngest patient found with the disease was eight, and the oldest 43; the average age at which patients developed polyposis tended to be about 20. There was an early onset of malignancy frequently with more than one primary focus of cancer. The age of death from cancer in polyposis families tended to be about 20 years younger than the average age of death from the disease in the general population – one patient had died at 22. On average, the malignant change seemed to occur about 15 years after the adenomas appeared, at about the age of 35. Lockhart-Mummery and Dukes suggested that familial polyposis was the result of 'an inherited instability of the epithelial cells of the large bowel which renders their nuclei peculiarly liable to undergo mutation for excessive rate of growth'.²³⁷ Patients with multiple polyps were monitored for malignant change, and where this became apparent, either through sigmoidoscopic diagnosis or symptomatic evidence, rectal excision or resection of part of the bowel was undertaken. There was a danger, however, of recurrent cancer. In one instance, for example, multiple polyps were found when the patient was 44, at the age of 56 he developed cancer of the descending colon which was successfully excised, but three years later he developed cancer of the rectum and a few months later, while still in hospital, he developed a third cancer at the site of the colostomy.²³⁸

Ulceration, proctitis and ulcerative colitis

Cancer, as a disease, was already well-established diagnostically in the nineteenth century, but it was only after the sigmoidoscope came into use that types of ulceration were differentiated from one another. Surgeons

interested in the disease spent the first ten or fifteen years in persuading their fellow surgeons and physicians that the disease existed as a separate entity. Only then was more attention paid to the means of treating the affliction, and this remained problematic. Ulcerative colitis had been mentioned by Wilks and Moxon in 1875 in lectures on pathological anatomy. Writings on pathological anatomy did not necessarily have any impact upon surgical practice, and it seems that these were no exception. William Hale White, of Guy's Hospital and president of the Royal Society of Medicine, gave the first of several descriptions of the condition in 1888, while several of the St Mark's surgeons mentioned ulceration in their textbooks. Goodsall and Miles (1905), for example, divided ulceration into several categories. Anal ulceration occurred in the following forms: chancroidal, tuberculous, syphilitic, lupoid, rodent or infective. Circumscribed rectal ulceration could be due to trauma, tuberculosis or syphilis. Diffuse ulceration which progressively involved the whole of the mucous and submucous coats of the rectum had a microbial origin.²³⁹

Goodsall and Miles took their discussion of ulceration no further. Frederick Wallis (1906), using the sigmoidoscope, argued strongly that rectal ulceration was the cause of a variety of complaints including pruritus, fissure, abscess and fistula. He was certain that many surgeons wrongly categorised many cases of ulceration as syphilitic. Distinguishing between malignant and non-malignant ulceration of the rectum, he thought that the latter was often due to abrasions of the rectum which then became septic. Syphilis could exacerbate the condition but was not a frequent cause, and neither was another suggested cause of ulceration, dysentery. Tuberculous ulceration, he believed, had definite characteristic signs. The treatment of 'infective ulcerative proctitis' was difficult and disheartening. Palliative measures seemed quite inadequate. Scraping, cauterizing, or the application of strong nitric or carbolic acid were not worth considering; he argued that it was at the level of submucous infiltration that the disease needed to be checked. He recommended that the whole of the affected area should be removed and healthy mucous membrane brought down and stitched to the anus, after a preliminary colostomy. He mentioned that there was a serious incidence of stricture in such cases of ulceration.²⁴⁰

In 1909 Wallis reiterated his belief that surgery was the best answer for ulceration. He divided 'ulcerative colitis' into four categories: follicular, septic, traumatic, and dysenteric. The aim of surgical treatment was, he thought, to clear out the bowel thoroughly and render its contents as aseptic as possible. Half-measures, he claimed, were useless. Keetley of the West London Hospital had in 1895 suggested appendicostomy in order to irrigate the bowel, and Weir of the Roosevelt Hospital in New York had by 1902 carried out the practice. The appendix was brought out

and amputated, a catheter inserted and the bowel irrigated with warm sodium bicarbonate. Wallis thought that this was the best operation for colitis, whether ulcerative or membranous (where mucus was present but little mucosal destruction had occurred). After about three to six weeks of treatment the patient had usually improved sufficiently to be nursed back onto an ordinary diet, although excretions had to be monitored carefully.²⁴¹

Lockhart-Mummery's enthusiastic adoption of the sigmoidoscope encouraged him to use it to differentiate various diseases. The gastroenterologist, Arthur Hurst, recalled in 1940 that it was Lockhart-Mummery who in 1909 at the Royal Society of Medicine 'inaugurated' the clinical study of the disease by describing the first sigmoidoscopic observations 'ever made in this condition'.²⁴² Lockhart-Mummery divided colitis into chronic mucous or membranous and ulcerative types. Several authors had suggested that neurotic women were particularly prone to the problem. Lockhart-Mummery did not find more women than men among his patients; he also argued that patients presenting with prolapsed piles or similar ailments were often markedly neurotic, but that it was not thought that the piles were caused by neurosis, but that the neurosis was caused by the piles. Until quite recently, he held, ulcerative colitis was 'a disease of the post-mortem table'.²⁴³ It was seldom diagnosed during life and never operated upon. The use of the sigmoidoscope, he maintained, now made it possible to differentiate it from other diseases which caused ulceration, such as Bright's disease, amoebic dysentery, typhoid, tuberculosis, syphilis and cancer. The notion – drawn from postmortem experience – that it was invariably fatal could now be refuted. Lockhart-Mummery felt that there was not yet sufficient proof of any specific bacteriological origin of ulcerative colitis. He described the pathological appearance of ulcerative colitis, and noted that small islands of normal mucosa often stood out like polyps above the surrounding ulceration. Perforation was a common cause of death. The main symptom was diarrhoea; mucus, blood and pus were frequent accompaniments. The prognosis was distinctly bad unless an operation was performed, with mortality as much as 50 per cent, although he felt that this might be a pessimistic figure because of the past and continuing reliance on diagnosis only at postmortem. Like Wallis, he felt that palliative measures were useless and an appendicostomy should be performed through which the bowel could be irrigated. An alternative was to rest the colon by establishing an artificial anus. This required a caecostomy or right-sided colostomy since, he held, the ulceration usually extended throughout the whole colon. He had considered two other operations, ileosigmoidostomy, to bypass the colon, or actual colonic excision, but he had not performed either. He thought that neither would



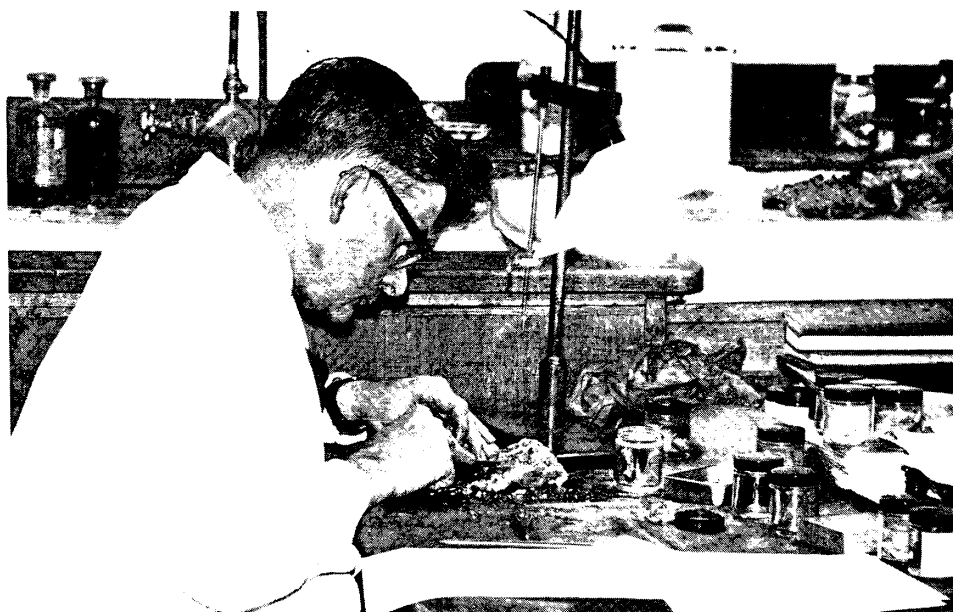
W B Gabriel



Cuthbert Dukes



Wooden 'egg' used by Charles Gordon-Watson during perineal excision, and characteristic split in specimen (see page 260)



H J R Bussey mapping gland involvement in rectal cancer specimen, 1950s

be possible except in very unusual circumstances as the rectum and sigmoid were generally badly affected.²⁴⁴ Where the ulceration was limited to the rectum he recommended the use of 'cataphoresis', a treatment propounded by Frederick Wallis with Ironside Bruce, in which the salt of a metal having an antiseptic or astringent action was introduced deep into the diseased tissues by means of an electric current, passing from the bowel wall to the back of the patient. Lockhart-Mummery had noticed a marked improvement in patients treated this way.²⁴⁵

The subject of ulcerative colitis was discussed briefly at the Royal Society of Medicine in 1909. Fourteen years later, in 1923, the disease formed the main item under discussion at the sub-section of proctology. The debate was opened by Sir Humphry Rolleston, Emeritus Physician at St George's and Regius Professor of Medicine at Cambridge University, who wondered whether much advance had been made since 1909. 'From the bacteriological and medical points of view it must be admitted that there is little to say.'²⁴⁶ The lack of a specific micro-organism causing ulcerative colitis encouraged Rolleston to say that:

It must be admitted that ulcerative colitis is not a disease in the strict sense of the word, any more than rhinitis or bronchitis is, but that it is a syndrome with fairly constant clinical manifestation, and anatomical changes, which may be excited by different factors.²⁴⁷

He referred to researches which indicated that a deficiency of vitamin B encouraged the development of ulcerative colitis, and suggested that the vitamin might be used in treatment. The large number of drugs which had been used to treat the complaint, but without effect, was, he felt, 'a reproach to purely medical treatment'.²⁴⁸ From a surgical standpoint, however, more could now be offered: the sigmoidoscope proved useful in diagnosis, and appendicostomy was valuable.

Sir Thomas Horder argued that the complaint was less a disease of the colon than of the patient generally: the patient had a low resistance and was probably afflicted in addition with a streptococcal infection. On the other hand, Lockhart-Mummery argued that they were still in the dark over the bacteriology of the disease, and that streptococcus did not seem to be the primary organism. His figures now showed a mortality of 15.7 per cent for the disease. He continued to recommend appendicostomy as the best method of treatment; having experimented with a number of solutions for irrigating the colon, he found that silver nitrate had drawbacks, but that a solution of sea salt was quite effective, administered as twice daily irrigations. At least one other discussant, however, professed himself disappointed with the results of appendicostomy and irrigation. He maintained that a right-sided colostomy was essential in severe cases so that faeces did not pass over the ulcerated surface. Although most

argued that ulcerative colitis was distinct from dysentery, some suggested that anti-dysenteric treatments could be useful. A tendency for the disease to recur was noted.²⁴⁹

Rolleston's belief that ulcerative colitis was not a specific disease was refuted by the surgeons. As Lionel Norbury put it in 1933, 'Ulcerative colitis ... is the name given to a definite disease with more or less well-defined symptoms and characteristic pathological appearances. It does not include every variety of ulceration of the colon.'²⁵⁰ The main symptoms were frequent motions, with the passage of blood, mucus and pus. He argued that it was a disease of early adult life and although it was said that the sexes were equally affected, at St Mark's more female than male patients were seen with the complaint. He combatted a formerly held belief that it had a dysenteric origin: in most cases cultures and serum tests proved negative. The pathological appearances as seen with the sigmoidoscope varied considerably. In early stages oedema of the mucous membrane was present with multiple vascular granular areas. Later on, definite ulceration of the mucous membrane occurred. Usually the ulceration was superficial but if it had penetrated more deeply, strictures could occur. He described the appearances in detail and distinguished them carefully from those of dysentery. Cancer should be ruled out: Norbury criticised a physician who had stated that he could diagnose ulcerative colitis simply by the symptoms. The sigmoidoscope should be used as well. He related that ulcerative proctitis could be found alone, or in conjunction with ulcerative colitis. Proctitis could also result from radium treatment, or gonorrhoea, and these, too, had to be considered. Polyposis coli might give rise to similar symptoms, but there was usually a discharge of blood and mucus, but no pus, thus distinguishing it from ulcerative colitis in its early stages. E T C Milligan (1933) distinguished between granular proctitis and ulcerative proctocolitis, arguing that the former was more common and less severe. When ulcerative proctocolitis was diagnosed the prognosis was grave: prolonged invalidism, serious relapses and death were far from uncommon results.²⁵¹

In 1934 Lockhart-Mummery recorded that the mortality from ulcerative colitis as a whole now appeared to be 10 per cent. Considerable attention had always been paid to the diet of the patient but he stressed that it was a common error to put a patient on a diet with insufficient nourishment. Ulcerative colitis was, he held, a very exhausting disease and if recovery was to take place, the patient must be well fed. Diet should be increased rather than reduced.

I can almost hear some of my medical colleagues saying: 'How ridiculous! A patient with ulcerative colitis cannot digest ordinary food.' But why not? Digestion does not take place in the colon ...²⁵²

Lockhart-Mummery found that 40 per cent of patients recovered without operative interference, with 'suitable medication', diet, lavage of the colon, combined with serum injections and zinc ionization.²⁵³ Speaking of proctitis in 1945, William Gabriel noted one or two additional causes of the disease. He had found simple, catarrhal proctitis in a number of cases during the war which seemed to be directly associated with the stress of air raids.²⁵⁴

Ulcerative colitis proved difficult to treat. At a meeting at the Royal Society of Medicine in 1940, Lionel Norbury noted that a large proportion of cases progressed with some rapidity to a fatal issue. He argued that 'when one examines the colon of a well established case it is difficult to imagine how a cure can ever be effected whilst faeces stagnate in the bowel'.²⁵⁵ He argued that surgical treatment was therefore often a necessity, mentioning methods for colon irrigation, but also ileostomies, either leaving the colon in place or followed by colectomy and ileo-rectal anastomosis, or proctocolectomy. His own experience was confined largely to appendicostomies: he found that if the patient survived for the first few weeks after the operation his or her health slowly improved. He had performed two ileostomies, one on a 23-year-old patient who probably already had peritonitis and who died post-operatively, and the other on a patient who then showed a marked improvement. He concluded that ileostomy would appear to be indicated in severe cases with symptoms of toxæmia, abdominal tenderness, distension and extensive ulceration. He noted that the lowest portion of the ileum absorbed fluids, according to physiologists, and argued that the ileostomy should be formed as low down as possible so that the bowel action might be semi-solid rather than a continuous watery discharge. As for colectomy, he regarded this as unnecessary in the earlier stages of the disease and dangerous in the later. Moreover, the rectum was usually involved, but total proctocolectomy 'would seem a very hazardous procedure'.²⁵⁶ Gabriel agreed, arguing that 'appendicostomy is the safest, easiest, least mutilating and most rational surgical treatment', and should be performed before the disease had advanced too far.²⁵⁷ Arthur Hurst argued that appendicostomy as such was of little or no value: the colon could be irrigated effectively from below. Gabriel had recommended the injection of olive oil in the treatment of ulcerative colitis because of its value in relieving a patient with a duodenal ulcer; Hurst was scathing: olive oil 'depends upon its inhibiting effect on the secretion of hydrochloric acid so the analogy fails'.²⁵⁸ Where a case needed operation, he argued, ileostomy should be the procedure of choice. It was the only hope in a fulminating case, even though it required courage to operate. The creation of an ileostomy should usually be followed by colectomy, with local treatment for the rectum unless it subsequently proved too diseased.²⁵⁹

Rupert Corbett also criticised appendicostomy, pointing out that there was a 20 per cent mortality after it and arguing that many would have survived if treated by ileostomy. Despite these arguments, Lockhart-Mummery continued to favour it.²⁶⁰

After two decades or so in which some surgeons and physicians had argued that ulcerative colitis was a distinct disease, and not a symptom of another complaint or a variation of dysentery, this point was accepted in the medical community and the discussion had shifted to consideration of effective treatment. This proved as contentious as earlier debates, with the original definers of the disease, such as Lockhart-Mummery, adhering to their originally radical but now traditional methods, such as appendicostomy. Newly suggested operations seemed too radical and encountered much opposition.

Diverticulitis

New diagnostic tools, in particular x-rays rather than the sigmoidoscope, also played their part in differentiating diverticulosis (defined as the presence of diverticula) and diverticulitis (diverticula with inflammation) from other complaints. Descriptions of the problem date back into the nineteenth century. Cruveilhier in 1849 gave a pathological account of diverticula, and Habershon described the complaint in 1857. Graser in 1889 argued that the disease was not uncommon and described changes resulting from inflammation around the diverticula, calling the complaint peridiverticulitis. He also emphasised the apparent similarity of diverticulitis to cancerous growths.²⁶¹

Before the First World War, diverticula were frequently thought to cause a complaint labelled as pericolicitis. Lockhart-Mummery (1910) described pericolicitis or inflammation of the colon as a disease of advanced life. It could be caused by ulceration, tuberculosis, cancer, syphilis or 'trauma', but its major cause was diverticula of the colon. He described diverticula as small pouches or hernial protrusions, which might later develop secondary inflammatory changes. There was often a thick layer of fibrous tissue in their walls, which he thought was due mostly to inflammation. Although postmortem statistics indicated that diverticula were very rare, Lockhart-Mummery agreed with Graser that the complaint was probably much more common than had originally been thought. Graser had examined the sigmoid flexures microscopically from 28 elderly people at postmortem and found small diverticula in ten. Lockhart-Mummery argued that diverticula could either be congenital or acquired, but that most were acquired. He thought that they could occur in the small intestine, but never in the rectum, probably because of its thicker muscular coats. In most cases they were multiple. Faeces collected in them, causing ulceration, inflammation and

possibly abscesses or perforation, with great danger to the patient.²⁶²

Gordon-Watson recorded visiting an Essex farmer in the middle of the night in July 1913. He operated 'under some difficulty in the farm house with an indifferent lamp light'. He found acute general peritonitis due to a ruptured diverticulum. 'At that time diverticulitis was a new disease, and we called the condition "pericolitis sinistra".'²⁶³ The following year he operated upon a patient, found diverticulitis, resected the colon using Paul's operation, but the patient died when another surgeon attempted to close the colostomy.²⁶⁴

By the time of the First World War the surgeons at St Mark's identified diverticulitis as a separate disease, and in the 1920s and 1930s showed great interest in it. Lockhart-Mummery, in the 1923 edition of his book, renamed the section on pericolitis as 'diverticulitis'. He now held that diverticula were only of clinical importance in the large bowel, causing little problem in the small intestine. He thought that they occurred mainly in the sigmoid flexure. According to Lockhart-Mummery, the most popular theory of origin was that they were due to the pressure of gas in the large bowel, associated with a weakness in the muscular walls. One investigator, E I Spriggs, had carried out a large number of x-ray examinations and shown that multiple diverticula were common in patients over 40. Spriggs suggested that when there was no inflammation, the affliction should be termed diverticulosis. However, Spriggs also held that an inflammatory condition preceded the development of diverticula. Cuthbert Dukes made a careful investigation of a large number of cases and with Lockhart-Mummery confirmed the latter's belief that this was not the case: the development of multiple diverticula was the primary stage and inflammation followed.²⁶⁵

Constipation could be an exacerbating factor, Lockhart-Mummery thought. The best treatment, he argued, was colostomy, followed by excision, when possible, a year later; unless time elapsed to allow the inflammation to subside, resection was very dangerous.²⁶⁶ Both he and other commentators stressed the need to consider cancer when diagnosing diverticulitis. Gordon-Watson described differences in appearance between patients with cancer and diverticulitis, and argued that many apparent cures for cancer by colostomy alone were probably in fact cases of diverticulitis.²⁶⁷

Conclusion

Between 1900 and 1948 there were considerable changes in the diagnosis, differentiation and treatment of colo-rectal diseases, in which the surgeons at St Mark's played a leading role. Changes in anaesthesia, the development of pathology, blood transfusion, methods to reduce shock and a greater emphasis on asepsis and antisepsis laid the foundations for a

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significant growth in surgery. The use of the sigmoidoscope and radiology assisted in the differentiation and diagnosis of diseases, and the increase in the number of operations meant that pathological specimens could be correlated with clinical appearances.

It was after the First World War that research began to be conducted at the hospital, largely in the pathology department. Its focus was mainly on cancer, and the related problem of polyposis coli, but it was extended to other areas too. When the injection of haemorrhoids was being assessed, Dukes analysed tissues from the anal canal; when the aetiology of fistula was being considered, he investigated the anal glands. When treatments for fissure were being discussed, he examined the tissue which Miles termed the pecten band, and when Lockhart-Mummery wrote about the inflammation in diverticulitis, Dukes undertook the pathological side of the work. Using Gabriel's follow-up of cancer patients and Dukes' staging of rectal cancer, assessments of the relative merits of various operations were made along lines which laid the foundations for comparisons between different procedures used in the treatment of other complaints. It was the research carried out at St Mark's that in the end distinguished it from the Gordon, giving the older hospital the greater strength and influence.

CHAPTER XIII

A jewel in the National Health Service?

The surgeons at St Mark's entered the National Health Service with some trepidation. As Gordon-Watson had remarked in 1941, 'if the State takes control of the hospital services, which God forbid, private practice as such may cease to exist and with it much of the initiative that leads to progress and success'.¹ Concern about private practice and the part that doctors were to play in the new service was not the only worry: the voluntary hospitals had over the years engendered strong loyalties and traditions among their benefactors and staff. It was feared that losing control to the state would break these bonds. Moreover, small specialist hospitals like St Mark's did not easily fit into the health service. The hospitals had to justify themselves in new terms: it was not simply a matter of appealing to the charitably-minded, but of demonstrating that they were efficient, economic and fitted into a local and national scheme. Bevan may have termed St Mark's a jewel in his health service – whether his successors and those to whom they delegated power would think so was another matter.

The new health service was divided into three branches – family practitioner, community, and hospital services. There had been a certain amount of attrition amongst special hospitals between 1900 and 1948, as many found that they could not survive financially, especially where several hospitals devoted to the same specialty competed with each other. Further contraction occurred in 1948: it had often been argued that special hospitals offered what was already available in general hospitals and the same point was made in the NHS. In London many special hospitals were linked to general teaching hospitals. The Gordon Hospital for example, together with All Saints' and the Infants Hospital, was linked to the Westminster.² It was intended that these special hospitals should contribute to undergraduate education but in fact most soon lost their identities as they were absorbed by their larger partners, in many cases simply being used as outposts for overflow of patients. The Gordon gradually lost its identity in this manner and its example served as a sharp reminder to St Mark's. While specialist surgeons from prewar years continued to practise at the Gordon, some of its independence was maintained, but as they retired the momentum of the specialist hospital was gradually lost.

The more fortunate special institutions were those which had been declared postgraduate hospitals with associated institutes and were part

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Special hospitals, postgraduate institutes and the University of London⁴

<i>Postgraduate institute</i>	<i>Hospital or group</i>	<i>Recognised by University of London</i>
Postgraduate Medical School of London	Hammersmith, West London and St Mark's Hospitals	1947
Institute of Laryngology and Otology	The Royal National Throat, Nose and Ear Hospital	1949
Institute of Psychiatry	The Bethlem Royal and the Maudsley Hospitals	1949
Institute of Ophthalmology	The Moorfields, Westminster and Central Eye Hospitals	1949
Institute of Child Health	The Hospital for Sick Children	1949
Institute of Obstetrics and Gynaecology	The Postgraduate Medical School, Queen Charlotte's Hospital and the Chelsea Hospital for Women	1949
Institute of Neurology	The National Hospitals for Nervous Diseases	1950
Institute of Orthopaedics	The Royal National Orthopaedic Hospital	1951
Institute of Dental Surgery	Eastman Dental Clinic	1951
Institute of Cancer Research	Royal Marsden Hospital including the Chester Beatty Research Institute and the Pollards Wood Research Station	1951
Institute of Cardiology	The National Heart Hospital	1954
Institute of Diseases of the Chest	The Hospitals for Diseases of the Chest	1955
Institute of Basic Medical Sciences	at the Royal College of Surgeons of England	1957
Institute of Urology	St Peter's and St Paul's Hospitals	1957
Institute of Dermatology	St John's Hospital for Diseases of the Skin	1959

of the British Postgraduate Medical Federation. When the NHS came into effect in 1948 Aneurin Bevan formally recognised twelve such institutes, and several others were recognised during the 1950s. Between 1947 and 1959 these were individually granted recognition by the University of London. In most instances the postgraduate institutes were based on two or more hospitals which specialised in the same areas and which were now linked together under the National Health Service. St Mark's had failed to become classified as an institute – although a link with the Gordon had originally been suggested and an institute might have developed from such an association. However, colo-rectal surgery was not regarded by those in authority as a distinct specialty which justified an institute. St Mark's was fortunate even to have secured the anomalous position of association with the non-specialist postgraduate hospital, the Hammersmith.³

There were distinct advantages in being designated as a teaching hospital. Such hospitals held high status in the NHS: they were administered by boards of governors which were directly responsible to the Minister of Health. Other hospitals were run by hospital management committees which were answerable to regional hospital boards. The board of governors of the Postgraduate Medical School of London oversaw the finances and policy of the three hospitals in its group, the West London, Hammersmith and St Mark's. The board met at the Hammersmith; its chairman, Somerville Hastings, was appointed by the Minister. Hastings was an ear, nose and throat surgeon, a leading figure in the Socialist Medical Association, chairman of the London County Council's Hospital and Medical Services Committee and a member of parliament. One-fifth of the members of the board of governors was drawn from the University, one-fifth from the regional hospital board, one-fifth from the medical teaching staff of the hospitals and the remaining members were appointed by the Minister (in consultation with various organisations) from among those who had been on the governing bodies of the hospitals before the Act came into operation.⁵ It was thus hoped that the voluntary service provided by governors, often with a long interest in their hospital, might be retained. The board of governors appointed various standing committees to help with its work, and committees at the three hospitals reported to it.⁶ The board directly oversaw the appointment of consultant staff at St Mark's; at the Hammersmith, the Postgraduate Medical School was charged with this responsibility.⁷

At St Mark's there was a house committee which oversaw the daily administration of the hospital. Its responsibilities were to 'promote the welfare' of patients and staff, make recommendations on the day-to-day running of the hospital and suggest new policies. Their suggestions were usually referred directly to the relevant standing committee, for example

nursing or finance – although the board was the final authority. The only financial discretion held by the house committee was to spend up to £25 a month from endowment funds on urgent matters, but such expenditure then needed to be reported to the finance committee. The house committee at St Mark's consisted of six members from the board and consultant staff, together with not more than four members appointed on the approval of the board.⁸ The medical committee answered to the house committee, and only through it to the board of governors, although the medical committees of both the Hammersmith and West London committees answered directly to the board.⁹

At St Mark's, Raymond Bull continued as hospital secretary, with responsibilities for the day-to-day administration of the hospital. The surgical registrars took charge of the admission and discharge of patients and the matron was responsible to the board through the nursing committee, rather than to the house committee, although in accordance with the directions of the consultant staff. She also controlled the female domestic staff of the hospital, with the exception of the catering staff, and had considerable rights to engage, dismiss or suspend members of staff from duty.¹⁰

St Mark's at first seemed uncertain of its position within the National Health Service. Its first *Annual Report* under the new system consisted only of a surgical report, with no editorial comment on the year, and not even a list of staff. It was apparent, however, that the medical staff and governors had in the end thought it appropriate – given the negotiations over the establishment of an institute – to change the hospital's name from St Mark's Hospital for Cancer, Fistula and Other Diseases of the Rectum to St Mark's Hospital for Diseases of the Rectum and Colon.¹¹ By the end of 1949, the hospital was beginning to find its voice. The medical staff were once again listed in the *Annual Report*, and comments were made on various aspects of the hospital's work. It was noted, for example, that the amount of work handled in the x-ray department compared favourably with that of a medium-sized general hospital. Particular mention was made of the new colonic lavage department 'specially sponsored by the Ministry of Health, who kindly procured for us two special types of American Colonic Lavage machines' and that medical visitors from all over the world had shown keen interest in this work.¹² (The medical staff at St Mark's referred to the Ministry rather as if it were an especially well-off philanthropist.) The *Annual Report* mentioned that three members of staff had attended the fiftieth anniversary meeting of the American Proctologic Society, reporting their experiences back to the rest of the staff, and that other members of staff had demonstrated their operative techniques abroad. It was also recorded that some 150 physicians and surgeons from 21 different countries had visited the

hospital and that regular postgraduate teaching had been undertaken.¹³

In certain ways the hospital held on to its past. The two wards that had been opened in 1927 above the new outpatients' department had been known only as 'A' and 'B', in the hope that substantial benefactors would come forward after whom they could be named. They were renamed in 1949 after previous surgeons, William Allingham and Frederick Salmon, while fifteen new private single rooms which had been opened in 1949 on the third floor were now named JP Lockhart-Mummery ward.¹⁴ The board of governors suggested in 1948, in accordance with the National Health Service Act, that the house committee at St Mark's should convene a meeting for the public to attend. The committee decided to try to maintain their earlier tradition and secure the Lord Mayor as patron. The Lord Mayor agreed, and he and his successors visited the hospital each year to preside over the Annual General Meeting.¹⁵ The chairman of the committee of management from before the NHS, Judge Norman Daynes, was selected to chair the house committee under the new system. D R B Park and Arthur Brewin continued their families' traditions by maintaining their interest in the hospital's affairs.¹⁶

When the future of St Mark's had been discussed at the end of the war, it had been argued that an association with the Hammersmith Hospital would leave St Mark's largely independent, because of the distance between the two. This proved to be the case, and the minutes of the board of governors indicate that most of its time was spent on the Hammersmith's affairs, with slightly less on the West London (which declined rapidly both in terms of budget and the number of patients treated), with St Mark's relatively ignored. At first, this seemed to suit the hospital which appealed to the board of governors for help when necessary, but followed its own line for the rest of the time. (As a greater check was placed on expenditure in the health service, St Mark's became more concerned about being overshadowed by the Hammersmith.) One of the main overseers from the board was Dame Katherine Jones, by chance an aunt of a member of the medical staff, Francis Avery Jones, while most of those who monitored the weekly progress of the hospital were former governors from the old committee of management.¹⁷

Now that the hospital's position within the NHS relied upon its reputation for teaching and research, it was these aspects that were stressed in the *Annual Reports*, not the relief of cancer as emphasised in earlier years. In 1951 the research department was established at St Mark's under the supervision of a committee consisting of Norman Daynes, Cuthbert Dukes, William Gabriel, Henry Thompson and Raymond Bull. Work on cancer continued to be supported by the British Empire Cancer Campaign. The Medical Research Council paid for the follow-up of patients with cancer, and a general research fund was estab-

lished, consisting of money from the hospital's endowment funds and from the board of governors. The first disease to be investigated by the new department was ulcerative colitis.¹⁸ Three students were taken from the Hammersmith Hospital to learn from the practice at St Mark's and a two week course was offered twice a year for postgraduate students. Also in 1951, the system of quarterly clinical staff meetings was established: during these meetings a survey of all the cases treated in the previous quarter was presented, and deaths and unusual complications discussed.¹⁹

Slowly and steadily the National Health Service began to have a greater impact on the hospital. A steady stream of directives from the Ministry of Health laid down regulations on all elements of the hospital's arrangements. Where these matters particularly affected the consultant surgeons they responded strongly, but usually with little success. In former years they would probably have been able to influence the committee of management, but they found it less easy to persuade the Ministry of Health. One bone of contention was the position of private patients treated within health service hospitals. Private treatment had been allowed only as a compromise to the doctors, and it was intended that such practice should not be a drain on health services resources. In 1949 the official auditor stated that private patient charges at St Mark's were too low. The surgeons asked the house committee to urge against increases in charges, but to no avail.²⁰ In 1952 the Ministry recommended a further increase, to 25 guineas per week for a private bed. The house committee reported that it regarded this 'with the gravest apprehension', and referred to regulations which stated that the charge should be related to the nature of the accommodation provided.²¹ Now that the house committee was no longer responsible for raising the funds for the hospital, there was a closer identification between its members and those on the medical committee. The finance and general purposes committee of the three hospitals, however, recommended to the board of governors that the new charges should be adopted. The medical committee at St Mark's decided to appeal outside the health service by presenting a petition on the subject to the British Medical Association.²² Again, their appeal had no effect. When the subject arose again in 1957, the medical committee took an approach more likely to succeed within the National Health Service: they suggested that there was room for economy in other departments and that priorities on savings should therefore shift elsewhere. Even with this change of tack, the surgeons lost their case once again.²³

Under the NHS, the surgeons' terms of service were altered although in effect little changed. All the surgeons, whether holding assistant or full positions, were given consultant status, employed on contract by the Ministry of Health to work in the hospital (usually part-time to allow

for private practice). They each took one outpatient session and one operating session. However, they were now paid, where before they had worked on a voluntary basis and derived their income from the private practice which came their way as a result of their hospital appointment. The health service did, however, break down the system by which a junior surgeon assisted his senior with operations. Moreover, beds had been unevenly distributed between the surgeons before the NHS was established. For example, Gabriel, as senior surgeon, would have had about 30 beds, while the most junior surgeon had only about three or four. The number of beds counted as a privilege, and it was argued that the older surgeons with more established reputations had a greater need for beds. Under the NHS, this was equalised, with each surgeon being given the same number of beds as his colleagues. As before, however, the resident surgical officers continued to undertake much of the work at the hospital, admitting, tending and discharging patients.

There was little change in the manner in which members of the medical staff were in effect chosen after the health service was introduced: the traditions established earlier continued to be followed. As surgeons retired, they were generally replaced by others who had worked as resident surgical officers, who were therefore already known to the surgeons at St Mark's and trained in their methods. In 1951 Edward Campbell Milligan retired. Two former resident surgical officers were short-listed, and Hugh Evelyn Lockhart-Mummery, the son of Percy Lockhart-Mummery, was appointed – the second instance of a son following his father at St Mark's, the previous instance being that of William and Herbert Allingham in the nineteenth century.²⁴ There was a rare departure from St Mark's in 1954: J C Goligher left to take the chair of surgery at Leeds University. From the time of the First World War, surgeons appointed to St Mark's generally remained at the hospital until retirement, with most then serving as consulting surgeons. However, after the establishment of the National Health Service and the development of close links between teaching hospitals, universities and the health service, a little more movement between the various parts of the service could be seen. Moreover, there were now opportunities for those who were particularly interested in the academic side of medicine to take up appointments, in a way that had not been easy before. Ian P Todd, who was then serving as resident surgical officer, was appointed in Goligher's place.²⁵ In 1956 Cuthbert Dukes retired as pathologist, to be succeeded by Basil Morson, who was already a research fellow; Dukes remained for a time as director of the research department and dean, overseeing postgraduate instruction.²⁶

Appointments so far had followed traditional lines. However, in 1958 there was a break in this tradition. When William Gabriel retired, there

were 38 applicants to take his place. The advisory appointments committee had the same structure as when H E Lockhart-Mummery and Ian Todd were selected, but now chose a surgeon who had not trained at St Mark's. It consisted of the chairman of the board of governors, a 'lay member', a member of the medical staff of St Mark's (Clifford Naunton Morgan), two 'professional members', one of whom was nominated by the Royal College of Surgeons and the other by the North East Metropolitan Regional Hospital Board, and four others, all of whom were nominated by the University of London. In fact three members of the committee were from St Mark's, Norman Daynes (as the lay member) and Francis Avery Jones (from London University) in addition to Naunton Morgan.²⁷ They selected Alan Guyatt Parks, who had already carried out investigations into the anatomy of the anal canal and written on the treatment of haemorrhoids and fistula.²⁸

Under the National Health Service St Mark's was now competing directly with other institutions for funds. The Ministry gradually evolved methods of assessing the relative merits of such claims, but it was always important for institutions to make as strong a case as possible. Arrangements were less flexible than under the voluntary system, although it had been far from the case that every request had been granted in earlier days. The x-ray department at St Mark's, for example, saw a massive increase in its work at this time, and the radiologist, Norman Henderson, complained that the Ministry made an inequitable evaluation of this work.²⁹ In 1952 the Ministry introduced a points system to evaluate x-rays in different hospital departments somewhat more effectively: the x-ray examination of a finger counted as one unit while an opaque enema, as administered at St Mark's, counted as six units.³⁰ Within a year, permission had been granted for the hospital to employ a second radiographer to assist Henderson. In 1953, the surgeons successfully requested a third resident surgical officer. They justified this addition to the staff because Lockhart-Mummery ward had been opened, and there had also been a significant increase in the numbers of outpatients treated, operations performed, and cases of cancer and ulcerative colitis admitted. (The number of operations had risen by 10 per cent simply between 1952 and 1953).³¹ Securing a third resident surgical officer was now a complicated procedure: the request was put to the establishment committee, then referred to the finance and general purposes committee, the board of governors and finally the Ministry for the approval of the Minister himself.³²

Capital expenditure was difficult to secure, especially as the Ministry of Health tried to check the apparently endless needs of the service. St Mark's had to wait its turn with the West London and the Hammersmith, with the latter undergoing considerable upgrading in the 1950s. In 1958, for example, the house committee reported serious overcrowding in the

outpatient department, but was instructed to wait until a new operating theatre at the Hammersmith had been completed.³³ Between 1948 and 1958, 77 per cent of capital expenditure was allocated to the Hammersmith, 15 per cent to the West London and eight per cent to St Mark's. Outpatient attendances at St Mark's were about nine per cent of the total, which indicated that the hospital was getting a reasonable share of capital expenditure, but that the Hammersmith was draining the West London Hospital's share of resources. Of the total budget for 1958/59 St Mark's received almost nine per cent with the Hammersmith receiving about 65 per cent and the West London about 26 per cent.³⁴ Comparing outpatient attendances at the three hospitals, as a guide to the amount of work each undertook, the rising star of the Hammersmith shows clearly against the declining one of the West London.

*Outpatient attendances*³⁵

	<i>Hammersmith Hospital</i>	<i>West London Hospital</i>	<i>St Mark's Hospital</i>
1949	79,712	140,987	14,436
1957	102,011	98,892	19,989

St Mark's secured some capital to make a few changes. In 1951, Somerville Hastings opened an extension to the nurses' dining room and the three floors above.³⁶ The hospital chaplain, Reverend FJ Dove, joined the house committee in 1952 and immediately expressed a desire for a chapel in the hospital.³⁷ Although a regular inspector of the hospital and member of the house committee, D Vernon Tomson, argued that precious space should not be 'wasted' on a chapel, a room was consecrated by the Bishop of Stepney on 9 October 1953.³⁸

When Sir Zachary Cope visited St Mark's for the King's Fund in 1954, he reported that it had proved impracticable to join up the three hospitals in a satisfactory way and that the West London and St Mark's 'now carry on much as they were'.³⁹ Somerville Hastings, who remained as chairman of the board of governors until 1954, had 'believed in complete equality': according to Cope this meant that no one was fired and no decision was taken until '2,000 rules' had been consulted. Hastings' successor, Sir Desmond Morton, was encouraging St Mark's to operate with even greater independence than it had already exercised.⁴⁰ In 1957 the Ministry warned that unless the West London was used for postgraduate teaching it would be detached: in 1959, this was carried out, and the hospital was linked to Charing Cross Hospital. This left St Mark's in an even more anomalous position – as a small specialist hospital loosely attached to a far stronger one.⁴¹

The Hammersmith and St Mark's were very different, not only in size.

The Hammersmith Hospital gradually became more independent of the British Postgraduate Medical Federation, with its loose-knit institutes; the orientation at the hospital was towards scientific research, undertaken by whole-time university-paid consultants. The consultants at St Mark's, on the other hand, were part-time, often with appointments at other institutions, and with significant private practices.⁴² Those at St Mark's still considered the possibility of establishing their own institute, although there was no agreement on the form it might take or the feasibility of the project. One possibility was that it should be an institute of gastroenterology rather than colo-proctology, a move encouraged by the appointment of Francis Avery Jones as honorary consultant gastroenterologist.

Gastroenterology developed as a specialty in the twentieth century, with the British Society of Gastroenterology taking its first shape in 1937. One of those who had attended the first meeting was Avery Jones, who had trained as a physician at St Bartholomew's. Avery Jones was interested in surgical problems and observed Clifford Naunton Morgan's work at St Bartholomew's, collaborating with him in 1938 over an investigation into the action of saline solution, administered to patients to reduce shock during and after operations. Avery Jones' interest in Naunton Morgan's work continued in the 1940s and he made frequent visits to St Mark's. Morgan, Lloyd-Davies and even Gabriel consulted him on some cases of ulcerative colitis and it was decided in 1949 to appoint him to the staff, with his own outpatient session on Friday mornings. He was by this time also on the staff of the Central Middlesex Hospital where he headed the department of gastroenterology.⁴³

Avery Jones was unpaid for his work at St Mark's, and all patients had to be referred to him by the surgeons, rather than directly from general practitioners. Moreover, there were no medical beds: any patient who needed to be admitted had to be assigned to one of the surgeons. It has been suggested that the more successful special hospitals in the post-war period were those which diversified out of their (usually) exclusive concentration on either medical or surgical treatments. Thus the Brompton Hospital for Consumption and Diseases of the Chest which had medical origins, moved into surgery, and was able to take advantage of developments in heart surgery. A similar pattern can be seen at the National Hospital, Queen Square and other special hospitals.⁴⁴ In the 1950s, during the debates over whether St Mark's should form part of a gastroenterological institute, the hospital moved some of the way to becoming both a surgical and a medical hospital.

The hospital was hindered by not being an institute, especially when it came to funding research, because it had no direct university affiliation. The NHS contributed little for research, and by the end of the 1950s the hospital was looking for a source of non-exchequer funds. The

research foundation was initiated in 1959 by Basil Morson, (who had succeeded Dukes as director of the research department), with a £1,000 donation from Mrs Primrose Merriman, in memory of her husband, Mark.⁴⁵ In proposing it to the board of governors, the chairman of the medical committee, Naunton Morgan, stated that the consultant staff had long been aware of 'the inadequate accommodation and facilities for research and postgraduate teaching' at St Mark's.⁴⁶ St Mark's had been in the forefront of advances in the surgery of the colon and rectum, gaining a world-wide recognition. More needed to be done to maintain this momentum:

It is the unanimous opinion of the medical staff that we must not lag behind other institutions specialising in the various forms of medicine and surgery.⁴⁷

The necessity of their own research foundation was re-affirmed by Sir Francis Fraser, the head of the British Postgraduate Medical Federation, who stressed that the University of London was unable to agree to the establishment of an institute for proctology (gastroenterology, it was implied, was another matter).⁴⁸ Although St Mark's might claim to be at the leading edge of work in colo-rectal surgery, and to have taught many of the specialists in its area, it was not in the 1950s treating patients on a national basis. An analysis of the residential areas of new patients attending St Mark's in 1958 showed that 73.2 per cent came from London, 24.2 per cent from the home counties, with only 2.3 per cent coming from the rest of the country. As a specialist hospital, therefore, it could at that time be seen as a national resource only in a limited way.⁴⁹

Things began to look brighter for St Mark's in 1961: that year a scheme was announced which included St Mark's in ambitious plans for all of London's postgraduate special hospitals. The eventual demise of the proposal revealed many of the frustrations of planning within the health service, although in some ways these frustrations were little different from those of the mid-nineteenth century when ambitious plans had to be laid aside because of lack of funds. The new project became known as the Chelsea Scheme: it was intended that several specialist hospitals should be grouped on a new site in Chelsea, in new buildings, where some resources could be pooled but their independence be retained. To the hospitals it seemed an almost ideal solution to the constant problem of defining their place within a national system of health care.

Most of the special hospitals associated with institutes were in old buildings which urgently needed improving. It was rumoured that a property speculator, Charles Clore, had offered to rebuild several of them on his own land in return for their prime sites in central London. Such a scheme, if it was in fact proposed, was not favoured by the Ministry of

Health. However, in 1961 a study group consisting of representatives from the British Postgraduate Medical Federation, the University of London, the University Grants Committee, the Ministry of Health and the Metropolitan Regional Hospital Boards had recommended that rebuilding the hospitals as a group should be considered. Sir Desmond Morton wrote to Basil Morson in March 1961, saying that he had advised the Ministry of Health that St Mark's should not be 'brigaded' with the Hammersmith, and that the Ministry was about to disclose plans to rebuild St Mark's and several other special hospitals as one teaching group on a single site. The plans should come to fruition by 1965 and in the meantime the board of governors could not make capital grants to St Mark's.⁵⁰ A meeting of the medical staff at St Mark's was convened and an immediate reply was sent through Morson. He stated that he was delighted that the 'phase of talking' was moving into a 'phase of action' on the part of the Ministry of Health; it was stressed that the hospital's 'medical independence' and concentration on diseases of the colon and rectum should be retained, but the scheme was welcomed.⁵¹

A week later the medical staff came to more detailed conclusions: certain facilities such as physiotherapy, electrocardiography and medical illustration could be held in common with other institutions but certain points were indispensable. St Mark's should continue to exist as a separate entity, under its old name, as a hospital for diseases of the colon and rectum, although administratively it could be subordinate to a larger organisation. It should continue to have an independent outpatient organisation and records department, as well as independent departments for diagnostic radiology, special pathology, research and postgraduate teaching. It should have its own resident surgical officers of registrar status and its own nursing sisters. Members of the medical staff wished to put right some of the inequalities of their present situation. The hospital should be on an equal footing with other constituent hospitals, and retain its medical committee, which should (in future) report directly to a board of governors.⁵²

In May 1961, Enoch Powell, as Minister of Health, officially announced the scheme for discussion. He reported that the study group had at first considered bringing together all the specialist postgraduate hospitals and their institutes on to one site. However, it was too expensive and impracticable to acquire a sufficiently large site in central London, and the concentration of hospital services on such a scale presented its own administrative problems. It was therefore decided that there should be two groupings on sites already possessed by the Ministry of Health – one in Bloomsbury and the other bordering South Kensington and Chelsea. The Hospital for Sick Children, Great Ormond Street, the National Hospital for Nervous Diseases, the Royal National Throat,

A JEWEL IN THE NATIONAL HEALTH SERVICE?

Nose and Ear Hospital and the Eastman Dental Hospital were already in the Bloomsbury area. It was recommended that they should be developed further on their present sites. It was also suggested that Moorfields should be associated with this group and should be redeveloped with the Institute of Ophthalmology on the site of the Royal Free Hospital in Gray's Inn Road. All these institutes would be in close proximity to departments of the University of London. The second group, in Chelsea, included the Brompton and Royal Marsden Hospitals which were already in the area. Land on which the Chelsea Hospital for Women and St Luke's Hospital now stood, together with neighbouring sites which included a convent, a school and Kingsmead old people's home, should be used for several other special hospitals: St Peter's, St Paul's and St Philip's (the urological hospitals), St John's Hospital for Diseases of the Skin and St Mark's. The central London part of the Royal National Orthopaedic Hospital and the Institute of Orthopaedics might also be linked at a later stage to the Chelsea group (with due access to the Stanmore branch) and land should be secured for the eventual inclusion of the National Heart Hospital with its Institute of Cardiology. It was decided that the remaining postgraduate special hospitals, Queen Charlotte's (maternity), the Bethlem and the Maudsley, did not need to be brought into close geographical proximity with either of the two postgraduate centres.⁵³

The newspapers soon took up the story. *The Times* on 2 June 1961 reported that the new groups would be able 'to stand comparison with any of the great international centres of medical research'.⁵⁴ The *Daily Telegraph* quoted Enoch Powell as saying that it was better to consider the future of the hospitals as part of a ten-year hospital plan for the century rather than to rebuild each postgraduate special hospital, which had grown up 'topsy-turvy on a variety of sites'.⁵⁵ The response in the medical press was positive. *The Lancet* commented that, from the standpoint of research,

... the small special hospital, which was so perfect an instrument sixty years ago, when individuals were developing their subjects on their own, is no longer the ideal place in an era when teamwork and the laboratory have taken the place of the single-handed clinician or surgeon.⁵⁶

The journal warned, however, that efficiency and economy would be poor rewards for an amalgamation which led to 'loss of the pride and tradition of our medically great, though physically small, special hospitals'.⁵⁷

There now commenced long, expensive and time-consuming discussions and plans: it was later estimated that the Ministry of Health spent a million pounds in planning – those at St Mark's estimated that the plans

absorbed about a year of their time. St Mark's submitted its memorandum on what it felt could be pooled and the manner in which it wished to maintain its independence and concentration on colo-proctology: the medical staff requested an institute for their specialty. In its current form, St Mark's, although associated with the Hammersmith Hospital, was not part of the University of London: it served rather as an outpost for students from the Hammersmith. Under the new proposals this was to be reassessed, as all the postgraduate hospitals were expected to have an association with the University.

Sir James Paterson Ross, the new director of the British Postgraduate Medical Federation, put the case for an institute of gastroenterology – not simply colo-proctology – to the principal of London University. He stated that St Mark's had been an important centre of postgraduate surgical training and research, with an international reputation, before the National Health Service came into being. It had been decided at that time that the hospital should be included in the postgraduate organisation, but that its specialty was too narrow to be given independence, and the hospital therefore became a sub-department of the Hammersmith. 'Unfortunately, they are so far separated from Hammersmith that they feel themselves neglected.'⁵⁸ They held no direct university affiliation: 'They carry on their teaching activities without any kind of financial help from the Postgraduate School, and they have no academic status whatever.'⁵⁹ The horizons of the hospital had extended since 1948 'and their work is no longer confined to fistula (the original object of the Foundation) or even to cancer of the rectum and colon.'⁶⁰ Interest had extended to all the other diseases of the large bowel, 'even to the rest of the alimentary tract' and since the appointment of Avery Jones 'they can fairly claim to be a Hospital for the study of gastroenterology'.⁶¹ Ross reported that the Federation received large numbers of requests from students wishing to study gastroenterology, who had to be sent all over London and to provincial centres because there was nothing under the aegis of the Federation. He stated that he had previously considered requesting the University to approve an institute of gastroenterology: he now recommended that this should be established, in association with St Mark's. Although the hospital had some links with both urology and cancer, 'I don't think they would agree to becoming part of either of these Institutes.'⁶² To have an institute of gastroenterology on the site would, he thought, complete the centre in terms of general medicine and surgery: there would be institutes for the chest, urology, gastroenterology, cancer, and, in time, cardiology.⁶³

The proposals which Ross made to the University of London were then forwarded to St Mark's. Some of the surgical staff did not agree that they should head a gastroenterological institute: a 'lively discussion'

greeted the suggestion. Eventual agreement was reached that it was highly desirable for St Mark's to have a university connection, preferably through an institute, and that there should be an institute of gastroenterology in London. However, it was reported that 'the medical staff are against turning St Mark's into a gastroenterological hospital': proctology might be developing hand-in-hand with gastroenterology, but the latter covered a wider field.⁶⁴ It was recognised that St Mark's needed to take urgent action to improve its research facilities in the light of university attention. Two research units were established which illustrated the differences of emphasis among the medical staff regarding the future direction of the hospital. A medical (gastroenterological) research unit was set up under the general direction of Avery Jones; there was also a surgical research unit under Alan Parks, which was to stress physiology, 'a much neglected field as far as diseases of the colon and rectum are concerned'.⁶⁵

Francis Avery Jones was enthusiastic about a gastroenterological institute. He discussed the idea further with Ross, who thought that St Mark's might be expanded to 150 or 170 beds as a gastroenterological hospital, taking a proportion of work affecting the upper alimentary tract. Avery Jones noted that this might change the nature of the hospital 'and it is fair comment that in few hospitals is there closer, friendlier or more efficient collaboration between a group of surgeons and their colleagues'.⁶⁶ He suggested that the hospital might be divided into two parts: one for colon and rectal work, and a new 'gastric' division for the upper alimentary tract, including the liver and pancreas. Gastroenterology was, he argued, a rapidly expanding field with many new techniques for investigation: there was room for expansion in these areas even though the Central Middlesex, St James' and the Royal Free already had strong departments for gastric and liver problems. An alternative plan that was being suggested, of developing an institute outside the University was, he thought, less desirable, although feasible.⁶⁷ It was Alan Parks, in particular, who maintained that making St Mark's a gastroenterological hospital had important implications for its proctological work. He hoped that a balance could be maintained between that work and the desire to fulfil the University's wishes, although agreeing both that there should be an institute of gastroenterology and that gastroenterological work at the hospital should be expanded.⁶⁸ Hopes for an institute of proctology were, however, dashed by the University.⁶⁹

Enoch Powell had announced the scheme for discussion, but with sufficient detail for it to be considered as accepted policy. He had, however, requested further advice on the project from a committee, under the chairmanship of Sir George Pickering, Regius Professor of Medicine at Oxford, which consisted of representatives from the Ministry of Health

and the University Grants Committee. Reporting in September 1962, the Pickering Committee identified two patterns of specialist practice which had evolved in Britain: the specialist hospitals, with their origins in the nineteenth century, which concentrated on description and differentiation of diseases with little laboratory study and experimental research, and the special units in general hospitals, many of which had developed under the stimulus of the Second World War and were more scientifically based. The special hospitals, it was maintained, could not keep up with scientific developments if they were isolated and lacked adequate facilities. They could easily fall into intellectual isolation, insulated by their restricted interests and their separateness from the developments of general science and general medicine and surgery. The Pickering Committee argued that in the past quarter of a century few of the major advances in special fields had come from the special hospitals. They saw three possibilities: associating each special institute with an undergraduate teaching hospital; moving some or all to the Postgraduate Medical School at Hammer-smith; or associating the hospitals and institutes in groups. They rejected the first two, as they felt that they risked losing the identities of the special hospitals and creating excessively large institutions. They therefore endorsed the Powell proposals. In looking at these in detail the Pickering Report recommended that there should be certain central departments such as pathology, microbiology, biochemistry, genetics, biometry and medical physics. Among other facilities which might be shared would be haematology, serology, mycology, virology, tissue culture and an animal house.⁷⁰ Agreeing with the Pickering Report, *The Lancet* hoped that 'all concerned will accept the unpleasant truth that the special hospitals and institutes, as at present constituted, can no longer lead in their special fields'.⁷¹ The *British Medical Journal* also argued that if the special institutes and hospitals of the British Postgraduate Medical Federation were to be the leaders in medical advance 'then their medical staffs must be in the laboratories almost as often as they are in the wards'.⁷²

It was reported that the institutes were to be 'semi-separate' although all housed in one building – a feature little favoured by most of them.⁷³ Correspondence flowed between the various special hospitals and the Ministry of Health about details of the proposed scheme. St Mark's expressed particular concern over nursing arrangements: its nurses needed both specialised training and also a high degree of specialised supervision. Moreover 'the kind of nursing required is very arduous, and unpleasant, and only a specially dedicated individual would choose permanently to do it'.⁷⁴ The medical staff was also anxious to be reassured that the Minister 'will maintain what he builds'.⁷⁵

Nothing further was heard of the project in Bloomsbury but in 1962 a planning coordination committee for the Chelsea Scheme was created,

chaired by Sir Miles Clifford, a veteran colonial civil servant, former governor of the Falkland Islands, and then director of the Leverhulme Trust Fund. Its task was to get the project off the ground. The Ministry delayed over its approval of appointments to the project team, which was not complete until September 1964.⁷⁶ However in April 1963 Brian Langslow, who was an administrator at one of the hospitals involved in the scheme, the Royal Marsden, was appointed as project officer to oversee the development, building and opening of the new postgraduate centre.⁷⁷

In the meantime there was considerable concern among the staff at St Mark's that full discussions of the new plans should take place and that their suggestions should be carefully presented to the Ministry. In particular some were worried about the concept of a central authority.⁷⁸ It was recommended that each department should decide with corresponding departments in the other hospitals what could be shared and what held independently. By early 1963 the radiologists, pathologists and anaesthetists were already engaged in such discussions.⁷⁹ J R Bignall, the dean at the Institute for Diseases of the Chest at the Brompton Hospital, was given the task of coordinating the attitudes of his fellow deans. It was generally agreed that each institute should have a separate building, but with the shared facilities of a central medical science block. Negotiations indicated that an institute of gastroenterology was still under discussion, but that 'the academic side' of St Mark's Hospital should be considered as a separate unit.⁸⁰ At St Mark's, Alan Parks stressed that St Mark's must retain '*within its own walls a complete research and teaching unit*'.⁸¹

Sir James Paterson Ross urged Bignall and the other deans to clarify the aims of the postgraduate centre, arguing that teaching and research should predominate in the group. He thought that the special hospitals should not have as many beds as they were asking for: they should be selective in their admission procedures. 'Routine' clinical work should be dealt with elsewhere. He rejected the notion that to put academic needs first harmed patient care; he also referred to a fear being expressed by neighbouring hospitals that they would lose patients once the new centre was opened.⁸²

By the end of 1963 details of the 'New St Mark's Hospital' had been drawn up. There should be a nurses' home, a hostel for resident medical staff, another for relatives of dangerously sick patients, even two chapels (one Church of England and the other Roman Catholic). Essential facilities were defined, and a possible lay-out was suggested, based on a building of seven or eight floors together with a basement. There were to be four operating theatres, 30 private beds and two 25-bedded wards. Each floor was described in detail – even down to bays for food trolleys. Whether the hospital was to have its own institute was regarded as

primarily a matter for the University, although it was accepted that there would probably be no institute of proctology.⁸³ Continued discussion emphasised the necessity of St Mark's remaining as a physically separate unit. As Alan Parks put it, it was unrealistic to envisage that the hospital's medical identity 'would long survive the administrative and economic pressures which must inevitably arise, compelling a fusion of institutions in a tower block'.⁸⁴

In the space of two years, plans had proceeded swiftly. There had been a remarkable amount of agreement between the various hospitals, perhaps because it was recognised that such hospitals had an uneasy place within the health service and this scheme welded them together, with new buildings, in a strong partnership. It was later noted:

In a profession notorious for its internal rivalries, the degree of concord reached by doctors, administrators and governors involved is described by those closest to it as 'astonishing' and 'unprecedented'.⁸⁵

Once assembled, the team, headed by Langslow and Dr Courtney Wade and working with the architects, Llewelyn-Davies Weeks, produced its development plan and report within six months. It confirmed that the scheme was practicable and acceptable to all parties. The University Grants Committee and London University had given their support.⁸⁶ But already things had changed.

In 1963, Enoch Powell was succeeded at the Ministry of Health by Anthony Barber. Barber had been there only a short time when the general election of 1964 brought Labour to power, and Kenneth Robinson became Minister of Health. It was later remarked that whereas both Powell and Robinson showed genuine concern with the Ministry, other Ministers had their eyes on other departments.⁸⁷ Whether there was a lack of leadership at the top in the critical years, the Ministry was attacked for an 'unbelievable capacity to evade decisions'.⁸⁸ The first requirement was to clear three sites for the new hospitals. Two of them, St Luke's geriatric hospital and the Chelsea Hospital for Women, already belonged to the Ministry. The third, Kingsmead old people's home, belonged in the initial stages to the London County Council but in local government reorganisation (in which the Greater London Council was established and the boroughs reorganised) Kingsmead passed to Kensington and Chelsea Borough Council, a change which had long been known about. The Ministry was criticised for delaying the decisions to move its own hospitals and for failing to clinch an agreement with the LCC which could have coped far better with arranging for alternative accommodation for the 300 occupants of the old people's home, unlike the local council for which such arrangements were a proportionately greater burden. It was the problem

of Kingsmead which became the stumbling block to the whole project.

It was planned that a meeting should be held at St Mark's on 2 June 1965 to consider the rebuilding of the hospital, at which the project team, including the architect, were to be present. On 19 May it was cancelled because of 'certain difficulties'.⁸⁹ As it was reported in the *Chelsea News* on 27 May 1966:

Kingsmead old people's home sits on the site where building of the huge Chelsea post-graduate medical centre . . . is planned to begin. Five years ago the scheme was announced. Until Kingsmead is pulled down it cannot begin. Now – Kingsmead gets a £3,500 facelift.⁹⁰

The Ministry told those who were involved in the scheme that it did not know when the Kingsmead site would become available, if ever. The scheme now had a place in the Ministry's programme for 1976. The chairman of the St Mark's house committee, Richard Parker, protested: 'We have already been engaged on the project for four years: to add ten years to that makes half a generation'.⁹¹ It was a far cry from the 1961 promises that the new complex would open in 1965.⁹² *The Lancet* criticised what it described as 'apathetics anonymous' in the Ministry of Health: the uncertainty 'would have been resolved long ago had it not been for the lack of dynamism . . . of the Ministry of Health'.⁹³ London was in danger of losing its position in the 'more recondite clinical specialties'.⁹⁴

At the end of April 1966 Brian Langslow resigned in frustration: 'My job is to plan hospitals which are going to admit patients, not merely to plan plans'.⁹⁵ Hugo Young, as social services correspondent of the *Sunday Times*, reported on 1 May that the Chelsea Scheme 'stands this week on the brink of collapse owing mainly to the Ministry's own failure to carry it through.' Langslow 'leaves behind him a wooden hut on the site, an architect's secret model of the project, and thousands of man-hours of committee-work, all that there is to show for the grandiose plan'.⁹⁶ The story was told that a committee member had asked a representative from the Ministry whether the Kingsmead site would become available in 1968, adding 'I will accept as an answer Yes, No or Don't Know.' The response came: 'The Ministry is not yet in a position to say that it doesn't know'.⁹⁷

The scheme was not actually abandoned, although some hoped, for the sake of clarification, that it would be. It had been conceived as part of an overall 'plan' for the rebuilding of old hospitals in Britain generally. In May 1966, Kenneth Robinson issued a White Paper entitled 'The Hospital Building Programme': the 'plan' had become a 'programme'. However, the Chelsea Scheme was included as one of those to be started in the next four years.⁹⁸ At a press conference, Robinson said that

the Kensington and Chelsea Borough Council had undertaken to replace the Kingsmead old people's home by 1971. 'The hospital town is "very firmly" in the programme', the *Chelsea News* reported.⁹⁹ However, in a leaflet distributed through the borough in March, the council had continued to express opposition to the loss of beds locally for the aged and chronic sick.¹⁰⁰

Only two months after Kenneth Robinson had reaffirmed that the Chelsea Scheme would definitely go ahead, a Ministry official stated to the planning coordination committee on 27 July 1966 that the scheme was to be put into temporary abeyance, although (and this was not a firm promise) she envisaged a starting date of 1972/3 for building. No finance and no sites would be available until at least 1970. The committee decided, therefore, that it fulfilled no useful purpose for the present and that it should go into 'cold storage' until it became clear that there was some justification in making specific plans again.¹⁰¹ In the meantime, the Ministry of Health promised to proceed with the project. A year later the Ministry wrote to say that although two of the sites looked as if they would become available by 1972, there was no prospect for the site of the Chelsea Hospital for Women becoming available before 1973/4.¹⁰²

During the negotiations over the Chelsea Scheme, it had been seen that the hospital's gastroenterological work might be critically important in securing the hospital's safe future. Francis Avery Jones had been running the medical outpatient clinic at St Mark's since the early 1950s, on an honorary basis. In 1964 he recommended that a consultant gastroenterologist with an allocation of beds should be appointed. He argued that although St Mark's remained primarily a surgical hospital there were various conditions, in particular ulcerative colitis, which needed medical assistance: the introduction of corticosteroids and other treatments had given the physician more scope in the treatment of bowel diseases. He noted that there were often up to a dozen inpatients largely under the care of the gastroenterologist. The outpatient clinic was staffed in an honorary capacity by clinical assistants mainly from Avery Jones' department at the Central Middlesex; up to 50 patients were seen at each session. Avery Jones concluded that 'in effect an appreciable proportion of the normal hospital routine work is being done in an entirely honorary capacity or without recognition being given to the status of some of the staff concerned.'¹⁰³ Although no record of the new appointment was made in the relevant *Annual Report*, Avery Jones' suggestion was accepted and JE Lennard-Jones, who had already carried out several years' work in an honorary capacity at St Mark's, was appointed as consultant gastroenterologist. Early in 1965, two side rooms on Allingham Ward were converted to provide three medical beds.¹⁰⁴ There were also two changes in

the surgical staff around this time: Clifford Naunton Morgan retired in 1967 (Charles V Mann was appointed) and O V Lloyd-Davies retired in 1970, to be replaced by Peter R Hawley.¹⁰⁵

Perhaps because the role of St Mark's seemed uncertain, further developments emphasised its separate and specialised identity. In 1966, the St Mark's Association was formed, consisting of those who were medically qualified and were currently, or had been, on the staff of the hospital or in the research department. In addition, those who had particularly contributed to the field or those who had rendered 'special service' to the hospital could be invited to become members. Its object was 'to advance the study of diseases of the colon and rectum' and to facilitate contact, both professional and social, among those 'interested in the practice of St Mark's Hospital'.¹⁰⁶ In effect it helped to place the hospital as a central focus of the specialty, linking surgeons (mostly) from all over the world who had acted as researchers, resident surgical officers, or in other capacities at the hospital. It created an informal professional body for colo-rectal surgery. In addition to those on the staff there were 144 other surgeons and physicians who were eligible for membership, many of whom joined. The countries listed by each name give an indication of the influence of the hospital throughout the world: 19 (13 per cent) previous members of staff or researchers came from Australia, eight (six per cent) from Canada, six (four per cent) from the USA, five (three and a half per cent) from Ireland, four (three per cent) from New Zealand, and four (three per cent) from South Africa.¹⁰⁷

Given the strong Australian link, it was not surprising that when the section of proctology was formed in 1963 at the Royal Australasian College of Surgeons, gratitude was expressed to members of staff at St Mark's for their work. The surgeons from St Mark's sent a gavel and block to commemorate the new formation: and on the block were emblazoned the crests of the Royal Australasian College of Surgeons, the Royal College of Surgeons of England, the Royal Society of Medicine (to which the British section of proctology belonged) – and a red lion with gold wings representing St Mark's Hospital.¹⁰⁸ Postgraduate students, of course, continued to come to the hospital from all over the world. As the academic side of the hospital's work became more highly developed – and the hospital continued to try to secure independent recognition from the University – increasing reference to research and teaching was made in the *Annual Reports*. In 1966 the academic board made its first report. The names and country of origin of the 22 postgraduate students were listed, and details of other visitors were given, together with information about courses, and the professional activities, lectures and travels of the medical staff. This account supplemented that of the research department which had since its estab-

lishment regularly issued a report, describing in some detail the research at the hospital.¹⁰⁹

Capital projects had been held back by the Chelsea Scheme, as the Ministry and the board of governors at the Hammersmith Hospital refused to make interim grants. However, further facilities for research were needed if the hospital was to justify university status. In 1966 the research department had become a separate department of the hospital; a biochemistry laboratory had been established in 1967. Temporary huts at the back of the hospital were pulled down and an equally temporary-looking research building was erected to house the research units. This was formally opened on 25 April 1968 by Sir John McMichael, then director of the British Postgraduate Medical Federation.¹¹⁰ The Federation had, from 1964, been giving the hospital £2,000 a year towards research.

By 1966 further delay in the consideration of the Chelsea Scheme was recommended by the Ministry while it waited for a Royal Commission headed by Lord Todd, established in 1965, to report on medical education. Members of the commission reported in 1968, and their conclusions fundamentally undermined the philosophy behind the Chelsea Scheme. They rejected the fears of the special hospitals and institutes that they would lose their identities if linked with undergraduate teaching hospitals. On the contrary, they recommended that close links should be established as quickly as possible between the special hospitals and the teaching hospitals, and between the postgraduate institutes and the undergraduate medical schools. The special hospitals should be rebuilt in close geographical proximity to the general teaching hospitals – or even assigned wards or a block within them. In particular, they felt that the special hospitals needed associations with basic science laboratories. It was suggested that St Mark's, however, might be rebuilt in association with the Hammersmith and Queen Charlotte's Maternity Hospital. Although the commission did not favour the separation of postgraduate from undergraduate teaching, in the case of the Royal Postgraduate School this seemed inevitable. They recommended that the Chelsea Scheme should be abandoned as incompatible with their conclusions.¹¹¹

The medical committee at St Mark's had failed to submit its own suggestions to the Todd Commission, and was not happy at its outcome. The medical staff did not favour an association with an undergraduate teaching hospital, but neither did they wish to rebuild at the Hammersmith. They continued to favour the Chelsea Scheme, even though any life remaining in the project had been virtually extinguished by the Todd Report. They reiterated that the hospital wished to develop in the central London area and that the hospital should move towards a more formal university status, as either an institute for intestinal diseases or an institute

of gastroenterology.¹¹² Avery Jones expressed regret that St Mark's had not submitted its own evidence to the Todd Commission. He urged that a united front now be presented, with a clear notion of the future of St Mark's. He stressed that the hospital had to take into account the fundamental principles of the report – it was no use wishing for the reinstatement of the Chelsea Scheme. He agreed that St Mark's was more likely to survive as a specialist hospital serving the whole metropolitan area and beyond if sited inside the inner circle: to be rebuilt in the proximity of the Hammersmith Hospital would be disastrous. He argued, as before, for the association of the hospital with an institute of gastroenterology, to allow St Mark's to be responsible directly to the University. The hospital could concentrate on enterology (that is, only on the small and large intestine), linking up with other gastroenterological centres in London. He did not think it worth seeking to have an institute of enterology as 'no support for this idea had been forthcoming from the Postgraduate Medical Federation in recent years'.¹¹³ The association with the Hammersmith should be relinquished and a link established with a central London teaching hospital. St Bartholomew's was a possibility: Bart's itself would have a link with The London Hospital, on the commission's recommendations. Ian Todd was already a surgeon at St Bartholomew's, with Alan Parks and Charles Mann at The London. The other possibility, which Avery Jones favoured, was a link with University College Hospital, which was to be associated with the Royal Free. John Lennard-Jones was on the staff of UCH, and Professor Sheila Sherlock had established her liver research unit at the Royal Free which could complement work at St Mark's.¹¹⁴

By late 1968, it was accepted that St Mark's would probably be linked to an undergraduate teaching hospital, but the two main options now preferred were either The London or St Bartholomew's. It was argued that both had a similar patient catchment area to that of St Mark's: there was some fear at the hospital that patients would be lost if the hospital turned its attention westwards towards University College. Moreover, the gastroenterological element was less strongly favoured. Those surgeons who felt that the proctological side of the hospital's work might be neglected if it stressed gastroenterology were investigating an association with the Institute of Urology.¹¹⁵ By Christmas, approaches had been received at St Mark's both from The London and St Bartholomew's. Those at St Mark's wrote back that they were interested in talking, but the complete identity of the hospital must be preserved in any arrangement. Meetings were held with both teaching hospitals early in 1969. The London was currently negotiating an extensive rebuilding programme with the Ministry of Health and suggested that St Mark's should have its own building within the complex: the larger hospital wished to expand its

postgraduate facilities considerably and saw St Mark's as contributing to this. Negotiations with St Bartholomew's were more limited, specific and short-term. It was suggested that some exchange of junior hospital staff would be beneficial to both institutions and that cooperation between the pathology, radiology, surgical and gastroenterological units over staff and facilities would be useful. The St Mark's representatives left the meeting at St Bartholomew's 'with the impression that there was an immediate opportunity for practical collaboration with Bart's at a professional level.'¹¹⁶ In contrast, the Hammersmith Hospital was planning its own rebuilding with no provision for the inclusion of St Mark's.

After considerable discussion, the members of the medical staff at St Mark's issued a report for the Ministry of Health and the University Grants Committee to use when deciding on the hospital's future position. The report stressed the uniqueness of St Mark's with its 'exceptional concentration of experience' in its chosen area.¹¹⁷ It was the only academically-orientated hospital of its kind in the world. It offered several courses: an FRCS course twice yearly, participation in the gastroenterology and general practitioners' courses of the British Postgraduate Medical Federation, a course for consultant pathologists, biennial conferences for consultant surgeons and senior registrars, as well as courses for postgraduate students. It was stressed that the research department was now incorporated as a department of the hospital under the board of governors. The report also mentioned that in 1968 the World Health Organization had designated St Mark's as an international reference centre for the nomenclature and classification of intestinal tumours under the direction of the pathologist, B C Morson. Although the conditions treated in the hospital were also treated in general hospitals, it was maintained that the standards of surgical practice elsewhere 'left much to be desired in this field, as it has often been regarded as a less interesting aspect of medicine and surgery.'¹¹⁸ The report agreed that St Mark's was no longer a viable unit on its own – problems under the NHS had included a lack of nursing staff, comprehensive investigative and ancillary services – 'the wisdom' of the Todd Report was accepted but the medical staff were as anxious as ever to preserve the independence of the hospital. It was claimed that virtually all surgeons in the United Kingdom specialising in colon and rectal surgery had had some training at St Mark's. Looking to the future, it was argued that the hospital should continue to be predominantly surgical, but with a growing medical side: there should be 100 surgical and 25 medical beds.

The fact that we are denied the same kind of University support

accorded to other special hospitals in the London area is a matter of regret. We wish to become an Institute of the University of London.¹¹⁹

They suggested either joining an institute of gastroenterology (as outlined by Francis Avery Jones) or an institute for diseases of the colon and rectum (as preferred by several of the surgeons), but recognised that the former was the 'more realistic concept'.¹²⁰

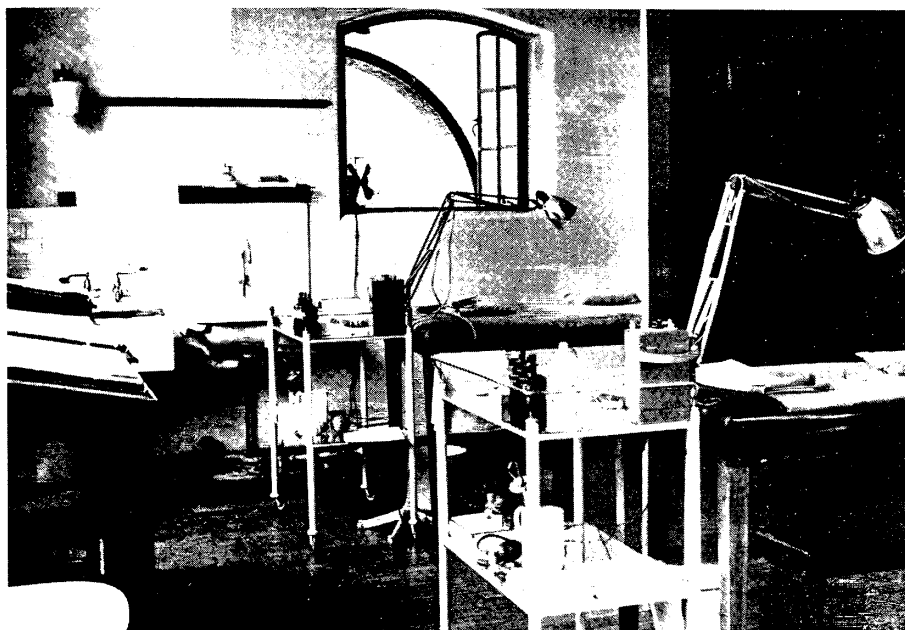
As St Mark's entered the 1970s it was seen that the hospital depended for its survival on public support. Members of staff had earlier addressed the Ministry of Health, as the hospital's paymaster. In the end, though, Ministers were subject to the electorate, and it was to the general public that the hospital now addressed itself. The *Annual Report* for 1971 reflected the change of emphasis: it was presented as a magazine. The essence of earlier reports, the analysis of the hospital's medical work, was relegated to a removable supplement. The anxiety at the hospital over its future was reflected in 1971 when a press conference was held at the hospital, attended by the major newspapers and the BBC. Two developments within the health service were proceeding simultaneously: one was the result of the Todd deliberations and the other was a wider-reaching reassessment of the service generally. St Mark's was involved in negotiations over its status as a postgraduate teaching hospital; it was also potentially affected by the attempts of the Green Papers of 1968 and 1970 to organise the health service more effectively, and more economically. In any planning to improve coordination between parts of the health service on a local basis, St Mark's as a small, specialised and rather anomalous hospital, was at risk. However, both the Department of Health and Social Security (its name changed from Ministry of Health in 1968) and the University of London approved of the removal of St Mark's from under the wing of the Hammersmith Hospital to its nearest undergraduate teaching hospital, St Bartholomew's. The change was implemented in 1973, and the long term plan was to rebuild St Mark's within the current site of St Bartholomew's. Representatives from both St Bartholomew's and The London now joined with those at St Mark's in an endeavour to form a gastroenterological centre. In 1973 a postgraduate centre of gastroenterology – planned for Charterhouse Square – was granted provisional university recognition. J E Lennard-Jones was appointed as reader (and was later granted professorial status) in gastroenterology, with clinical and research facilities both at St Mark's and The London. It was hoped that in due course similar full-time appointments in surgery and pathology would follow. The British Postgraduate Medical Federation doubled its grant to £4,000 a year.¹²¹ However, the proposed centre itself remained at the planning stage and never developed further because of lack of sufficient university support. In 1974 there was

a change of staff among the surgeons: Henry Thompson retired, and James P S Thomson, who had served as resident surgical officer, was appointed (he also held sessions at the Hackney Hospital, within the district). Reflecting the growth of the gastroenterological side of the hospital a second gastroenterologist, Christopher B Williams, was appointed in 1974, charged with the task of setting up a colonoscopy unit.¹²²

No sooner had St Mark's made the administrative change to St Bartholomew's than reforms within the NHS, under discussion for almost a decade, were enacted. The new structure of the NHS implemented in 1974 attempted to unify the hospital, community and family practitioner services which had previously been run as three different entities. Now the country was divided up into regional health authorities (there were fourteen in England, and the Thames area was divided into four) whose tasks were mainly planning and supervisory, with day-to-day matters delegated to area health authorities. Most area health authorities (AHAs) were co-terminous with county and metropolitan boundaries. The third tier in the service consisted of health districts managed by district management teams (DMTs). Each district served a population ranging from 100,000 to 500,000 people and it was intended that they should supply the complete range of services to their local population. The district management teams now took over the tasks of the boards of governors of the teaching hospitals, as well as other functions in the district.¹²³ St Mark's joined the City and Hackney Health District, in the City and East London Area Health Authority (Teaching), itself within the North East Thames Regional Health Authority.

The years 1974-1984 were full of ironies for the hospital. In many ways it was very successful, both professionally and in terms of fund-raising for the research foundation. On the other hand it came as near as ever to closure. St Mark's remained in an anomalous position: it was small, when the Department of Health and Social Security argued that it was more efficient to have a few, large institutions than numerous small ones; it was funded within a district, although the majority of its patients came from outside that district. When the National Health Service was established, teaching hospitals were directly answerable to the Minister of Health. Now St Mark's found itself at the other extreme. The district management team, with increasing pressure on funds as inflation and reduced economic growth undermined national prosperity, were required to fund a hospital which supplied only a limited service to those in their district. To allocate resources to St Mark's potentially penalised other deserving medical concerns (especially in an inner city area) which actually provided more care for those in the district.

This newly threatening pressure developed at a time when the hospital



The outpatient department in the 1950s



One of the operating theatres in the 1980s



St Mark's today

was attracting significant philanthropic support. When the National Health Service was established, former contributors and supporters faded away, the City guilds directed their funds to other worthy causes and the close network of philanthropists who had supported the hospital began to break up. With NHS support, the hospital did little to retain their assistance. Even though the level of health service expenditure was questioned from the early 1950s, St Mark's felt little effect from restrictions until the 1970s. The hospital once again looked to private sources to fund additional developments, particularly for research, since the NHS (and London University) were seemingly unable to help. Between 1973 and 1975 the St Mark's Research Foundation received £600,000 from a former private patient of one of the surgeons. Another particularly generous donor to the hospital was Sir Charles Clore who was also, in the last years of his life, a patient of a St Mark's surgeon. Clore donated money which was used to modernise the board room to make it both a lecture theatre and a room for social occasions. A subsequent and much larger donation was used to carry out expensive alterations to the old nurses' home, creating a new department of postgraduate studies, library and endoscopy offices.¹²⁴ The link with St Bartholomew's also proved beneficial: hospitals had been allowed to retain their endowments when they entered the NHS, and in the cases of the older teaching hospitals these were often very substantial. St Mark's now received occasional grants from the special trustees of St Bartholomew's and St Mark's Hospitals. Together with the St Mark's research foundation, the special trustees funded the new colonoscopy unit. The King's Fund continued to make grants, earmarked for projects such as buildings (they did not support research). A local charity, the Cripplegate Foundation, enabled the hospital to develop a parenteral nutrition unit.¹²⁵

Yet, against this background of upgrading and expansion, through charitable support, the hospital's prospects did not look good. Avery Jones expressed grave concern for the hospital's future in the introduction to the *Annual Report* in 1975.

Although it is Government policy these days to decry the small hospitals, nevertheless it is possible for them to remain extremely active and to provide a first-class service not only to the public but to the National Health Service itself.¹²⁶

He argued that St Mark's had succeeded in making 'a hitherto dull and uninteresting aspect of medical practice' into a field which attracted 'the best brains, both on the medical as well as the surgical side.'¹²⁷ The declaration by the area health authority in its plan for 1976 to 1986 that it intended to 'maintain [St Mark's] on its present site during the

next decade' seemed to do little to reassure those at the hospital.¹²⁸ In view of the perceived threat to it, the hospital issued a document for the new royal commission on the National Health Service in 1976, an action it had not taken for the Todd Commission. It made the case for St Mark's as one of 'Britain's leading small specialist hospitals'.¹²⁹ The hospital fulfilled several functions: it helped to develop 'new and highly economic' treatments, while also acting as a referral centre on a national and international scale, despite operating in a small unit which 'in current administrative terms' was not thought economically viable.¹³⁰ It was maintained that the hospital in fact operated most effectively as a small unit. After outlining its work, the submission concluded that the hospital had fears 'that progress will be impeded unless administrators understand that specialist hospitals cannot easily fit into the usual concepts of a cost-effective size and district commitment'.¹³¹ With 34 per cent of outpatients and half of inpatients coming from outside London, it was appealing to be removed from the straitjacket of district funding: 'we ask the Royal Commission to recognise its national as well as its local role.' Moreover: 'The hospital is uneasy that it is dependent on funding based on local needs in an area of social deprivation.'¹³²

Those at the hospital were right to be concerned: economic stringency began to have a potentially disastrous effect on St Mark's. There were two factors in the immediate change of circumstances: RAWP and cash limits. In an attempt to redistribute resources from the better-off to the poorer areas, the resource allocation working party (RAWP) was set up. London had always been far better provided with hospitals and doctors, and this had remained so under the NHS. Money was therefore re-allocated away from the Thames regions, to medically poorer areas. Within those regions, too, emphasis was shifted from central areas with good provision to those without. All the attempts by the King's Fund and others earlier in the century had achieved little: RAWP began to take effect. St Mark's was in the area which was considered to be well-provided for. Money was therefore re-allocated within the North East Thames region to Essex, which had proportionately fewer hospitals. Moreover, in 1976, in an attempt to reduce inflation, the government placed cash ceilings on its spending departments. In the National Health Service, each region, area and district was allocated a budget, with the penalty that if they overspent, the money was taken from the following year's grant. By November 1976 it was clear that the City and Hackney Health District would overspend by £650,000 in that financial year. The district management team took the kind of actions being taken elsewhere: they decided to close wards until the end of the financial year. Such actions had been common enough before the NHS was established. But under a nationally coordinated system, there was a new danger: the wards might never

reopen, and the district might be tempted to close the remaining wards, having found themselves in continued financial difficulty, and without having suffered unduly from the first closure.

St Mark's heard on Thursday 25 November through the *Evening Standard* of the DMT's decision to close 40 of its 93 beds. The following day they received a letter from the DMT: in order to save money on a temporary basis, half of the hospital was to remain closed until the end of the financial year, 1 April 1977. Over the weekend rapid negotiation went on, in which St Bartholomew's and the Hackney Hospital each agreed to close an extra ward, and by Monday the district administrator was able to reduce the closures at St Mark's to 14 beds – Fournier ward was closed.¹³³

As soon as the first report appeared in the *Standard*, a public relations consultant, Robin Liston, a relative of whose had been a patient at the hospital, offered St Mark's his assistance. The hospital began to mount a massive publicity campaign.¹³⁴ A steering committee was formed, with representatives from all sections of the hospital – administrative, technical, medical, nursing, maintenance and domestic – the first such representative group in the hospital's history. Patients who protested at the planned closure were urged to write to their members of parliament. One wrote to George Cunningham, MP (Labour) for Islington South and Finsbury, whose constituency included the hospital, and who now began to put great pressure on the Department of Health and his own party in government to reopen Fournier ward.¹³⁵

Problems at the hospital were exacerbated in the winter of 1976–77. In the first and only instance, some of the members of staff at St Mark's went on strike. Members of NUPE among the porters and catering and technical staff struck in sympathy with members of NUPE at St Bartholomew's who were protesting at cuts in overtime payments due to the NHS economy measures. However, the hospital continued to function almost normally, as the technical, medical, nursing and administrative staff filled the gaps. It was reported that Miss Liddiard, the senior nursing officer, spent the morning scrubbing kitchen floors, and a rota from early in 1977 shows Christopher Williams manning the switchboard all night on Sunday 16 January and Basil Morson performing the same task on the following Tuesday.¹³⁶

Cunningham's steady pressure on the Department of Health resulted in a visit to St Mark's on Friday 11 February 1977 of one of the junior ministers, Roland Moyle. A petition was presented to Moyle which stressed that the DMT's 'panic decision' to close half of the hospital in November had been made without due consultation; confidence had not been restored by the restriction of this closure to one ward, and the strike was blamed partly on this. It was strongly argued that the method of

financing St Mark's was not appropriate: less than half of its work directly concerned patients in the district. It was inappropriate to starve the district of funds for St Mark's.¹³⁷ Basil Morson and Sir Francis Avery Jones appeared on the BBC and ITV local news programmes to explain the hospital's position. However, the press seized upon a rumour that the hospital itself would close, which was strongly denied by St Mark's.¹³⁸

The area health authority then decided that the Metropolitan Hospital and the London Jewish Hospital should be closed, but this needed Ministerial approval before the money saved could be re-allocated. As April drew closer the district management team could only assure the hospital that the ward would be reopened 'as soon as possible'. April 1 came and went. On 5 April 1977 George Cunningham took some action. He began to use parliamentary procedures to delay work in the House of Commons. He warned on 6 April that he would continue to filibuster until the matter of St Mark's was addressed. 'I could, of course, have done the same sort of thing on Monday night on all the Budget resolutions, but, being a very understanding person, I did not do that....'¹³⁹ He warned that a single MP, like Horatius holding the bridge, could create parliamentary havoc. He pointed out that about twenty or thirty MPs had received letters from constituents about St Mark's: what would happen, he asked, if all filibustered. He took advantage of the adjournment debate for Easter to introduce the subject of the hospital: it had originally been given five weeks' notice to close half of its beds. There had been no consultation.

I gave a warning last December that this was not to happen to a hospital in my area – that this sort of last minute ordering about of medical staff as to what they would be able to do must not be repeated.¹⁴⁰

Although the figure had been reduced to 14, this was still a large proportion of a 90-bedded hospital, and now the DMT had stated that the ward would not be opened 'until some vague time in the future'. The amount the closure was supposed to have saved was originally quoted as £60,000 but this was drastically revised later by the Department to £18,000. 'This is no way to run anything, far less a hospital, and far less one dealing with cancer.'¹⁴¹ Cunningham stated that he would not normally seek to substitute his judgment for the judgment of the health authorities, 'all three tiers of them', and the Minister.¹⁴² But where the manner in which decisions had been taken was clearly at fault 'I am prepared to use parliamentary judo.'¹⁴³ He warned that he would continue to delay proceedings in parliament until told that the ward would reopen. If it was in April, he would lift his sanctions as soon as he was

informed, if May he would lift them only when it was reopened, if June, a week after it reopened, if July two weeks later, and so on.

Let me close by quoting the deathless words of the district administrator of the health authority concerned. Standing two feet away from the responsible Minister, he said: 'St Mark's must take its share of the misery.' I am glad to say that the Minister informed the district administrator that that was not the principle on which a hospital service should be run.¹⁴⁴

Cunningham was as good as his word, and consistently exercised his parliamentary rights to delay business that might otherwise have been expedited. He forced votes when no one opposed the motion, and insisted on his right to speak for two minutes on a number of subjects on which he was in fact in perfect agreement with the government.¹⁴⁵ On Friday 22 April, Cunningham persuaded Arthur Lewis, MP for Newham North-West, to join him in delaying agreement on a money resolution brought at 4 pm. Cunningham noted that it was not normal for a money resolution to be considered at the end of the day on a Friday. He suggested that it had been so arranged 'in the hope that I would not be here to block it.'¹⁴⁶ As he pointed out:

... two minutes being the amount of time that one hon. Member can force to be wasted on any Division and 15 minutes being the amount of time that two hon. Members can force to be wasted on any division.¹⁴⁷

Turning his attention occasionally to the subject supposedly under discussion, Cunningham stated that he did not object to the money resolution:

I might be speaking wholeheartedly to urge the House to pass it. I hope that it will do so. I hope that no one will oppose the money resolution. Certainly I shall not oppose it.¹⁴⁸

However, supposing that it cost the government £3,000, that might open the ward at St Mark's – and repeatedly he brought the subject back to the hospital – 'a centre of excellence, not just for London and Britain, but for the world.'¹⁴⁹

As Cunningham continued his campaign of obstruction, attacking most of all inadequate planning and consultation in the health service, not all of his colleagues agreed. The district had relied upon the closure of the Metropolitan Hospital to smooth out their financial problems. Ron Brown, MP for Hackney South and Shoreditch, protested strongly at the proposals to close the Metropolitan. He expressed bitterness about plans to spend money on reopening wards at St Mark's and St Bartholomew's. He argued that local people would benefit little, and the secretary of the

local community health council agreed. St Bartholomew's, it was argued, drew only 14 per cent of its patients from the district, and yet it was allocated half of the money: this should be taken into consideration in regional planning.¹⁵⁰

With Cunningham's activities, and correspondence in *The Times* initiated by Sir Francis Avery Jones,¹⁵¹ pressure began to be exerted on the hospital (through its administrator) to be less public in its complaints. It was suggested that it was inappropriate, counter-productive, and that other areas in the district would have to suffer if the ward at St Mark's was reopened.¹⁵² The steering committee at St Mark's and Cunningham were not persuaded, and the campaign continued, with Cunningham using normal parliamentary channels, putting questions on the details of the supposed savings as well as filibustering. Cunningham stressed that the ward was closed to balance the books in one district – no allowance was made for the cost of treating elsewhere the patients refused admission to St Mark's.

We know that it is not lack of funds in the National Health Service. It is lack of funds on the relevant page in the Minister's mind that is at issue.¹⁵³

Roland Moyle admitted that the action taken had been drastic and consultation imperfect.

St Mark's has enhanced the world-wide reputation of British medicine for research, discovery, innovation, development of sophisticated procedures and superlative standards of skill and care.¹⁵⁴

However, the maintenance of cash limits was of paramount importance in the battle against inflation. 'I cannot accept that any hospital, no matter whether it be a centre of excellence, can be sheltered from the necessity of adhering to financial allocations.'¹⁵⁵ Despite these comments, Moyle now gave a date for reopening Fournier ward – 15 July 1977.¹⁵⁶

The pressure applied to the DHSS had been effective, but it possibly helped to accelerate the closure of the Metropolitan Hospital. A report appeared in the *Guardian* on the following day:

... compared with gentlemanly public campaigns in the streets and lobbies, Mr Cunningham's campaign has been hitting the Government embarrassingly low.¹⁵⁷

The community health council complained that the decision to redirect money from the Metropolitan towards reopening the wards at St Mark's and St Bartholomew's rather than establishing alternative facilities for local people 'has more to do with direct political pressure than with the consideration of needs of the people who live in the district'.¹⁵⁸

On 20 July the ward was reopened. In all, however, the episode had pointed to the vulnerability of St Mark's within its district setting. In 1979, the Conservatives won the General Election and in 1980 the new Secretary of State, Patrick Jenkin, visited the hospital to open the up-graded outpatients department.

If I may say so, you are an example *par excellence* of the kind of small hospital, which it is very much my purpose and that of my colleagues to help to survive and prosper.¹⁵⁹

Two years later the district management team announced that it intended to close the hospital in 1985. Their move can be seen more as a ploy than an intention. The district was continuing to support an institution which itself claimed to be regional and national, not local, in its scope. Little allowance was made for that in the budget for the district. The DMT had also learned that St Mark's was well able to protect itself. Protests against the DMT's plan were led by Harold Wilson and Gwyneth Dunwoody: Patrick Jenkin's statement was a useful weapon. The threat of closure in fact proved effective – St Mark's was granted regional specialty status, and funded accordingly.¹⁶⁰

A move which enhanced the regional and national nature of the hospital was the involvement of the Imperial Cancer Research Fund in the hospital. The British Empire Cancer Campaign (later the Cancer Research Campaign) had of course long been associated with the hospital. The involvement of the ICRF was a further recognition of the contribution the hospital was seen to make towards cancer research – colo-rectal cancer was the third most common type of cancer (and the second most lethal in terms of numbers). When Sir Hugh Lockhart-Mummery retired in 1978 he was replaced by John Nicholls, a former resident surgical officer. On his appointment to St Mark's – the first since the link with St Bartholomew's had been established – he was also given an appointment in the department of medical oncology at St Bartholomew's, sponsored by the Imperial Cancer Research Fund. As recorded at the time, it was 'a unique venture.'¹⁶¹ It was arranged that he should divide his time between clinical and academic work. However, he relinquished his sessions at St Bartholomew's on his appointment as consultant surgeon at St Thomas' (after H E Lockhart-Mummery's retirement from there). On the sudden death of Sir Alan Parks in November 1982, and after delays over the decision as to whether he should be replaced, the ICRF again became directly involved in support of staff at St Mark's with the appointment of John Northover from 1984. Again his was both a clinical and academic position, with the academic sessions funded by the Imperial Cancer Research Fund at St Mark's, where an ICRF unit to study colorectal cancer was established, headed by I P Todd

as honorary director. It had its own laboratory, full-time consultant pathologist, Jeremy Jass, and researchers.¹⁶² The unit was significant in several ways: it stressed research and academic study, an aspect which the surgeons generally found difficult to introduce into their work because of their other commitments, and it was supported by a body which encouraged work intended to be of national application.

By 1985, therefore, the hospital had weathered a number of major crises in its existence. Its position within the NHS had been less certain and less secure than in its prewar days, unlike that of most hospitals. In the earlier period St Mark's had obtained funding relatively easily, reflecting public concern about cancer. It had also attracted much professional interest. However, its specialty was not sufficiently well-established as a distinct entity when the NHS was formed and it suffered as a result, failing to achieve the status of institute, even though it rapidly developed an interest in the wider field of gastroenterology. Its anomalous position after the 1974 reorganisation when it was assigned to a district, unlike such special hospitals as St Peter's and St Paul's, led to particularly difficult situations as resources in the health service were reallocated nationally, and later when the service itself began to be squeezed. Achieving regional specialty status and an improved academic status made it more secure and less anomalous, but its history under the health service pointed up the problems of building a unified system of health care out of the institutions and patterns that had been established with little attention to fairness of provision over the previous century.

CHAPTER XIV

The field diversifies

The management of intestinal disease at St Mark's, 1948–1985

The rate of change in medicine, apparent since the end of the nineteenth century, became even more rapid after the Second World War. Medicine became more interventionist, technological and specialised, with very rapid growth in laboratory medicine, pharmacology, anaesthesia, radiology and other technologies as well as in clinical surgery and medicine. Before the war, the main emphasis at St Mark's had been on surgery and surgical pathology. After the war that was no longer the case: the hospital's fields of interest extended far more widely, beyond its earlier primary concerns, the treatment of rectal cancer and anorectal complaints, to include large numbers of cases of inflammatory bowel disease and also such formerly unyielding problems as anal incontinence.

The specialty itself grew considerably in the postwar period. St Mark's and the Gordon Hospital had stood almost alone in their specialty in Britain before the National Health Service. There were surgeons who treated the same problems at other hospitals, particularly in London, but they were more isolated, depending on medical meetings and journals for the interchange of ideas. After the war, this changed. Other centres developed – for example those associated with the universities in Birmingham and Leeds – and began to play a leading part in colo-proctology. More diseases were identified, afflictions which were already well known were further investigated, classified and merged or divided; new ranges of treatments were described and evaluated.

Some of the changes at St Mark's were due to the introduction of the National Health Service. Before there was a coordinated service, as long as a hospital was able to raise funds, it could continue specialising in areas which it marked out. St Mark's flourished because of its association with cancer, and there was little incentive to expand into other areas. The development of district general hospitals within the health service encouraged general practitioners increasingly to refer to them the sort of cases – such as rectal cancer or haemorrhoids – which they might formerly have sent to St Mark's. Suddenly the hospital had to compete with other institutions in a very different way from before: it needed to demonstrate that it treated afflictions or particularly severe cases of disease that were not effectively managed elsewhere. The staff had been in

the vanguard in their use and development of operations for colo-rectal cancer which, by the early 1950s, were routinely used in other hospitals. There were debates over whether the hospital should extend its work into gastroenterology generally, including the small intestine and stomach, or whether concentration should be on understanding the anatomy and physiology of the pelvic floor. Both approaches took the hospital beyond its earlier concentration on cancer and the treatment of rectal diseases.

In other ways, too, the National Health Service affected medical practice and not simply administration. The surgeons at St Mark's had generally opposed the idea of 'state medicine', arguing that at the very least they would lose some independence. However, they had always been subject in their hospital work to financial constraints. As the new service sought to embrace the whole population, its budget expanded rapidly: at St Mark's the effects of this were immediately apparent – requisitions for equipment grew at a rate unparalleled in the interwar period. Certainly for the first twenty years or so, the health service was largely able to accommodate such expansion, and, if necessary, hospitals turned once again to charitable sources to support other areas of growth.

With the growth of pharmacology and the pharmaceutical industry both before and, to a greater extent, after the Second World War a wide range of drugs became available. The new drugs which had the greatest effect on the treatment of intestinal disease were the sulphonamides, antibiotics and steroids. The 'sulfa' drugs and antibiotics had a major effect on surgery. Considerable care had long been taken to minimise the risk of post-operative sepsis, and before intraperitoneal operations the bowel was usually washed through with antiseptics. However, the development of the new drugs allowed patients to be prepared by pre-operative courses and also treated post-operatively to reduce the incidence of staphylococcal or streptococcal infections. Increasing numbers of sphincter-saving restorative operations for cancer were now performed, undertaking intraperitoneal anastomoses that were formerly regarded as too risky. Also, in other diseases such as diverticulitis or ulcerative colitis, colonic resection and proctocolectomy were performed where formerly the morbidity and mortality associated with them were regarded as too great to justify the operation. In turn, this meant that more operative specimens were available for research on such diseases.

Another development which had a major impact on surgery was the more extensive use of blood transfusion. Transfusion had been carried out since the First World War at St Mark's, but not as a routine measure, and rarely using more than one pint of blood at a time. During the Second World War, regional transfusion centres were established in Britain as part of the Emergency Medical Service, and this became the National Blood Transfusion Service afterwards.¹ Problems continued to

be encountered: in 1940 the Rhesus factor was described, but as usual such developments took some time before their implications were applied in regular practice, and in 1949 a patient died owing to Rhesus incompatibility at St Mark's.² Increasingly, however, the blood group was assessed more systematically and blood transfusion was used on a more routine basis at St Mark's, with surgeons permitting larger quantities to be transfused if necessary. The importance of monitoring fluid and electrolyte balance before and after surgical operations was also emphasised.

Changes in anaesthesia introduced after the war also had an important effect on surgery. Reflecting the growth of pharmacology and physiology, new drugs were employed to produce muscle relaxation, allowing the use of general anaesthesia at a much lighter, safer level of cerebral depression. Work on drugs which reversed the action of muscle relaxants was carried out at the hospital. Some perianal operations at St Mark's which had earlier been undertaken using spinal anaesthesia alone were now carried out under general anaesthesia, since its risks had been reduced. The decline in use of spinal anaesthesia, with its own particular dangers, was noted in the hospital's *Annual Report* of 1951.³ However, spinal anaesthesia was later re-introduced as an adjunct to general anaesthesia to reduce post-operative pain. The development of muscle relaxants assisted endotracheal intubation, which had been an occasional practice before, but which now became commonplace, thus allowing the anaesthetist to ventilate patients to ensure that they had sufficient oxygen during operation. The time limit on operations was thereby increased – previously any procedure beyond two hours was regarded by anaesthetists as dangerous because progressive oxygen starvation occurred. Anaesthetists in the post-war period were also able to monitor the patient during operation to a greater extent.⁵

Laboratory medicine changed markedly after the Second World War, with important implications for the work at St Mark's. Dukes had been a general pathologist, offering a service in all branches of pathology – histopathology, haematology, biochemistry and microbiology. Laboratory workers, too, became more highly trained, as in other paramedical areas, with skilled laboratory technicians taking the place of the 'lab boy'. When Morson replaced Dukes in 1956 he continued to carry out a range of investigations, but increasingly from the 1960s he specialised in the histopathological side of the work. In 1967 Barry Lewis was appointed as consultant pathologist, in a newly constructed biochemical laboratory, to look after this area of the pathology department's work. When Lewis resigned in 1970, the biochemical services were transferred to St Bartholomew's Hospital. Later, haematology and microbiology were also transferred, as it was argued that these could effectively be centralised in a

larger unit, while the increasing volume of histopathological work was emphasised as the most crucial in the pathology department.

As this specialisation increased, there was a gradual rise in the number of pathology referrals from other hospitals. Recognition of the histopathological work had also come from the World Health Organization (WHO) when it designated St Mark's as a reference centre, first for the classification and nomenclature of colo-rectal cancer and later of pre-cancerous lesions. With the aid of a grant from the WHO the polyposis register, run by H J R Bussey, was established in its own accommodation in 1968. The British Empire Cancer Campaign/Cancer Research Campaign continued its support of the research on cancer and allied conditions, and the Imperial Cancer Research Fund, as mentioned before, also became increasingly involved in work at the hospital on colo-rectal cancer.⁶

It was in the pathology department, from the early 1930s, that medical photography was first used at St Mark's. Dukes and Bussey had photographed surgical specimens on a systematic basis to provide a record of their gross appearance. In the 1950s this area was expanded further, with the appointment of Norman Mackie as hospital photographer, on a grant from the BECC. As at other hospitals, the photographic service was soon expanded for clinical, research and teaching purposes.⁷

Radiology also changed considerably after the war, moving the service from a rather peripheral position in the hospital's work to a more central role. The introduction of the double-contrast barium enema technique had much to do with this change. Norman Henderson had not taken up the air insufflation technique introduced in the 1920s, partly because of technical difficulties. Welin (1958) in Malmö, Sweden, modified the method considerably. His use of it consisted of scrupulous cleansing of the bowel, followed by instillation of a barium suspension which coated more effectively than had earlier suspensions, and air insufflation, which allowed a distinct display of mucosal patterns. A series of radiographs was taken to image every part of the large bowel in double contrast, propantheline sometimes being given intravenously to help to differentiate between a muscular contraction and an organic stricture.⁸

On Norman Henderson's retirement in 1961, Allan Young from The London Hospital was appointed in his place: Young immediately introduced the Malmö method to St Mark's, and popularised it more generally in Britain.⁹ Distinguishing between diverticular disease and cancer, or detecting the coexistence of Crohn's disease in a patient with diverticular disease, remained difficult even with the new technique. Moreover, it was a lengthy procedure which required the patient to be carefully prepared beforehand. In some cases the double-contrast barium enema was not used. For example, patients with suspected inflammatory bowel

disease were examined by 'instant' barium enema, without bowel preparation. Young explained that although the Malmö technique gave the most reliable evidence of the earliest mucosal changes in ulcerative colitis, the instant enema could give the clinician immediate information on the extent of proctocolitis.¹⁰ The number of x-ray examinations undertaken in the radiology department rose steadily as a result of the introduction of such techniques. In 1938, 289 examinations were carried out: by 1984 the number was almost 4,400 (of which almost 2,000 were barium enemas).¹¹

The diagnosis and treatment of colo-rectal disease was less technological than many other areas of medicine. However, the introduction of the sigmoidoscope early in the century had had a radical impact on the field. Just after the Second World War Lloyd-Davies developed a small-bore, proximally-lit sigmoidoscope which was soon used in standard practice. Surgeons at St Mark's had used the sigmoidoscope routinely in the outpatient department since the early twentieth century. However, elsewhere the older sigmoidoscopes were used only under anaesthetic and therefore not as a routine procedure: the new instrument made outpatient use more acceptable. Francis Avery Jones used Lloyd-Davies' sigmoidoscope at St Mark's, and urged other gastroenterologists to do likewise. As Basil Morson put it, where surgeons 'bit', physicians 'nibbled': they were therefore more prepared to use the smaller sigmoidoscope.¹²

A development of great significance in the diagnosis of bowel disease was the colonoscope: its implications for diagnosis were at least as important as those of the sigmoidoscope. HH Hopkins, a physicist at Imperial College, devised an optical instrument in the early 1950s which he termed a fibrescope, since it conveyed images along a flexible bundle of glass fibres. A South African, Basil Hirschowitz, who had trained in gastroenterology at the Central Middlesex Hospital with Avery Jones, produced a flexible gastroscope based on Hopkins' instrument, but had difficulty in finding a manufacturer for it. Eventually the American Cystoscope Makers Incorporated made a fibrescope in 1960, with Japanese manufacturers soon in hot pursuit. The instrument was first used for the upper gastrointestinal tract – in Japan there was a higher incidence of stomach cancer and a lower incidence of colon cancer than in the West, so that instruments were developed first for the diagnosis of stomach cancer. Moreover a 'gastro-camera' had already been manufactured, and the Japanese were technically better prepared to adapt the fibrescope for stomach investigations. There were great technical difficulties in negotiating the twists of the colon: at least one Western colo-rectal surgeon condemned the first colonoscopes as lacking any potential use. J A Fox of the Edgware Hospital demonstrated a colonoscope to consultant staff at St Mark's in 1966, but they did not take up the instrument. A more

sophisticated instrument was introduced by a Japanese research fellow at St Mark's, Tetsuichiro Muto, in the early 1970s; Christopher Williams, who was then medical registrar, used it with Muto. They argued strongly for the use of instruments up to 190 cm long, which could be introduced as far as the ileocaecal valve (the first colonoscopes were used to view the left colon only). Initially endoscopists worked with the aid of x-rays, either to establish the position of the colonoscope, or to help guide it forward.¹³

From the 1970s the use of the colonoscope at St Mark's began to affect the diagnosis and treatment of bowel disorders. By the 1980s the caecum could be reached in 98 per cent of cases. The colonoscope enabled a diagnosis to be made far beyond the reach of the sigmoidoscope, in areas which could formerly be demonstrated only radiologically. It began to be directly compared with x-rays: it was reported in 1975, for example, that the clinical and radiological diagnosis of stricture proved wrong in over half of the cases subsequently examined colonoscopically. Colonoscopy had several distinct advantages over x-rays: biopsies were increasingly taken through the instrument, thus avoiding exploratory laparotomy. Suspected cases of inflammatory bowel disease, diverticular disease or cancer, in particular, were examined colonoscopically. It also had a role in cancer prevention. As the pathologists described certain groups as high risk – for example patients with polyposis, long-standing ulcerative colitis, adenomas, previous carcinomas, or members of colo-rectal cancer families – individuals could be screened regularly by means of the colonoscope. Biopsies could be taken from any part of the colon to identify or rule out pre-cancerous dysplasia, polyps could be removed, lowering the risk of subsequent cancer, and even when cancer was subsequently demonstrated after removal of the polyp, provided that the snare had removed benign tissue between the cancer and the bowel wall, local excision via the colonoscope was considered to be sufficient treatment.¹⁴

ANORECTAL AND PELVIC FLOOR DISORDERS

Anatomists and clinicians had in the past usually pursued their researches in isolation from one another. In fact, anatomists showed less interest in the anal region than other parts of the body, while clinicians at St Mark's only began to pay much attention to anal anatomy in the 1930s.¹⁵ Significant disagreements between surgeons, and between them and anatomists, then emerged, surrounding almost every fundamental question about the structure and function of the anal canal and pelvic floor. There were several difficulties inherent in the problem: the anatomical relationships differed between conscious, anaesthetised and dead subjects, there were differences between the sexes and also at various stages in life.

THE FIELD DIVERSIFIES

In the 1950s the anatomists' and clinicians' descriptions drew closer together, and at the same time new anatomical theories were brought to bear on the treatment of almost all perianal complaints, even though treatments for ailments such as haemorrhoids and fistula were already seen as largely satisfactory. As in other areas of the history of medicine, new explanations did not necessarily alter practice in a radical way.

There had been little agreement earlier regarding the relative positions of the muscles surrounding the anal canal or even where the colon ended and the rectum and anal canal began. Milligan and Morgan had described a 4.0–4.5 cm anal canal, ending at the anorectal ring, which was useful surgically, but which did not give clear markings for the anatomists, who limited the anal canal to about 2 cm, extending only from the anal margin to the anal valves. As such disagreements showed, there was no evidently common language. In the 1950s surgeons modified their descriptions of the musculature of the anal canal from those of Milligan and Morgan, reassessing the relative arrangement of the internal and external sphincters at the anal margin. In addition, they increasingly described the external sphincter as a sheet of muscle rather than dividing it into three sections, and they also discussed whether the levator ani, puborectalis and external sphincter were continuous or separate muscles.¹⁶

The blood supply and innervation of the region were studied, and from the 1960s various means of studying the physiology of the colon, rectum and anus were developed. Radiological observations, intraluminal pressure recording, and electrical measurements were used to elucidate sensory and motor pathways, with particular attention to the mechanism of continence: commentators disagreed – among other points – over whether the innervation of the puborectalis, crucial for continence, was sacral or pudendal. Light and electron microscopy and enzyme histochemical analysis were used to differentiate between the types of muscle, and tended to indicate that the puborectalis was distinct from the levator ani.¹⁷

Milligan and Morgan had moved away from traditional practice at St Mark's when they applied Peter Thompson's (1899) anatomical work to the treatment of anorectal disorders; some of their younger colleagues at the hospital developed this trend much further, often with the help of registrars and research fellows. Reflecting the fact that anatomical and physiological studies were now seen as highly relevant to the diagnosis and treatment of rectal diseases, Professor E W Walls, from The Middlesex Hospital, was appointed as honorary consultant anatomist at St Mark's in 1956. In 1978 the research department in anorectal physiology under the directorship of Alan Parks was established, and Michael Swash was appointed honorary consultant neurologist. In 1982 Michael Henry

became honorary consultant in anorectal physiology, and after Parks' death that year the department was renamed the Sir Alan Parks physiology unit.

Haemorrhoids

Throughout the interwar period piles had mostly been classified by degree of apparent severity. The majority (largely first and second degree piles) were treated by injection, while the more difficult cases of third degree piles were treated by ligature and excision.¹⁸ From the Second World War until the 1980s, the most important change in the treatment of piles was the decline in the proportion treated radically, as injection and then banding were increasingly used in the outpatient department. The proportion of cases treated operatively or in outpatients had often varied, with as many as 90 per cent being treated by injection in 1930. However, by the Second World War operative procedures had regained some of their former popularity. By the 1980s, only five per cent were treated on an inpatient basis.

Ligature and excision underwent further reassessment and modification. Some familiar debates were rehearsed: if the ligature was applied at a high level, as originally recommended by Salmon, it created extensive raw areas with a tendency to cause stenosis. On the other hand, the method of low ligation advocated by Milligan and Morgan, while obviating this, was criticised for causing post-operative pain. While still at Guy's Hospital, Alan Parks undertook new anatomical studies to try to devise a method which was equally effective but less painful. Milligan and Morgan had held that the longitudinal muscle ran between the internal and external sphincters in the upper levels of the anal canal, emerging between them half way up the anal canal as the anal intermuscular septum, which formed a groove at its attachment at the dentate line. It had already been suggested by anatomists, and clinicians such as Eisenhammer (a former RSO at St Mark's) in South Africa, that the internal sphincter in fact reached to the anal margin, and that the external sphincter did not curve under it to the anal canal. Therefore no muscle strands could pass between the two sphincters at the dentate line. Parks' own investigations seemed to confirm this, although he did maintain that there was a mucosal suspensory ligament from the internal sphincter to the anal canal at the level of the anal crypts. He argued that this was important in the aetiology of haemorrhoids, and that if stretched or torn by excessive straining, the mucosa would then prolapse. If the mucosal ligament had not been stretched, it was reasonable to treat the haemorrhoids by injection, while if stretching had occurred, only an operation would solve the problem.¹⁹

Parks devised a method which he called submucosal haemorrhoidectomy to treat piles according to his anatomical explanation: he argued that the

anal mucosa should be fixed to the underlying muscle to prevent prolapse. He also held that high ligation above the mucocutaneous line was necessary, in order to avoid pain. Mucocutaneous flaps were raised on either side of the haemorrhoid, and the mucosal suspensory ligament divided; the pile was then dissected off the underlying sphincter muscles to the upper end of the anal canal, where its pedicle was tied and most excised. The flaps then fell back on the raw area, where they were sutured together to cover most of it.²⁰ Although Parks described the aetiology and treatment of haemorrhoids differently from his predecessors and colleagues, not all agreed that his procedure was a marked improvement. J C Goligher argued that it was a technically difficult and time-consuming operation, and recurrences were apparently more frequent than in the Miles or Milligan and Morgan operations. Other surgeons also reported that they found little difference in the pain suffered after Parks' or other operations.²¹

Ligation without excision had been practised in the nineteenth century, but after much debate it had been generally rejected. However, in 1963 a new method of ligation was introduced in America by J Barron, in which he placed a strong rubber band on the base of the haemorrhoid. Banding became extensively used at St Mark's in the outpatient department: it was suggested that it was applicable to second and some third degree piles – in other words, those which were not necessarily amenable to injection. The tissue sloughed within a few days and the wound healed by fibrosis. Whereas less severe piles continued to be treated by injection, about 25 per cent of all cases were now treated by banding, thus reducing the number treated operatively to five per cent. Operative treatment was recommended for haemorrhoids with tags or large external plexuses, or those which were too big to be pulled through the bander. Some of those which would formerly have been treated by injection were now also banded, since the medium term results seemed to be better.²²

Other methods of treating haemorrhoids were also suggested from the mid-1960s, but did not take the place of any of the three main treatments at St Mark's. Freezing, or cryosurgery, was recommended by some surgeons who maintained that its special advantage was painlessness. Those at St Mark's were sceptical of its benefits, finding either that it was ineffective or that it was in fact often accompanied by pain – particularly if the freezing involved the mucocutaneous junction or the anal skin. The freezing caused the haemorrhoid to slough, and there was often a persistent serous discharge for several weeks. Infra-red coagulation was also suggested in the 1970s, and Leicester, Nicholls and Mann reported in 1981 that the method was as effective in the treatment of non-prolapsing haemorrhoids as injection, and patients suffered less discomfort.²³ However, the method was not generally taken up at St Mark's.

In 1975 W H F Thomson put forward a new theory on the nature of haemorrhoids. He argued that the normal anal canal had three cushions which sometimes slid down, leading to congestion by a tight anal sphincter and hypertrophy of the cushions. The cushions of submucosal tissue were normal: piles were merely the result of their displacement.²⁴ The emphasis on normality, which others were maintaining as well, encouraged the reclassification of haemorrhoids according to how troublesome they were and what kind of treatment, if any, they needed. Classifications according to degree were increasingly challenged, partly because they did not necessarily help in the choice of treatment. Cases tended to be classified by the 1970s into four groups – those with mild symptoms such as occasional bleeding, which might be treated conservatively, those with recurrent bleeding, which might be treated by injection or rubber band ligation, those with haemorrhoids which prolapsed but spontaneously returned, for which rubber band ligation was recommended, and the fourth group, with prolapsed haemorrhoids which did not spontaneously return and which had a large external component. These should be treated by haemorrhoidectomy.²⁵

By the 1980s, therefore, only a very small proportion of patients suffering from haemorrhoids were treated operatively. Over the preceding years, arguments for non-operative treatment had often been made, but it was only in years of great economic stringency that such large numbers had been treated as outpatients. In each decade surgeons marvelled at how large a proportion were treated non-operatively: in the 1970s and 1980s they marvelled once again.

Abscess and fistula

A pragmatic approach to the treatment of abscess and fistula was taken in the nineteenth century, and no doubt far earlier: the abscess was drained and the fistulous track was laid open. This continued to be the practice in the postwar period. However, anatomical studies were used to elucidate the aetiology rather than simply the topography of the disease. Different types of fistulae were also identified: with the decline in incidence of tuberculosis, tuberculous fistulae became rarer, while, as Crohn's disease was more clearly defined, fistulae resulting from this complaint were differentiated from others.

The suggestion that anal glands might play a part in the aetiology of fistula had been made in the nineteenth century, and in the twentieth century J P Lockhart-Mummery and Charles Gordon-Watson had also speculated about their possible importance. Hill, Shryock and Rebell in America (1943) argued the case and, on clinical evidence, Eisenhammer in 1956 and 1958 took this further: he ascribed most anal abscesses and fistulae to anal gland infection – the primary lesion was an inter-

sphincteric abscess.²⁶ Alan Parks agreed, arguing that infection rarely crossed the wall of any part of the bowel spontaneously unless there was already a channel such as a diverticulum or ulcer. He undertook a number of anatomical investigations, and found six to ten anal glands in all specimens; in half of them branches completely crossed the internal sphincter, ending in the longitudinal layer, with none passing into the external sphincter. He concluded that the anal glands provided free channels for infection beyond the anal lumen; inflammation could then develop that might spread in other directions, while the glands could become the site of chronic infection. Their ducts were so minute that clinically they might be overlooked, explaining why 50 per cent of fistulae seemed not to have internal openings. Parks maintained that this theory had important implications for treatment. It was not necessary to lay open all the secondary tracks, causing large wounds or even endangering continence: so long as the infecting source was treated, the secondary track would heal. Sometimes, using a dye introduced into the external opening of the fistula in order to identify the anal gland into which it seeped, Parks advocated only coring out the gland and removing a segment of the internal sphincter. There was no need, he argued, to remove any of the external sphincter since the gland did not extend into it.²⁷

Parks and Morson (1962) reported that they had found that in two-thirds of patients the cause of the fistula was an intersphincteric abscess originating in an anal gland, and they suggested that such an abscess was the primary cause of fistula in most cases. On analysing the anal glands in patients suffering from fistula, it was found that they were not the simple, minute structures found in anatomical dissections: dilation had often occurred, they were usually full of pus and some contained vegetable matter, suggesting that faecal material had entered them. Parks and Morson stressed that tracks extending from the abscess were secondary and dependent on the primary abscess.²⁸

In 1973, Parks and Thomson emphasised that an intersphincteric abscess had the same aetiology as fistula. They noted that there was a similarity in the site of the abscesses around the circumference of the anal canal and the position of the internal openings of fistulae. An association of fissure with such abscesses had also been recorded, and Parks had suggested that anal fissure might obstruct the ducts by fibrosis and predispose them to suppuration.²⁹ In 1976, Parks, Hardcastle and Gordon remarked that it was often asked what the relationship of a fistula to an acute abscess was. They argued that both were manifestations of the same disease: abscess was the acute phase and fistula the chronic. Not all acute abscesses were followed by a chronic fistula, but if a chronic infection persisted at the primary site in the intersphincteric plane it would lead to a persistently discharging fistula, recurrent acute abscess, or both.³⁰

The new explanations of the pathogenesis of anal fistulae encouraged Parks to reclassify them. Various classifications put forward from the end of the nineteenth century had been rejected by Milligan and Morgan in the 1930s in favour of a classification based on their anatomical description of the anal canal. They had stressed the importance of the anorectal ring in the maintenance of continence, and argued that the classification of fistulae should reflect this. There was subsequent disagreement over whether their classification adequately categorised fistulae, especially those in which treatment endangered continence. In 1961, Goligher divided the earlier classification of high anorectal fistulae into 'ischio-rectal', in which the cavity extended to the top of the ischio-rectal fossa, and 'pelvirectal', which penetrated the levator ani muscle, ending in the supralevator tissues.³¹ Henry Thompson (1962) thought that the Milligan and Morgan classification was too complicated, and that a far simpler grouping was required which singled out the small number of cases in which continence had to be carefully guarded. He therefore differentiated the 95 per cent which were 'simple' from the remaining five per cent of 'complex' fistulae, in which there was an internal opening into the rectum above the anorectal ring, or the fistulous track extended around three-quarters of the circumference of the external sphincter muscle.³²

Parks, Hardcastle and Gordon (1976) stressed that pathogenesis was as important as anatomy in the understanding of fistula topography, and argued that a new classification of fistulae should be based on recent ideas on the subject, in order to facilitate treatment. They pointed to the work by Eisenhammer on the importance of the intersphincteric plane in the pathogenesis and extension of fistulae, and noted that Steltzner in 1959 had classified fistulae into three main groups: intermuscular, trans-sphincteric and extra-sphincteric, according to their relationship to the sphincters. The type of fistula which had always concerned surgeons was the so-called 'high' fistula. However, Parks et al held that a high fistula was not necessarily difficult to treat. It was essential, they maintained, to have a three-dimensional concept of the topography of any fistula. The muscles of the pelvic floor, they argued, were arranged in the form of two cylinders, one within the other, and there were two large paravisceral spaces in which fistulae might ramify: the ischio-rectal fossa below the levator ani, and the pararectal (supralevator) space above it. The successful treatment of the fistula depended on an understanding of the different paths the secondary track might take.³³

Emphasising the necessity of maintaining continence, Parks et al described the way in which various high fistulae might seem to resemble each other but, nevertheless, required different treatments. Even though the anal glands did not extend into the external sphincter, fistulae might cross it, or might run up or down the intersphincteric plane, or spread

circumferentially as a 'horseshoe'. They could produce an abscess in the ischiorectal fossa and spread up or down from there. A superficial fistula might be associated with a chronic anal fissure and run subcutaneously under a sentinel tag. An intersphincteric fistula had its primary track between the sphincters, and might spread upwards or downwards. It could break back through the rectal wall at a higher level. The primary track of a trans-sphincteric fistula crossed the external sphincter into the ischiorectal fossa. It might then descend to the skin, but occasionally ran upwards, possibly into the supralelevator space; such fistulae required very careful treatment to avoid incontinence. A suprasphincteric fistula passed from the intersphincteric space, upwards over the puborectalis muscle and down through the ischiorectal fossa to the skin. To lay this open would lead to incontinence. An extrasphincteric fistula ran from the intestinal tract above the anorectal ring and passed outside the external sphincter. It could result from a trans-sphincteric fistula, from pelvic trauma or perforation. They maintained that as a general rule the whole of the internal and most of the external sphincter could be cut (with the exception of the puborectalis muscle) without any serious loss of function. However, in an elderly person with a weak external sphincter, division merely of the internal sphincter could cause partial incontinence. For this reason, they argued, it was essential to assess the state of the sphincter muscles pre-operatively. The commonest of all fistulae was the intersphincteric variety. In this type, division of part of the internal sphincter only was required and the threat to continence was minimal. The trans-sphincteric fistula crossed the sphincter mass below the puborectalis muscle and therefore laying open its tracks seldom caused difficulties. However, when there was a high extension which passed upwards into the ischiorectal fossa either to the apex of the fossa or through the levator muscles to the pararectal space (which would previously have been classified as an 'anorectal' fistula) induration could be felt through the rectal wall which gave the impression that there was a communication with the rectum itself. However, Parks et al believed that it was only necessary to lay open the lower limb of this type of track, the upper extension being given free drainage through a large incision in the ischiorectal fossa. A horseshoe fistula could spread circumferentially in the ischiorectal fossa, the intersphincteric plane, or in the pararectal tissue above the levator muscles. Although a large incision might be necessary to give adequate drainage to these tracks, this did not involve risk to the continence mechanism.³⁴

Parks et al argued that such a detailed classification as theirs should assist surgeons in the operative cure of the disease. They emphasised that the anatomy of the region was complex and the physiology both important and vulnerable. For that reason it was important to know exactly

where the fistulous track was passing in relation to the various parts of the sphincter. As they put it, it was hoped that this would alert the surgeon to the various complex situations that might be encountered.³⁵ Using this classification, it was found that, of the fistulae treated at St Mark's between 1968 and 1973, 16 per cent were superficial, 54 per cent intersphincteric, 21 per cent trans-sphincteric, three per cent suprasphincteric and three per cent extrasphincteric with the remaining three per cent of cases multiple or unclassified. It was emphasised, however, that these conclusions were based on a selected series of 400 patients at St Mark's Hospital and were not necessarily representative of the incidence of the disease in the population at large.³⁶

Treatment began to change as a result of the new studies, with less excision now recommended. Hawley (1975) described the procedures: probes were used to find the track and once its extent had been determined, it was visualised in a three-dimensional plane. A low fistula could be laid open completely: granulation tissue was followed and curetted away from the base of the fibrous track, which did not need to be excised. A minimum of skin and underlying tissue was removed, although Salmon's backcut was retained. Low intersphincteric fistulae were also laid open straightforwardly. In treating trans-sphincteric fistulae, Hawley stressed that it was important to find any upward or circumferential extensions so that granulation tissue could be curetted out. Although Parks recommended coring out the track and leaving as much of the external sphincter complex as possible when treating supralelevator fistulae (a category defined by Goligher), Hawley disagreed, arguing that they should be carefully laid open, lest healing was not secured. In treating high anorectal fistulae, Hawley argued that a defunctioning transverse colostomy was often required. An incision could be made above the puborectalis which was then closed with wire sutures.³⁷

Some maintained that the experience at St Mark's in treating difficult fistulae, in particular high iatrogenic ones, led to a distortion of the general picture. An editorial in *The Lancet* (1976) argued that Henry Thompson's concept of only two groups – simple fistulae and complex ones – had much to recommend it. Most surgeons, it was argued, would not encounter the difficulties described by Parks and others.³⁸ However, since those at St Mark's were often referred cases which had gone wrong after high-lying fistulae had been laid open elsewhere, they continued to emphasise such points.

Fissure

With the new theories regarding the arrangement of the sphincter muscles, the descriptions of treatment for fissures changed, although the causes of the complaint remained uncertain. The debate continued as to

whether fissures resulted from muscle spasm, from stretching and tearing due to constipated stools or from some combination of the two. The appearance of the fissure was generally agreed: there was often an anal polyp at its upper end and a sentinel skin tag at the lower extremity.

Those who believed that muscle spasm was the underlying cause generally advocated sphincterotomy. When it had been held that the external sphincter curved below the internal, it was maintained that it was the external muscle which needed to be divided – Milligan and Morgan had therefore recommended external sphincterotomy. Eisenhammer (1951) claimed that the muscle underlying the fissure which had previously been identified as the external sphincter (or, by Ernest Miles, as the pecten band) was in fact the internal sphincter. He argued that the internal sphincter possessed the inherent character of the involuntary circular muscle of the alimentary tract, a liability to spasm. Irritating stimuli such as chronic medicinal purgation, haemorrhoidal congestion or proctitis sparked off such spasm, which if persistent led to organic structural changes in the muscle giving rise to permanent contracture. Fissures might then develop. If the muscle contraction was not corrected, the fissure became chronic. Eisenhammer recommended internal anal sphincterotomy, dividing the lower half of the internal sphincter, which he usually performed under local anaesthetic in his consulting rooms.³⁹ Goligher and others (1955) investigated further the relative arrangement of the sphincters, concluding that the sphincter usually identified during operations for haemorrhoids and anal fissures as the subcutaneous external sphincter was in fact the rounded lower margin of the internal sphincter. Therefore, anal fissures lay over the internal sphincter, and it was this muscle that was in fact being divided by Milligan and Morgan.⁴⁰

Naunton Morgan and Henry Thompson (1956) explained that Eisenhammer's description of sphincterotomy had re-focussed attention at St Mark's on the exact position of the internal sphincter. The fact that the relationship between the two sphincters changed under anaesthesia, with the external sphincter curving somewhat below the internal, had not been realised. Morgan and Thompson now gave a new description of the musculature of the anal canal, and treatments for fistula, haemorrhoids and fissure. Henry Thompson had performed 300 operations for anal fissure, and argued that indeed the division of the white circular muscle fibres at the base of a fissure relieved pain and resulted in healing; he also categorically stated that these were the unstriped muscle fibres of the internal sphincter. Morgan and Thompson also concluded that Miles' pecten band was in fact a fibrosed internal sphincter: reference to the pecten band, they argued, 'should therefore cease and, except for historical interest, should not find a place in proctological literature'.⁴¹ However, they held that this in no way detracted from the value and

importance of Miles' operation of pectenotomy, which was, they maintained, internal sphincterotomy.⁴² Eisenhammer's procedure had now been adopted as the preferred method for treating fissure at St Mark's, as H E Lockhart-Mummery (1957) also confirmed.⁴³

Magee and Thompson in 1966 emphasised that sphincterotomy was a simple procedure which could easily be performed on outpatients under local anaesthesia, although they noted that some patients were temperamentally unsuited for any procedure under local anaesthetic. Under Henry Thompson's aegis, a number of cases were treated in the outpatient department by the resident surgical officers on Sundays.⁴⁴

However, the posterior division of the sphincter proved problematic. The wound often took a long time to heal and there was even a danger of incontinence; Goligher was sufficiently concerned to turn to anal dilatation.⁴⁵ Various surgeons, including both Eisenhammer and Goligher, argued that a lateral incision might be as effective as the posterior sphincterotomy through the fissure originally recommended by Eisenhammer. Occasionally such a procedure had been used at St Mark's, and by the mid 1960s it was beginning to be adopted more consistently at St Mark's. Alan Parks (1967) argued strongly for lateral sphincterotomy, and also stressed that most superficial fissures would heal with conservative management, such as the application of an anaesthetic jelly. If such measures failed, he recommended anal stretching, arguing that little harm was done by it, although occasional transient incontinence could occur in elderly people with lax external sphincters (he later abandoned the practice for fear of causing incontinence). In more persistent cases, he advocated sphincterotomy, arguing that care should be taken to divide only the internal and not the external sphincter. A lateral skin incision was made outside the anal canal and the sphincter was divided subcutaneously.⁴⁶

In 1969, Peter Hawley compared the results on 74 cases treated at St Mark's by anal stretching (24 per cent), posterior sphincterotomy (43 per cent) or lateral sphincterotomy (32 per cent). It was found that 72 per cent of patients were cured after an anal stretch, 92 per cent after posterior sphincterotomy but 100 per cent after lateral sphincterotomy. There was some faecal soiling reported in six per cent of the cases treated by posterior sphincterotomy, but none in those treated by the other methods. He concluded that lateral sphincterotomy was preferable, especially as healing took only half as long as after posterior sphincterotomy.⁴⁷ J P S Thomson argued in 1978 that lateral sphincterotomy was very effective, warning against the dangers of manual dilatation of the anus, which involved stretching the whole of the anal canal and lower rectal musculature, with a subsequent risk of incontinence. He noted that Goligher, too, now preferred lateral sphincterotomy to dilatation.⁴⁸

Two-thirds of fissures were usually treated at St Mark's non-operatively, mostly by an anal dilator and anaesthetic jelly. Fissures which were identified as chronic were treated operatively. However, in 1977 MR Lock and JPS Thomson distinguished more precisely between fissures which needed to be treated by operation and those which were likely to respond to conservative treatment. Where a fissure was complicated by an anal polyp at the level of the dentate line, by an external anal skin tag, haemorrhoids, or infection, operative treatment was recommended.⁴⁹

The use of an anal dilator was questioned by McDonald, Driscoll and Nicholls in 1983. Patients treated conservatively with lignocaine jelly and the dilator were compared with those treated only with the jelly, and no difference was found. They also concluded that in fact about half of all cases treated conservatively later came to surgery, and that there was no evidence that the conservative regimen itself was beneficial: it was possible that healing occurred spontaneously.⁵⁰

By the 1980s the preferred operative treatment for fissure was generally agreed by the surgeons at St Mark's to be lateral sphincterotomy. Although in other institutions, particularly in America, there was still debate over the most effective operative methods for treating fissure, this was no longer the case at St Mark's. Debate now concentrated on what the indications for operative treatment should be; however, the aetiology of the complaint still remained uncertain.

Incontinence

Among colo-rectal complaints the anatomical and, later, the physiological studies undertaken in the postwar period at St Mark's had their greatest impact on the understanding and treatment of incontinence and prolapse. Previously, where incontinence had been iatrogenic, resulting for example from operations for fistula, attempts to reunite the muscles had been made. In most other circumstances incontinence seemed largely intractable, and the St Mark's surgeons rarely addressed the subject in their textbooks.

Milligan and Morgan had stressed the importance of the anorectal ring in the maintenance of continence, and subsequently further consideration was given to the precise mechanism of continence, particularly by surgeons who were carrying out operations for cancer of the rectum. Goligher and Hughes argued that at least 6 cm of the anorectal stump was required to preserve rectal sensation and that sensibility in the rectum played a part in continence.⁵¹

One of the first studies in which electrical activity was recorded in the sphincter muscles, was reported by Floyd and Walls in 1953. They found that the external sphincter was in fact active even at rest and that it was constantly contracting during sleep.⁵² Also by electromyographic tech-

niques, Parks, Porter and Melzak (1962) concluded that the resting activity of this muscle was due to a spinal reflex. Parks et al used a balloon to test changes in muscle activity. They found that on inflating the balloon with 50 cc of air over a period of 20 seconds there was a transient increase in activity. By adding a further 50 cc the peak pressure was higher and transient rectal sensation was experienced. However, with a further 50 cc the electromyogram usually changed dramatically and a profound inhibition of activity occurred. Parks et al concluded that the inhibition was a part of the normal defaecation mechanism. In addition they found that abdominal straining caused reflex relaxation of the muscles of the pelvic floor.⁵³

Phillips and Edwards, from the Central Middlesex and University College Hospitals, argued in 1965 that a 'flutter valve' mechanism was responsible for preserving anal continence: the sphincters alone, they thought, were probably insufficient to maintain continence, and only partially closed the anal canal, while final closure was produced by mucosal flaps forced into position by the pressure differences between the abdominal cavity and external air pressure. The mechanism could be unlocked by stool passing down the rectum to the upper anal canal, thereby dislodging the mucosal folds.⁵⁴ Parks, Porter and Hardcastle (1966) accepted the principle described by Phillips and Edwards but added another factor. The rectum, they maintained, did not enter the anal canal directly: its lowest portion turned forward almost at a right angle with another right angle as it continued into the anal canal. They maintained therefore that the mucosa of the anterior rectal wall just above the anal canal fell into position as a flap valve over the anal canal. A rise in intra-abdominal pressure, produced for example by coughing, would close the valve more firmly. When faeces were driven by the sigmoid colon into the rectum, abdominal straining could force stool into the anal canal. The anorectal angle was thereby straightened and the pelvic floor dropped markedly. After defaecation there was a sharp contraction and the pelvic floor returned to its original position, with the valve mechanism restored. Parks et al believed that in some people the normal function was disordered, and they characterised this as what they called the 'descending perineum syndrome'. If abdominal straining was excessive, the pelvic floor muscle atrophied, the pelvic floor descended and became funnel shaped due to the stretching of the puborectalis and sphincter muscles. The force expelling faeces tended also to expel the rectal wall itself as a prolapse. Weakened pelvic floor muscle then resulted in permanent descent of the perineum, with the danger of anal leakage. Perineal descent could be recognised by measuring the level of the anal margin: it was lower at rest and on straining than in the normal person. Excessive straining, they argued, should be avoided, mild laxatives should

be administered to patients with this syndrome, and in particular straining to defaecate – as the prolapsing mucosal wall produced the call to stool – should be avoided. Exercises were also recommended, to tighten the muscles.⁵⁵

In 1967, Parks reported a much more radical means of treating the problem than mere muscle exercises. For six years he had been making a post-anal repair in cases of incontinence, in which he aimed to reconstruct the anorectal angle. He followed the intersphincteric plane posteriorly and laterally, lifting the anal canal off the external sphincter, puborectalis and levator ani muscles. He then placed sutures between the levator muscles on the two sides and made a lattice of sutures in the puborectalis muscle, in order to raise the pelvic floor so that the effective length of the anal canal was increased and the anorectal angle restored. He found the procedure particularly effective in younger patients who had some residual activity in their pelvic floor musculature: 90 per cent of patients were subsequently relieved of their symptoms.⁵⁶

A different approach was taken where the sphincters had been divided either as a result of childbirth or during anal operations. Where sphincter division resulted from childbirth, gynaecologists usually sutured the muscles, but sometimes unsuccessfully. Parks and McPartlin (1971) recommended that in such failed cases, and in instances when the sphincters were divided during anal operations, scar tissue should be excised and the muscle ring reconstituted.⁵⁷ In 1983, Browning and Motson assessed the results of Parks' operation for anal sphincter injury, showing that of almost one hundred cases, 78 per cent had had continence completely restored and in a further 11 per cent continence had been improved. They concluded that even after severe injury to the sphincters, surgical reconstruction could restore continence in these patients.⁵⁸

Giving the presidential address in 1975 to the section of proctology at the Royal Society of Medicine, Parks emphasised the disastrous social consequence of incontinence:

The plight of a patient with frank faecal incontinence is a very unhappy one indeed. There is the obvious association with uncleanness and the feeling of being a social outcast. Such a person will not meet people, will not leave the house, or be able to do any shopping. If the situation is known to the family the patient may well be rejected as a result, especially in old age.⁵⁹

He argued that the frequency of the problem was greater than was generally realised, because patients would not discuss it or even tell their nearest relatives or their doctors. They coped for years by wearing padding, but finally even this did not help.

Parks stressed that, despite the various labels given to the different portions of the pelvic floor muscles, they were essentially an anatomical and physiological unit: the levator ani muscles formed a cradle in which the lower rectum was contained. Parks speculated about the cause of muscle inadequacy in patients with incontinence: a colleague at the London Hospital, Michael Swash, pointed out that elsewhere in the body localised muscle atrophy was usually due to a nerve lesion such as an entrapment neuropathy. Histopathological and histochemical investigations undertaken at The London by Henry Urich and Swash, together with biopsies from pelvic floor muscles taken during post-anal repairs, strongly suggested that the muscle weakness in the pelvic floor was also due to a neuropathy. Further anatomical study was needed, however, to elucidate the exact innervation. It was thought that the pelvic floor muscles were supplied by the pudendal nerve, which was stretched excessively under certain circumstances, for example during childbirth. Investigators at St Mark's had noted that in a series of 75 patients, 90 per cent were women, although 22 per cent of these had not had children. The nerve was also stretched in those patients with the descending perineum syndrome and in rectal prolapse. Once pelvic floor weakness from any cause had occurred, the floor would be progressively less able to resist the force of intra-abdominal pressure and further descent would occur. A vicious circle was thereby established. Once muscle degeneration had occurred, the process seemed to be irreversible and no amount of physiotherapy, for example, was of any use.⁶⁰

Parks, Swash and Urich reported some of their conclusions in 1977. Electromyographic studies of patients with anorectal incontinence and rectal prolapse, together with a group of normal subjects, suggested that the problems were indeed caused by denervation of the pelvic floor muscles: the key factor was the nerve and not simply muscle damage. They argued that the pudendal or perineal nerves had probably been trapped or stretched either by straining or by childbirth.⁶¹ However, the nerve implicated had not been settled, and supply became the subject of further investigation. Percy, Neill and Parks (1980) concluded that the motor nerve supply of the puborectalis usually lay above the pelvic floor, and not below, as had been previously believed.⁶² Neill, Parks and Swash (1981) reported on single fibre electromyographic investigations and anal reflex latencies in 24 patients with incontinence, ten of whom also had rectal prolapse, and eight patients with prolapse but not incontinence. Their findings were abnormal in all the patients with faecal incontinence, with or without rectal prolapse. However, they were normal in seven out of the eight patients in whom rectal prolapse occurred without incontinence. The investigations therefore implied that denervation of the sphincter musculature could be recognised by electrophysiological tests in

most patients with primary faecal incontinence and that the pathogenesis of rectal prolapse differed in the two groups of patients.⁶³

The descending perineum syndrome had been described in 1966 by Parks et al. In 1982, Henry, Swash and Parks reported on comparisons between control subjects and patients with the syndrome in order to establish criteria for determining the relationship of the perineum to the pelvic bones. They then correlated anal reflex latency, perineal descent and faecal incontinence, concluding that abnormal degrees of perineal descent were indeed associated with changes in the external anal sphincter muscle, consistent with damage to its nerve supply. They argued that the concept that perineal descent was associated with damage to the sphincter muscles of the posterior part of the pelvic floor had important practical implications. Patients with perineal descent frequently presented with co-existent anorectal conditions such as mucosal or haemorrhoidal prolapse. Any procedures that might lead to further damage to the anal sphincter musculature, such as manual dilatation of the anus or sphincterotomy, should be avoided in these patients since they might increase the risk of incontinence developing later.⁶⁴

As had been reported earlier, Parks' operation of post-anal repair resulted in the return of acceptable continence in over 80 per cent of patients with neuropathic faecal incontinence. Browning and Parks (1983) examined the effect of the operation on anal canal pressures. They found that in the group which had regained continence, there was an increase in anal canal length, resting pressure and voluntary contraction pressure; in the group which had not been assisted there was some increase in anal canal length, but no increase in the mean resting pressure or mean voluntary contraction pressure. The results showed, it was argued, that post-anal repair worked by lengthening the anal canal and increasing anal pressures.⁶⁵

The cause of nerve damage was further studied in the physiology unit at St Mark's, looking particularly at the possible role of childbirth. Snooks, Setchell, Swash and Henry (1984) studied 71 women two to three days after childbirth and, in 70 per cent of them, again two months later. Previously it had been thought that the faecal and urinary incontinence which developed after vaginal delivery was due to direct sphincter division, or muscle stretching, but Snooks et al argued that in most cases such incontinence resulted from damage to the innervation of the pelvic floor muscles. Their results showed that the external anal sphincter muscle and its innervation could be damaged by vaginal delivery but not by Caesarean section. Abnormalities were most marked in women who had had several children and correlated most strongly with a prolonged second stage of labour and with forceps delivery. Substantial recovery from nerve damage occurred in the first two months after delivery, but

recovery was least complete in multiparae. Midline episiotomies and perineal tears seemed to cause no functional damage. Although Snooks et al stressed that childbirth was not the only cause of the syndrome, they argued that obstetricians should use techniques that would protect the pelvic floor muscles and their nerve supply from injury during vaginal deliveries, especially in multiparae, to reduce the frequency of later anorectal and urinary incontinence in women.⁶⁶

The subject of incontinence had moved from being a largely uninvestigated area in the late 1940s to one, by the 1980s, that was not only investigated but in which there seemed to be a good prospect of cure. The mechanism of continence was investigated by both anatomical and physiological studies, from which it was concluded that the condition resulted not simply from muscle damage but from nerve damage. Difficult vaginal deliveries in childbirth and persistent excessive straining at defaecation were suggested as possible contributory factors. Although new operations had been devised to correct the problem, increasingly the stress was placed on preventing it, and on recognising cases which would need especial care should surgery be required for another condition such as fissure.

Prolapse

The problem of rectal prolapse, unlike incontinence, had long been considered by the surgeons at St Mark's. However, the new anatomical and physiological theories were now applied to the complaint, since it was held that in many instances it had a similar pathogenesis. Various methods had previously been devised to restrain prolapses, but none of them had proved totally satisfactory. In the late 1940s, several procedures were in vogue, including Thiersch's operation, rectosigmoidectomy and rectopexy.

Gabriel (1948) continued to recommend rectosigmoidectomy but a review by E S R Hughes in 1949 of cases from St Mark's showed that in most instances the prolapse recurred or even that the patient was rendered incontinent.⁶⁷ Gabriel subsequently used the Thiersch wire to encircle the anus, but also tried to improve the results of rectosigmoidectomy by inserting sutures in the puborectalis to try to strengthen the pelvic floor. A survey by N H Porter in 1961 of cases from St Mark's showed that recurrence was still around 60 per cent.⁶⁸ Attempts were being made at abdominal repairs but these also had patchy results. Lloyd-Davies inserted floss silk slings to try to reconstitute the recto-vaginal septum, but this did not lower the recurrence rate. Henry Thompson sutured the levators behind the rectum from above, and the lateral ligaments of the rectum to the sacral promontory, with obliteration of the rectovesical pouch: by 1962 he had performed this operation on eleven patients with

no recurrence of the prolapse over an average of almost three years. Incontinence, on the other hand, often remained a problem.⁶⁹ In 1959, Charles Wells in Liverpool recommended that polyvinyl alcohol sponge should be used to surround the rectum, a method used by Schofield at the Mayo Foundation. The substance was incorporated into the tissues, causing fibrosis, and Wells had found the method highly effective.⁷⁰ The sponge he used was termed 'Ivalon', the trade name given by its American manufacturer. Clifford Naunton Morgan took up this method, also finding it effective. He reported in 1962 on a total of 52 cases, 20 of which had been treated by Wells in Liverpool, with the remaining 32 at St Mark's. Only one case had been complicated by staphylococcal infection. Although good results could not be guaranteed, function was usually improved. Naunton Morgan noted that it was not known why the rectum in these cases was often 'insensitive', with the normal reflex of defaecation lost or diminished.⁷¹

Attempts to elucidate this problem lay behind some of the physiological investigations of Porter and Parks, in conjunction with J Melzak at the National Spinal Injuries Centre, Stoke Mandeville. Porter (1962) concluded that the most likely cause of the muscle weakness was a deterioration of reflex postural contraction.⁷² Ian Todd (1962) had also questioned why an anatomical approach to surgical repair frequently failed, concluding that it was not that anatomy was inadequately studied but that correcting anatomy did not necessarily restore function. Disordered physiology, he thought, must surely be the answer. Poor sensation seemed to be present before operation, and any operation which removed part of the already impaired rectal sensory area, he thought, should be avoided. The use of Ivalon sponge might encourage the return of rectal tone and sensation. He concluded that the operation of choice would probably be to fix the rectum to the sacrum and restore the normal recto-anal angle. A posterior repair with a perineorrhaphy to re-form the perineal body, possibly followed by a sphincteroplasty, seemed to offer the best prospect of relief.⁷³

The work on physiology was applied to pelvic floor disorders generally, with a particular emphasis on incontinence. In the meantime it was found the polyvinyl alcohol sponge implant was far more effective than earlier procedures had been for controlling prolapse. Penfold and Hawley (1972) argued that it was a straightforward operation with minimal complications and that it produced long-term control of complete rectal prolapse in 97 per cent of cases. However, although the operation improved continence in some patients, functional disorders often persisted in others. Nevertheless it was an operation which could safely be used for elderly people.⁷⁴ Naunton Morgan, Porter and Klugman (1972) reported on 150 cases of complete rectal prolapse treated by Ivalon sponge

implant over the previous 13 years: 70 per cent of the patients were over 60, and the repair had been successful in 96 per cent of cases, with low mortality and morbidity rates.⁷⁵

Neill, Parks and Swash (1981) had found a physiological difference between patients with both prolapse and incontinence and those with prolapse alone, suggesting that the pathogenesis of the two afflictions differed.⁷⁶ Where the pathogenesis of the prolapse was similar to that of incontinence, Parks recommended a post-anal repair. C V Mann (1981) argued that although such major abdominal repairs gave excellent anatomical restoration, there was a danger of urinary or sexual dysfunction and they should therefore be reserved for the elderly, while a more conservative approach should be taken in young adults. He stressed the long-held difference between mucosal prolapse, which, he thought, should be treated by tethering the mucosa and its supporting structures, and rectal prolapse which required re-tethering of the rectum in the pelvic cavity.⁷⁷

By the 1980s anatomical and physiological studies had been applied to the aetiology of rectal prolapse, linking the problem with other disorders of the pelvic floor. Rectosigmoidectomy and Thiersch's operation had now been abandoned at St Mark's, in favour of the new form of rectopexy, the implant of polyvinyl alcohol sponge. Postanal repairs were also carried out on a few cases in which it seemed necessary to restore the anorectal angle. It was also beginning to be stressed that a distinction should be drawn between prolapse associated with a traction neuropathy of the pudendal nerve and other forms which did not exhibit such physiological signs.

Solitary ulcer syndrome

As rectal prolapse received greater attention, another problem – so-called solitary ulcer of the rectum – was also discussed. M R Madigan and B C Morson described the condition in detail in 1969. They argued that the name (originally conceived by Lloyd-Davies) was misleading, as more than one such ulcer in the rectum might be present, or there might be no ulcer at all. It was a benign condition most common in young adults, which did not respond satisfactorily to surgical or medical treatment. Patients suffered in particular from bleeding and pain, and biopsies showed fibrosis and misplaced mucosa. Madigan and Morson stressed that it was important to distinguish the condition from other causes of ulceration. They thought that self-inflicted trauma seemed not to be the principal cause, and there was evidence against an inflammatory cause. They pointed out that 16 of the 68 patients they studied also had rectal prolapse and they argued that the similar biopsy findings in both conditions might be significant, with excessive straining at stool leading to prolapse, trauma and attempts to expel the prolapse. They also suggested that there might be a hamartomatous abnormality of the rectal mucosa.⁷⁸

THE FIELD DIVERSIFIES

In 1975 K R P Rutter took the discussion of the problem further, suggesting that solitary ulcer syndrome, as he termed it, was in fact related to the breakdown of normal pelvic floor mechanisms. Patients had a tendency to strain excessively, and displayed features of what Parks had described as the descending perineum syndrome.⁷⁹ Physiological studies, therefore, were also used to elucidate this problem. In treating such problems, surgeons urged patients not to strain, and, if necessary, recommended the operation of rectopexy.

Pruritus Ani

In the treatment of pruritus ani, the greatest stress was placed on cleanliness, although a variety of other factors were considered. Bacterial, viral, and fungal infection or parasitic infestations were seen as possible causes, with new treatments suggested for them as drugs were developed. On the other hand, there were new iatrogenic factors in the postwar period, for example reactions to drugs such as steroids and antibiotics.

J P Lockhart-Mummery and others had maintained that pruritus ani was a symptom and not a disease, and his successors also emphasised this. Looking for dermatological causes of pruritus encouraged the hospital to appoint an honorary consultant dermatologist, Suzanne Alexander, in 1975.⁸⁰ Various investigations were recommended. The urine was tested for diabetes, the perianal skin was examined under ultra-violet light to identify erythrasma, swabs were taken, and patch testing might be recommended to identify allergic contact dermatitis. Other dermatological problems could cause the complaint, including eczema and psoriasis, and patients were then referred to the dermatologist. It was agreed that pruritus could be a difficult complaint to tackle, with many possible causes, but often intractable in its treatment.⁸¹

A number of theories were voiced elsewhere as to the causes of pruritus ani, and consideration was given to these at St Mark's. However, Thomson (1981) argued that faecal soiling was the most frequent cause of the problem. It was a point which had been maintained with greater and lesser strength over the years, but which found favour once again.⁸² Psychological factors sometimes also seemed to play a part in the complaint.

DISEASES OF THE INTESTINE

Cancer

The aetiology of cancer came under close scrutiny generally in the post-war period, but with few firm conclusions. Earlier ideas were tested and quantified: for example, epidemiological studies were undertaken to see

whether cancer was indeed a disease of civilisation. It was found that cancer was more prevalent in Western countries than in other parts of the world and that individuals moving from areas of low incidence to those of high incidence incurred a higher risk of the disease – thus seeming to confirm environmental factors. It continued to be argued that diet probably played a large part in this, with a high meat, high fat and low fibre content being particularly indicted. Genetic theories, to which J P Lockhart-Mummery and others had adhered, were refined as the field of genetics grew, but it was generally held that environmental and genetic notions were not mutually exclusive: an inherited chromosomal difference might create susceptibility, while environmental factors perhaps triggered the disease. In the 1930s and 1940s surgeons had concluded that the mortality from colo-rectal cancer would only be reduced if patients presented earlier. The Cancer Act of 1939 aimed to establish centres for screening the population, but the war prevented its implementation. Screening on a general scale was discussed again in the 1970s and 1980s.

At St Mark's, research into cancer continued, although investigation into inflammatory bowel disease and pelvic floor disorders, in particular, came to rival the earlier record of cancer research. From the 1960s particular effort was focussed on the prevention of cancer in patients known to be at high risk, as this seemed to be the most promising area in which to improve results. In addition, the surgeons tried new techniques, which had mainly been developed elsewhere.

(i) Operative treatment

At St Mark's greater attention was paid – as before – to treatments for cancer of the rectum than for cancer of the colon. Between the First and Second World Wars the surgeons had emphasised that, barring earlier presentation, a better overall prognosis for cancer depended largely on improving resectability. Certainly resectability had risen considerably over the period 1928–1952, while operative mortality had declined.

Resectability rate and operative mortality for rectal cancer at St Mark's, 1928–1952⁸³

		%	%
	Number of	Operative	Resectability
	operations	mortality	rate
1928–32	484	12.8	46.5
1938–42	595	11.1	69.4
1948–52	918	6.8	92.7

THE FIELD DIVERSIFIES

As it had become possible at St Mark's to resect the growth in over 90 per cent of cancer patients, increasing attention was turned to the nature of the operation.

By the late 1940s the established operations at the hospital were synchronous combined excision and Gabriel's perineo-abdominal excision, both of which necessitated a permanent colostomy. In earlier years JP Lockhart-Mummery and others had maintained that some patients would rather die than have a colostomy, but when it was overwhelmingly agreed that radical excision was essential if there was to be a prospect of cure, surgeons began to argue that patients fared remarkably well with colostomies. A variety of restorative procedures in which bowel continuity was re-established, so that a colostomy was not required, had been used around the turn of the century, but in Britain and America these had been largely discarded under the influence of Miles and his followers. They had maintained that such operations did not allow adequate clearance of possible lymphatic spread of the cancer: in particular, Miles' belief that cancer spread downwards, as well as laterally and upwards, meant that preservation of the sphincters was dangerous. At St Mark's, Charles Gordon-Watson and one or two of his colleagues performed an occasional restorative operation, but mostly the perineal and later the combined perineal and abdominal operations were used. In the 1930s and 1940s, particularly in America, a few surgeons revived interest in restorative procedures. HH Babcock and HE Bacon, in Philadelphia, developed abdomino-anal pull-through procedures,⁸⁴ HW Maunsell (in New Zealand) in the 1890s and RF Weir in New York in 1901 had suggested abdomino-anal excisions of an eversion type, and Lloyd-Davies and Naunton Morgan occasionally used a variation of this from 1936. The bowel was resected through the abdomen, but because of the difficulty of performing the anastomosis deep in the pelvis, the anorectal stump was everted and drawn out of the anus, following which the divided colon was pulled down, sutured to the everted anorectal stump and returned. It was in fact to facilitate such operations that Lloyd-Davies developed his version of the combined lithotomy-Trendelenburg position.⁸⁵ In America from the 1930s, CF Dixon and, later, OH Wangenstein, (1945) used methods of intraperitoneal resection and anastomosis (anterior resection) which gradually began to be considered more widely both in the United States and Britain.⁸⁶

With the introduction of the sulfa drugs, the greater use of blood transfusion, and pathological work on lymphatic spread which confirmed that this occurred almost exclusively upwards and laterally rather than downwards, restorative procedures were under wider discussion by the mid-1940s. At the same time more attention was being paid to the problems of patients with colostomies. At a meeting of the section of

proctology at the Royal Society of Medicine in 1945, Gordon-Watson argued that nurses should be specially trained for colostomy work and that district nurses should be informed when a patient with a colostomy returned home. His colleague, Campbell Milligan, stressed that a favourable social environment was essential: two of his patients had returned after their operations to live in lodging houses, and both had later committed suicide. 'It taught the lesson that a person must have privacy and suitable conveniences in a home or he should be in a hospital'.⁸⁷ There was no agreement at the meeting on whether a 'washout' – irrigation of the bowel via the stoma – was necessary: Ernest Miles strongly maintained that it was, while William Gabriel equally strongly held that it was not.⁸⁸ As a result of this discussion, Cuthbert Dukes decided to assess the disability caused by a colostomy, and the necessity or otherwise of the tedious procedure of a daily washout. Visiting former patients in their homes, Dukes recorded that only one-third of the patients gave themselves a washout, but he found no difference at all in the health of those who followed such a routine and those who did not. The procedure had been advocated for decades by surgeons, but he concluded that it was in fact unnecessary.⁸⁹

Surgeons at St Mark's tended to be conservative in their approach to restorative procedures. The practice of following up patients at St Mark's for five years meant that there was a long lag time before the surgeons were convinced of the efficacy of new procedures. It was Lloyd-Davies and Naunton Morgan, and subsequently Goligher and Thompson, who began to experiment with restorative operations. Gabriel declared such procedures too dangerous, and that anyway he was too old to change his ways.

Dukes, too, was cautious about restorative resections, addressing their pathological implications in 1947. Between 1939 and 1947 only forty patients (10 per cent) had undergone such operations, while 360 (90 per cent) patients had been treated by rectal excision. He analysed the pathological records of this latter group to see whether a restorative operation might have been employed instead with equal success, concluding that, from a pathological point of view, this was certainly the case in some. However, he thought that restorative operations were technically more difficult, probably with a higher mortality, requiring longer convalescence, and were more liable to complications and possible recurrence than total excision. He emphasised that great care should be taken in patient selection: no patient with a tumour in the lower third of the rectum, for example, should be treated in this way.⁹⁰ The following year, he reported on the incidence of local recurrence after the restorative operations at St Mark's. In two of the cases there seemed to be a fresh primary tumour, exactly on the suture line, which he suggested might have derived from implantation of cancer cells during anastomosis.⁹¹

At the section of proctology in 1948, Lloyd-Davies traced the history of

THE FIELD DIVERSIFIES

restorative procedures. Formerly sepsis had been such a predominating factor that restorative operations had had a prohibitively high mortality rate, which in turn reduced surgeons' ability to study end-results. Earlier in the century few surgeons had undertaken a preliminary transverse colostomy: Milligan in 1926 was the first surgeon at St Mark's to use a preliminary colostomy before resection. Subsequently there had been no deaths from sepsis after restorative procedures at the hospital. Lloyd-Davies noted that at other centres, restorative operations were now increasingly being adopted.

Since the advent of sulphonamides there has been a renewed and increasing trend towards attempting restorative resections for cancer of the rectum and rectosigmoid. The wave of enthusiasm has been so forceful, that in reading the surgical literature of some countries one might almost be persuaded that these restorative operations were the operations of choice and that all the older established combined operations had had their day.⁹²

He sounded a note of caution – radical combined abdomino-perineal excision now provided five-year survival in almost 50 per cent of patients, and he felt that only earlier diagnosis could improve this. Restorative operations should at least match this: 'We are not entitled to take risks with the growth or the patient merely to avoid a colostomy and restore continuity'.⁹³ He argued that at least 5 cm of bowel below the lesion had to be included in the excision, as well as sufficient clearance of possible upward lymphatic spread. The anal canal musculature, 'and its sensitive lining', had to remain intact if continence were to be maintained – otherwise the patient was simply given a perineal colostomy in place of an abdominal one.

By 1948 three types of restorative procedures on 54 patients had been performed at St Mark's: abdomino-sacral excision, abdomino-anal excision and entirely transabdominal resections. They had been performed as one, two or three stage operations. The earliest cases were abdomino-sacral operations, but this procedure was abandoned because fistulae frequently developed between the anastomosis and the perineal or sacral wound. Lloyd-Davies and Naunton Morgan had then devised their abdomino-anal procedure to try to overcome this problem. In both of these early operations there was a problem of anastomotic stenosis and they required a greater length of bowel than the entirely transabdominal resection, which had subsequently become the favoured procedure. All patients were given a pre-operative five-day course of a sulphonamide. Among those in which an intraperitoneal anastomosis had been performed, 25 per cent had had temporary complications. Lloyd-Davies described the end-results as 'seriously dis-

appointing': there had been a 24.6 per cent local recurrence rate, including recurrence in four of Dukes' 'A' cases. Such a rate was, he held, 'too big a price to pay for avoidance of a permanent colostomy'.⁹⁴ However, he did not advise abandoning restorative operations, but argued that removal should be sufficiently radical and the results carefully monitored.

One of the problems of restorative operations was that necrosis of the bowel sometimes occurred, due to inadequate blood supply. Goligher addressed this question in his mastership thesis in 1948, in particular investigating the feasibility of high ligation of the inferior mesenteric artery with subsequent re-establishment of bowel continuity. He demonstrated on postmortem specimens that this was possible, confirming it at operation. He stressed that if restorative procedures were to be as radical as combined excision, the ligature on the inferior mesenteric vessels should be placed not lower than the bifurcation of the abdominal aorta. The anorectal stump received its blood supply from the inferior haemorrhoidal arteries but also, he postulated, from other unnamed branches in the levator muscles.⁹⁵

Goligher's work showed that restorative resections could be performed while removing tissues as radically as in combined excision. Lloyd-Davies addressed the problem of implantation in the suture line, and in 1950 introduced a method of washing out the rectum from below during the operation with a cytotoxic agent, perchloride of mercury, in order to remove or destroy free malignant cells.⁹⁶ (Interestingly, perchloride of mercury had been used as an antiseptic agent earlier in the century in rectal cancer operations.) Continence, too, was considered: as Lloyd-Davies had argued, there seemed little point in avoiding an abdominal colostomy if the restorative operation resulted in anal incontinence. Goligher and Hughes (1951) concluded that rectal sensation was crucial to continence and that therefore it was essential to preserve undamaged not only the sphincter muscles but also at least 6 cm and preferably 8 cm of the anorectum.⁹⁷ Goligher (1951) also found that both the abdomino-anal excision of the eversion type and the pull-through type had high incidences of incontinence. Anterior resection had a better record, although it did not seem feasible to perform the anastomosis at as low a level as in the other procedures.⁹⁸

By 1950, one in five cases of rectal cancer was treated at St Mark's by restorative procedure.⁹⁹ A preference for anterior resection was becoming marked – 65 per cent of the 162 cases managed by restorative operations by 1951–52 had been treated by this method. Such an intraperitoneal resection was carried out if the growth lay at the rectosigmoid junction, and abdomino-anal excision with eversion might be used if the growth was lower.¹⁰⁰ By 1952 Dukes, for one, did not feel strongly that com-

THE FIELD DIVERSIFIES

bined excision was preferable to a restorative operation. When asked which procedure he himself would prefer if he had the misfortune to suffer from rectal cancer, he replied that:

I should not choose the *operation*, but I should choose the *Surgeon* who was to do it, and I should choose him with *very* great care. Then I should say to him, 'Do the operation just when and where you think best, but please promise to go to bed early the night before and to get up in good time and have a good breakfast!' It would be a relief also to be assured that the operation would not be filmed or televised!¹⁰¹

Clifford Naunton Morgan argued in 1952 that 'it had now been proved beyond all doubt that anterior resection had a place in the treatment of carcinoma of the rectum', mentioning the 'happiness and gratitude of patients alive and well without colostomies'.¹⁰² Some of his colleagues did not agree. In meetings of the section of proctology of the Royal Society of Medicine, Gabriel continued to advocate his perineo-abdominal operation, for once in general agreement with his rival at the Gordon Hospital, Lawrence Abel.¹⁰³ Goligher commented in 1957 that preservation of the anal sphincters

... has been one of the burning questions of surgery in recent years – an issue in fact that has never failed to divide any previously friendly gathering of general surgeons almost immediately into two hostile groups.¹⁰⁴

The first group believed that 'the last word on the subject had been said in 1910 by Ernest Miles', whose studies on lymphatic spread had 'established beyond all dispute' the necessity for complete excision; to members of this group any attempt at sphincter preservation was regarded as 'most retrograde and indeed quite unethical'. Among them were 'some of the most honoured and respected figures in British and American surgery', including Gabriel, Abel, Lahey and Rankin.¹⁰⁵ In the second group – proponents of restorative operations – surgeons believed that if the areas of lymphatic spread were carefully excised and measures against possible implantation were taken, a colostomy was not necessary. In fact, Goligher warned, there was even a danger of the pendulum swinging too far the other way – he felt that perhaps the operation was being used too extensively, for example for very low-lying growths.¹⁰⁶

It was the older generation which adhered most strongly to combined excision, and as they retired, restorative operations increasingly became standard practice, with results as good as those of earlier operations. Their success encouraged surgeons to consider them for operations at a lower level in the rectum. C W Mayo, at the Mayo Clinic, was a strong advocate of low anterior resection, reporting satisfactory recovery, function and

long-term survival rates.¹⁰⁷ However, low anterior resections presented potential problems of leakage at the anastomosis as well as technical difficulties during the procedure. Some surgeons therefore returned to abdomino-sacral resections, while others looked once again at abdomino-anal pull-through excisions, adopting new techniques introduced by Turnbull and Cutait. However, in 1972 CV Mann emphasised that the results from 'pull-through' operations at St Mark's between 1937 and 1970 had been very poor. The operation was by then performed only rarely at St Mark's, for example when anterior resection was impossible but the patient refused a permanent colostomy.¹⁰⁸ Alan Parks devised a variation on an abdomino-anal resection to overcome the technical difficulties of low anastomosis. Maintaining that rectal sensation was provided by the nerve endings in the pelvic floor and not by the rectal mucosa, he developed an operation in which he pulled the colon down through the anorectal stump, having first dissected the mucosa off the underlying muscle of the retained lower rectum. He performed the anastomosis through the anal canal, using the stripped rectum to give additional protection to the anastomosis. He later found that a shorter rectal stump was needed than he had formerly thought. The internal sphincter was carefully preserved, and Lane and Parks (1977) reported good functional results from the operation.¹⁰⁹

Low anastomosis became easier with the development of stapling devices. There was general agreement that a technically good anastomosis was essential, but there was no consensus over whether the stapling gun was an improvement over a carefully hand-sutured anastomosis.¹¹⁰ H E Lockhart-Mummery and R J Heald argued that one danger with the device was that it would encourage the performance of lower anterior resections

... without commensurate development of skilled low pelvic dissection technique. Such a trend would be disastrous ... since there is no more important aspect of rectal cancer surgery than the avoidance of local recurrence.¹¹¹

By the 1980s, operative mortality for colo-rectal cancer treated at St Mark's had dropped from about seven per cent to under two per cent, the resectability rate had risen only slightly from about 93 per cent to 95 per cent, and the five year survival rate remained at about 50 per cent. However, 67 per cent of cases were now treated by restorative resection. It was reported from St Mark's by Nicholls et al in 1979 that restorative resections in the middle third of the rectum were at least as curative as total excision.¹¹² There had been considerable disagreement over whether restorative operations were advisable, but by the late 1950s the long-term results indicated that they were. The challenge now seemed to

THE FIELD DIVERSIFIES

be to facilitate low anastomoses, decreasing further the number of patients requiring a colostomy. Yet again, however, the surgeons argued that the only effective means of reducing the mortality from cancer, which remained at its immediate postwar level, was for patients to present earlier.

(ii) The familial polyposis register

Adenomatous polyposis was something in which St Mark's had a special and increasing knowledge and expertise. As this had become known, larger numbers of patients with this relatively rare complaint were referred to the hospital, enabling the research department to build up a more detailed picture of the condition. In 1948 St Mark's had twenty families on the polyposis register; and by 1984 it stood at 302.¹¹³ The genetic character of the disease and its link with cancer was well recognised; as Dukes put it in 1948, cancer was 'very liable' to follow the adenomatous polyps.¹¹⁴ After the Second World War the association between polyposis and cancer was further studied, to cast light upon the development of sporadic rectal cancer, not only in cases of familial polyposis. The other major development during this period was the emphasis on cancer prevention: since polyposis was followed by cancer, it was increasingly argued that the bowel should be removed before this could develop. As procedures were developed elsewhere for the radical treatment of severe ulcerative colitis, in which the whole of the large bowel was removed, these were also used at St Mark's for patients suffering from the rarer complaint of polyposis.

Summarising the information gathered over twenty years, Dukes (1947) explained that polyposis was inherited as a Mendelian dominant; it could be transmitted by either parent and could be inherited by children of either sex. On average polyps appeared in the bowel at about 20 years of age; it was rare for symptoms to appear after the age of 40. Cancer tended to develop about ten or fifteen years after the appearance of polyps.¹¹⁵ Despite Dukes' claim that 'intestinal cancer is an almost invariable sequel to familial polyposis',¹¹⁶ Gabriel (1948) did not necessarily advocate radical measures in all cases – he thought that especially in the young the disease often remained 'stationary' or quiescent for years. In such cases polyps should be removed by fulguration as far as the sigmoidoscope could be passed; patients should be carefully followed up, but a resectional operation was not needed. Where there were more serious symptoms, such as bleeding, Gabriel advocated a perineo-abdominal excision of the rectum and pelvic colon, establishing a terminal left iliac colostomy. He felt that it was dangerous to leave the rectum intact, as some recommended. He advised that the colon should also be examined with the sigmoidoscope through the colostomy, and that additional segments of the colon might need to be removed later; however, he had

never found it necessary in his experience to take the removal as far back as the ileo-caecal valve. He reported that the disease often seemed to go into remission once the rectum and pelvic colon had been excised.¹¹⁷

Accepting that cancer almost inevitably followed polyposis, the surgeons at St Mark's increasingly argued that more radical treatments were required. In 1951 Gabriel reported to the section of proctology at the Royal Society of Medicine on a total proctocolectomy which he had performed on a woman of 27 with diffuse polyposis. He felt that it was necessary to defend his use of such a radical operation and maintained that it would have been impossible to clear the rectum by fulguration. In fact Dukes found three cancers in the specimen.¹¹⁸

The follow-up for families with polyposis was more difficult than that for patients who had undergone operation for rectal cancer, but was undertaken with great energy by the research department. As Dukes described it in the *Annals of Eugenics* in 1952, every new case at St Mark's was investigated and recorded, whether or not other members of the family appeared to be affected. Brothers, sisters and grown-up children were examined sigmoidoscopically, but uncles, aunts, cousins, nieces and nephews were not examined if they were reportedly in good health. The first rough sketch of the family pedigree was prepared while the patient was in hospital, but usually proved incomplete and was then supplemented by correspondence with relatives and through other enquiries. Whenever possible, the patients and relatives were visited in their homes; Dukes found that often 'in the confidential atmosphere of the parlour or kitchen "black sheep" ... and also illegitimate children have sometimes been mentioned for the first time'.¹¹⁹ In each family one individual was selected as a 'collaborator' – not necessarily a patient, but someone who was 'tribal' in outlook, and therefore knew about relatives. Having chosen the collaborator, Dukes recorded his or her birthday in his diary and sent an annual birthday letter. After expressing birthday greetings he enquired about specific relatives, enclosing a stamped addressed envelope. He usually received a reply within a week.¹²⁰

Dukes believed in 1952 that the surgical treatment of polyposis was still in an experimental stage.

Since the whole large bowel is diseased and may at any point become the site at which cancer develops, the most logical procedure would be to remove the whole colon and rectum leaving the patient with a permanent artificial anus known as an ileostomy.¹²¹

He mentioned the cases of two sisters treated in the pre-malignant phase, one by colectomy and ileorectal anastomosis and the other by total proctocolectomy. He noted that the patient with the ileostomy was less

contented than her sister. He maintained that it would be preferable to use such radical methods before cancer developed, but 'many polyposis patients do not come for surgical treatment until cancer has already developed'.¹²² As treatment improved, and follow-up was more effective, Dukes argued, it was becoming easier to keep in touch with polyposis families: patients often encouraged relatives to come at once for examination. More patients would be seen, therefore, in the pre-malignant phase and Dukes remarked that 'it should be possible in the future to make an interesting comparison between the expectation of life of treated and untreated cases'.¹²³

Following Dukes' logic, patients with polyposis were increasingly treated by total proctocolectomy, or colectomy with ileorectal anastomosis where the rectum seemed relatively undiseased.¹²⁴ As Henry Thompson – who treated many of the polyposis patients at St Mark's – put it in 1958, 'the only effective treatment known at present is surgical removal of the large intestine'.¹²⁵ Although Dukes had argued for total proctocolectomy, it had also been noted, as in the case of the two sisters, that patients were happier with a restorative operation than a permanent ileostomy. As will be discussed later, in the context of ulcerative colitis, ileostomies tended to evacuate constantly, causing skin damage and pain; appliances were unsatisfactory, and rectal excision itself had complications such as a risk of impotence in the male. Thompson believed that the risk of malignancy in the rectal stump needed to be assessed to see whether restorative procedures could safely be used. He himself concluded that the rectum was in fact the commonest place for the carcinoma to develop; of the 70 polyposis patients operated on at St Mark's, 30 had already developed cancer and in 23 of these the malignancy was in the rectum. The literature indicated that the incidence of cancer in the rectal stump after colectomy was 5–8 per cent, but Thompson thought that as time passed this figure would increase. Those who argued for preserving the rectal stump held that regular six-monthly check-ups and fulguration of adenomas reduced the risk of rectal cancer. However, Thompson warned, 'a carcinoma may develop *de novo* from rectal mucosa without the intervening stage of a polyp; and either patient or surgeon may default on the six-monthly check'.¹²⁶ Thompson had no doubts that the more radical operation was safer for the patient and easier for the surgeon. There was, however, 'a human side' to the problem. Patients with polyposis were usually young people, some of them without symptoms. 'One does not need a vivid imagination to understand a young girl's fear that a man's encircling arm would encounter an ileostomy bag'.¹²⁷ He suggested that the chances of marriage were reduced for a person with an ileostomy, although some patients did marry. Patients should therefore be given some choice: they might opt for the more risky operation in the

short-term, or they might choose to undergo proctocolectomy and dispense with subsequent checks and the possibility of further operation. Thompson had found in his experience that most young patients preferred ileorectal anastomosis even with its risks.¹²⁸ Overall, however, Dukes (1960) found that the new procedure of removing the colon before cancer developed was working relatively well. He remarked that the treatment of polyposis was 'a good example of cancer control': both diagnosis and treatment were possible in the pre-cancerous stage and the results of surgical treatment were good.¹²⁹

It had been noted that patients with polyposis had a tendency to develop fibrous tissue (desmoid) tumours after operations, as well as having a liability to other problems. By the mid-1950s those in the research department at St Mark's, in particular H J R Bussey, were investigating this.¹³⁰ In America, E J Gardner had identified a syndrome in the early 1950s which consisted of multiple adenomas of the colon and rectum, multiple osteomas of the head and multiple fibromas and epidermal cysts of the skin. He later included osteomas in any part of the body, post-operative desmoid tumours and certain dental abnormalities. Later, Gardner's syndrome was also associated with the development of duodenal cancer. Of the features in Gardner's syndrome, the multiple polyps were dangerous, but the desmoid tumours could also pose a threat. At St Mark's, Bussey (1969, 1972) found that of 127 polyposis patients who had undergone major surgery, nine had subsequently developed desmoids. These were liable to cause intestinal obstruction and even perforation, or renal failure due to pressure on the ureters. Some remained static in size while others grew until there was a fatal outcome; if removed, others grew.¹³¹

Concern over the development of cancer in the rectal stump persisted. The incidence of such cases was reported to be 50 per cent at the Mayo Clinic, but H J R Bussey reported in 1979 that the risk of cancer in the stump had only proved to be about 10 per cent over a period of thirty years at St Mark's. However, Bussey, Evers, Ritchie and Thomson warned (1985) that cancer in the retained rectum could be difficult to recognise because of the scarring from repeated fulguration.¹³² Even with very careful follow-up (and by the early 1980s there was a three-monthly 'polyposis week' when such patients were seen in concentrated groups) and fulguration of adenomas, the risk of cancer was undoubtedly there. Henry Thompson in 1958 had argued that a compromise between colectomy with ileorectal anastomosis and proctocolectomy was ileoanal anastomosis, which he also described as an anal ileostomy. The muscle walls of the rectal stump were retained but the mucosa was removed and replaced by a length of ileum. Thompson noted that cases with satisfactory function had been reported in the literature, particularly by

Devine and Webb, and he himself had performed two such operations, one on a boy of 17 and the other on a girl of 16, both of whom had by then been followed up for four years. He found that the ileum separated from the anal canal and retracted to the top of the rectal stump and the bare rectal tube finally became epithelialised. However, the operation was not generally adopted for polyposis patients.¹³³

In the late 1970s and early 1980s a new sphincter-saving proctocolectomy began to be used. The procedure was devised for patients undergoing proctocolectomy for ulcerative colitis and will be discussed later in further detail, but was also used for patients operated upon for polyposis. N G Kock had constructed a reservoir from the terminal ileum, devising a mechanism so that the ileostomy was continent and could be emptied by means of a catheter inserted through the stoma. As a variation on this, Parks, Nicholls and Belliveau (1980) brought the ileal reservoir down into the pelvis and sutured its opening to the anal canal so that the catheter could be used through the anus.¹³⁴

By the time of the Second World War, the disease pattern within adenomatous polyposis was thought to be well-established. However, after the war, it was found that polyposis could be more extensive than was originally thought, for example possibly affecting the duodenum and biliary tract as well as having other manifestations. As radical operations were used more widely in many colo-rectal diseases, patients with multiple adenomas were increasingly operated upon before they showed signs of cancer. By establishing a painstaking method of working out family pedigrees, following up families, and screening potential sufferers, many patients were caught in the earliest stages of the disease. Such patients could therefore be treated by preventive means, although the policy of establishing a permanent ileostomy especially in a young symptomless patient was regarded as far from satisfactory, and compromise restorative operations were therefore used instead.

(iii) Pathology: follow-up and prevention

The information gathered from following families with polyposis as well as the follow-up of other rectal cancer cases was used to cast light on the general development of cancer. In the 1920s Dukes had argued that adenomas often became cancers. As he put it in 1949, where patients with adenomas or papillomas had been observed for a period of years, cancer was frequently found to develop in tumours previously known to be non-malignant. It was also not uncommon to find a small focus of cancer in a tumour in which the greater part had the histology of an adenoma, and often at the edge of a cancer the surviving portions of a pre-existing benign tumour might be found. Moreover, the first foci of malignancy in

adenomatous polyposis were nearly always found in an adenoma or papilloma.¹³⁵

These conclusions encouraged further investigation of the significance and frequency of such correlations, and finally the adoption of preventive measures. H E Lockhart-Mummery and Cuthbert Dukes (1952) warned that polyps that looked benign might in fact have cancer in them and should therefore be removed.¹³⁶ It was increasingly stressed that some benign diseases – not only polyposis, but also severe chronic ulcerative colitis – seemed to predispose to cancer, and by 1964 Dukes stressed that the early diagnosis and treatment of 'precancerous lesions' were important means of controlling intestinal cancer.¹³⁷

Dukes also argued that if cancer was found in a polyp but had not invaded the bowel muscle, local excision of the polyp was sufficient. Such local excision, having been ruled out early in the century, enjoyed a revival in the postwar period. Lockhart-Mummery and Dukes (1952), reviewing the pathology and treatment of malignant polyps, concluded that the important factors in deciding whether further radical surgical treatment should be taken after local removal were the histological grade of malignancy of the carcinoma and the presence or absence of a free margin of excision.¹³⁸ Carden and Morson (1964) looked at the results of this approach at St Mark's, concluding that local excision of most malignant polyps was in fact satisfactory, with the qualifications that their predecessors had laid on the practice.¹³⁹ The operation of colotomy – that is, opening the colon – was occasionally recommended for removal of polyps beyond the reach of the sigmoidoscope. If the polyp was benign, nothing further was done, but if it was of high-grade malignancy and the stalk was extensively invaded a subsequent colectomy was considered essential. However, Henry Thompson (1966) thought that the surgeon should reserve colotomy for frail, obese or elderly patients with co-existing constitutional disease, and that colectomy should be the operation of choice for a fit patient.¹⁴⁰

Basil Morson strongly emphasised the importance of identifying pre-cancerous lesions. In 1969, he defined 'pre-cancer' as a state, not necessarily neoplastic, which predisposed towards the development of malignancy; among polyps, only adenomas and villous papillomas were pre-cancerous. Patients who had had partial removal of the intestine for colonic or rectal cancer were at risk from the development of new tumours in the rectum: Bussey, Wallace and Morson (1967) had calculated that at least 3.5 per cent of such patients would develop a second primary growth, on average about eight years after the first operation. Patients with adenomatous polyps as well as cancer in the resected specimen had twice that risk. Morson therefore recommended that patients who had had cancer of the rectum and colon should be followed up indefinitely.¹⁴¹

In 1971 Morson defined pre-cancer in detailed pathological terms: it was a condition which had the microscopic characteristics of epithelial dysplasia, often sufficiently severe for it to be termed *in situ* carcinoma. He described the gradation of microscopical appearances of benign polyps and 'the polyp-cancer sequence': if large numbers of cancers and polyps were examined, a composite picture emerged, showing stages of a histological process, from clearly benign tumour to a stage at which neoplastic tissue was invading through the muscularis mucosae. The practice of regularly following up patients with polyposis or longstanding ulcerative colitis had also helped to reveal the development of pre-cancer.¹⁴²

As he gathered evidence about this sequence, Morson (1974) addressed several other questions. He considered whether all adenomatous polyps and villous adenomas inevitably became cancerous, but concluded that this was not the case and that it related to size of polyp; whether all cancers of the colon and rectum evolved from pre-existing adenomatous polyps and villous adenomas, which he thought was highly likely; and how long it took for the polyp-cancer sequence to evolve, concluding that this was possibly as long as five years.¹⁴³ Muto, Bussey and Morson (1975) argued that adenomatous polyps were usually small, with a low malignant potential, while villous tumours were larger with a higher cancer rate. Regarding the occurrence of cancer in ulcerative colitis as a separate problem, they also described the notion that cancer could arise *de novo* as 'hypothetical'.¹⁴⁴

Preventive measures were applied to patients with polyposis, and also to many patients who had suffered from total ulcerative colitis for over ten years. However, a much larger group was now included in the high risk category: those patients who already had had an adenomatous polyp, a villous adenoma or a cancer removed.¹⁴⁵ Patients in such groups were regularly followed up, with sigmoidoscopic and often x-ray examinations. The development of the colonoscope made such follow-up easier, since the bowel could be examined as far as the ileo-caecal valve, biopsies taken at any point, and polyps snared and removed, dispensing with colotomy.¹⁴⁶ By the late 1970s, the policy of prevention was regarded as very important at the hospital. Morson (1979) had modified his terminology from polyp-cancer or adenoma-carcinoma to the dysplasia-carcinoma sequence, stressing that where epithelial dysplasia was severe the malignant potential was at its greatest.¹⁴⁷ Morson and Konishi (1980) argued that although the concept of epithelial dysplasia as the main, if not the only, precursor lesion of colo-rectal cancer was unfamiliar, it was perhaps the best nomenclature for describing pre-cancerous lesions. Not all polyps were adenomas, and dysplasia was already documented as the precursor lesion in chronic ulcerative colitis.¹⁴⁸

(iv) The aetiology of colo-rectal cancer

By the 1970s, St Mark's was once again cooperating in research into the aetiology of colo-rectal cancer, a subject which had been largely ignored at the hospital since Dukes' work in the 1920s. Using material from St Mark's and Northwick Park Hospitals, M J Hill from the Central Public Health Laboratory worked on a correlation between faecal bile-acids and clostridia in the faeces of patients with cancer of the large bowel. He postulated that bacteria producing carcinogens or co-carcinogens from bile-acids might be involved in the aetiology of colonic cancer and that this might explain the geographical correlation between fat intake and the incidence of this cancer. He had previously demonstrated that certain bacteria, notably *Clostridium paraputrificum*, were capable of performing the nuclear dehydrogenation reactions which produced carcinogens from bile-acids. Hill et al (1975) found that of 44 patients with cancer of the large bowel, 36 (82 per cent) had high faecal bile-acid concentrations compared with only 15 (17 per cent) of 90 patients with other diseases. Seventy per cent of the cancer patients had high faecal bile-acid concentrations in the presence of faecal clostridia able to dehydrogenate the bile-acid nucleus, compared with only nine per cent of the patients with other diseases. They suggested that their findings supported the hypothesis that cancer of the large bowel was caused by high concentrations of bile-acid derivatives produced by certain anaerobic bacteria.¹⁴⁹ Hill (1982) argued that carcinogens were not ingested in the diet in significant quantities to cause cancer, emphasising that it was more likely that intestinal bacteria produced carcinogens by chemical alteration of food constituents and intestinal secretions. He also maintained that it was important to relate the adenoma-carcinoma theory of malignant colo-rectal tumours to his hypothesis. In the scheme he proposed, the starting point was a genetic disposition to develop a small adenoma. Its appearance was dependent on a presumed environmental factor; the conversion of the small adenoma to a large adenoma was induced by other environmental factors, and this, he thought, related to some combination of high bile-acids and clostridia. A final factor was required to complete the sequence to carcinoma.¹⁵⁰

Diverticular disease

Diverticulosis and diverticulitis had been defined as diseases in the early twentieth century. As in other 'new' diseases, such as ulcerative colitis, surgeons speculated about incidence, and drew much of their information from the cases that came to emergency operation. As it became safer to undertake radical operations, after the Second World War, increasing numbers of cases of diverticulitis were treated operatively, and the bowel specimens were studied to elucidate the aetiology and stages of the disease. Some of this work was undertaken at St Mark's, while in other

cases the surgeons gradually adopted the theories and practices worked out elsewhere.

It was generally agreed by the early 1950s that diverticula of the colon were acquired rather than inherited, but there was no agreement on why they developed. As Lloyd-Davies (1953) remarked, 'in reading the literature I have encountered fifteen theories, ranging from too much fat to too little fat and back again to hormones'.¹⁵¹ Lloyd-Davies himself thought that the most plausible theory was that muscular spasm and irregular contraction of the bowel wall were initiating factors in the development of diverticula; perhaps there was a psychosomatic element which caused spasm, which then narrowed and shortened the bowel, throwing the circular muscle into folds. Intracolonic pressure resulted in herniations of the mucous membrane along the paths of least resistance, where the mesenteric vessels passed through the muscularis propria. He thought that severe rectal bleeding which was occasionally seen in diverticulitis was probably due to ulceration of a blood vessel adjacent to the neck of the diverticulum.

Sir Arthur Keith had argued in 1910 that high intracolonic pressure was the primary cause, and that this was brought about by strong contractions of the muscle, which threw the colon into folds; the mucous membrane was forced through at weak points where the blood vessels penetrated the bowel wall. A former St Mark's house surgeon, Hamilton Drummond, (1917) had described a correlation between the location of diverticula and the routes of the blood vessels and the theory of muscular spasm had later been elaborated by Edwards (1939) and others; Clifford Naunton Morgan posited a similar cause, describing a concertina-like appearance in the bowel, which he thought was due to fibrosis.¹⁵²

Commentators were uncertain of the incidence of the problem in the general population. Norman Henderson at St Mark's had reported in 1944 that he found that 15 per cent of all patients, regardless of complaint, examined by opaque enema at the hospital, had diverticula; on the other hand, those at the Mayo Clinic (1930) had reported an incidence of only five per cent, based on postmortem results, and some had argued that the St Mark's sample was distorted by the type of patients coming to the hospital.¹⁵³ However, other postwar studies increasingly suggested a high incidence of the disease: Parks of Belfast (1968), for example, found that 33 per cent of men and 42 per cent of women had diverticula in 300 unselected postmortem examinations. He also reported that the incidence of the problem seemed to increase steadily with age.¹⁵⁴

Some commentators argued that the conditions described earlier as diverticulosis and diverticulitis were in fact synonymous, and should be referred to by the same term. At St Mark's, Ian Todd (1954) continued to distinguish between the two, emphasising that it was diverticulitis which

was important as it gave rise to symptoms. With the increasing numbers of restorative resections undertaken for the treatment of malignant disease, Ian Todd held that such procedures should also be used in the treatment of diverticulitis. The mortality from complicated diverticulitis was high, and he therefore felt that the operative field should be extended: 'there must be a bolder surgical approach to the problem of diverticulitis'.¹⁵⁵ Surgeons increasingly took such advice: Henry Thompson noted in 1959 that 'the modern approach to diverticulosis and its complications has swung in favour of earlier surgical treatment'.¹⁵⁶ However, he also warned that resection of the colon for what he termed 'diverticular disease' could be a very difficult operation and that the surgeon should consider operating in three stages.¹⁵⁷

As increasingly large numbers of surgical specimens of diverticulitis were received by the pathology department, the stages of the disease were analysed. William Slack, when undertaking research at St Mark's, concluded (1960) that the circumferential blood vessels were probably the source of major haemorrhage in diverticulitis.¹⁵⁸ He also investigated in detail the relationship of diverticula to muscle layers and blood vessels in the colon, agreeing with former commentators that there was a close relation between the blood vessels and the diverticula, and that this arrangement probably had some aetiological significance.¹⁵⁹ It had formerly been thought that muscular hypertrophy resulted from the complaint. Morson (1963a,b) argued, as also had Slack, that muscle abnormality was the primary lesion, preceding the appearance of the diverticula rather than following it. He had examined the muscle coats in specimens removed after operation for diverticulitis and found abnormalities in all of them: the muscle was considerably thickened, even when there was no inflammation. He found no histological abnormality, and suggested that the thickening was probably due to shortening, and that the appearances were the result of a gross exaggeration of the normal physiological action of the bowel. Concluding that diverticular disease (a phrase he thought should be used to include both diverticulosis and diverticulitis) was a disorder of muscle function, he remained uncertain as to its cause – more needed to be known about the normal anatomy and physiology of the colonic muscle.¹⁶⁰

Summing up views in 1965, Ian Todd pointed to work which indicated that an increase in intraluminal pressure was important, occurring when muscular hypertrophy was present. Todd suggested, as had another surgeon, Chifflet, that there were two mechanisms by which diverticula might be formed. In addition to the notion that a hypertrophic muscular wall in the colon might increase intraluminal pressure and produce a diverticulum, they now suggested that in other parts of the colon, if there was less than normal resistance in the bowel wall, this might also allow

diverticula to develop. Todd identified this as the cause of diverticulosis, and held that this undermined the notion that diverticulosis simply preceded diverticulitis: the two conditions were clinically different. In fact, he argued, diverticulosis commonly appeared as a condition in which the colon had diverticula throughout its length, in which the wall of the colon was thinner than normal and in which there was no narrowed or obstructive element present; segmental diverticulitis, on the other hand, was a localised condition in which the wall of the bowel was much thickened and distorted, giving rise to mechanical obstruction. The obstructed phase preceded any inflammatory process, and caused the earliest symptoms of the disease. Todd, like Morson, believed that the terms 'diverticulosis' and 'diverticulitis' should be abandoned in favour of 'diverticular disease'. He advised that elective surgery should be undertaken when a patient had increasingly severe obstructive attacks or there was evidence of inflammation.¹⁶¹

Over the period 1964–1969, 139 resections were performed at St Mark's for uncomplicated diverticular disease, but this policy was criticised by some surgeons as involving unnecessary operative treatment. Penfold (1973) therefore sought to assess whether elective surgery undertaken at St Mark's before serious complications occurred could be accomplished without unacceptable morbidity and mortality. He found that no patients from this group had died as a result of the operation, and that 71 per cent had had no significant post-operative complication. He concluded that it was justifiable to recommend elective treatment for patients with severe persistent symptoms from uncomplicated diverticular disease.¹⁶²

In the first half of the twentieth century, many surgeons and physicians had recommended a low-residue diet when treating patients with diverticular disease, based upon reports of undigested fragments of food and pips associated with perforation. However, this policy was under attack by the late 1940s: it was pointed out that West Africans, with high fibre diets, rarely acquired diverticula. By the early 1960s those at St Mark's emphasised that a low-residue diet was, as Avery Jones put it, 'quite unnecessary and indeed . . . often harmful'.¹⁶³ However, it was Painter, at Manor House Hospital, who put forward the theory that bran was a useful means of treating diverticular disease. In 1971, Painter and Burkitt argued that diverticular disease was in fact a 'deficiency disease of Western civilisation', due to low-fibre diets. A large proportion of the population in modern Western societies seemed to have diverticula, while the disease apparently had been rare in the nineteenth century and was almost non-existent in less developed countries. They suggested that around 1880 the British diet had been sufficiently depleted of fibre to damage the colon: the evidence suggested that the refining of flour and other cereals was the

primary cause of diverticular disease, while the consumption of refined sugar further increased the loss of dietary fibre. They held that a high fibre diet subjected the colon to less strain and did not favour the development of diverticula, and also maintained that the symptoms of diverticular disease might be alleviated by the use of bran; a trial that they had carried out indicated that this was the case. A low-residue diet was strongly contra-indicated. Illustrating their case, they argued that the rise in the death rate from diverticular disease had been halted in Britain only during the Second World War when white bread and refined sugar were strictly rationed: 'Perhaps a return to this high-residue diet would achieve more than all our surgical endeavours.'¹⁶⁴ Painter had earlier measured intracolonic pressures in an attempt to relate the physiology of the colon to the pathogenesis of diverticula. Morson (1963) had found that the pain of 'diverticulitis' was not always due to inflammation, and Painter had suggested that the colic was probably caused by excessive segmentation leading to an intermittent functional colonic obstruction. Painter and Burkitt (1975) argued that a fibre-deficient diet led to hard stools that needed high intracolonic pressure to propel them, leading to muscle hypertrophy and mucosal herniation at the weakest points, where the blood vessels entered.¹⁶⁵

For many years it had been thought that diverticular disease was due to a muscle abnormality.¹⁶⁶ However, in 1985 Whiteway and Morson reported new findings based on light and electron microscopy. They concluded that in fact the muscle cells were normal: neither hypertrophy nor hyperplasia were present. The abnormality was in the connective tissue – there was a greatly increased elastin content in the taeniae coli. As the elastin was laid down in a contracted form, Whiteway and Morson suggested that the elastosis might be responsible for the shortening of the taeniae, producing the characteristic concertina-like corrugation of the circular muscle. Such an explanation meant that although a low-fibre diet might predispose to the formation of diverticula, prescribing a high-fibre diet after their development did not materially assist, since there was already a structural disorder.¹⁶⁷

Constipation and other functional bowel disorders

Constipation in its severe form was regarded as a particularly intractable problem. Various ideas were put forward as to its causes, but no definitive conclusions were reached. Earlier in the century, William Arbuthnot Lane had recommended total colectomy in such cases, a procedure regarded with little favour by his fellow surgeons. It was a problem, too, which was often regarded as unimportant. As Henry Thompson put it in 1964:

Those of us who are blessed with efficient visceral reflexes and who enjoy

the swift satisfying result of responding to nature's gentle call are apt to listen to the heartrending outpourings of the constipated patient with incomprehension and not a little impatience.¹⁶⁸

However, Thompson argued, there were cases which seemed remarkably unyielding to medical means. His first measure was to recommend aperients, and preferably he would refer the patient to the physicians. Nevertheless, 'there are times when a surgeon will presume to act the physician and when masquerading thus I have two great standbys – Paget's paste and spinach'.¹⁶⁹ Paget's paste consisted largely of prunes in brandy, with some senna. Thompson was also firmly of the opinion that 'few colons remain unresponsive to a large daily helping' of spinach.¹⁷⁰ Despite such measures, a few resistant cases remained, and Thompson admitted 'with a sense of shame and guilt' that in such cases he had been known to perform a colectomy.¹⁷¹ He often then found muscle atrophy which convinced him that such chronically constipated patients were unable to propel solid faeces.¹⁷²

Some patients with chronic constipation were found to have bowel abnormalities such as megacolon or megarectum, where the bowel was much larger than usual. In some of these cases, the patient had Hirschsprung's disease, where there was an aganglionic distal segment with dilated bowel above it. In such cases it was recommended that the segment should be resected. There was also Chagas disease, due to *Trypanosoma cruzi*, which caused a generalised degeneration of autonomic ganglia and usually presented as megaesophagus or megabowel, but this was mainly found in Central and Latin America, with cases appearing in Britain only exceedingly rarely. IP Todd showed a particular interest in megabowel of all types. In 1961 he introduced a discussion on megacolon at the Royal Society of Medicine, noting that the subject had not been discussed there since R H Gardiner had presented a paper on the subject in 1953. Gardiner had divided megacolon into several types: cases which were due to obstruction; those with aganglionosis; and those which were simple or functional. Todd focussed his attention particularly on the third category. The condition could be defined as a state in which the bowel was persistently much larger in diameter than normal and intractably constipated. Its aetiology was unknown. The rectum was often found to be atonic: there was little or no rectal sensation. He argued that although resection was indicated for Hirschsprung's disease, in other cases of megacolon medical management was preferable: if part of the bowel was resected, distension occurred proximally, even in the ileum.¹⁷³

The unknown aetiology of the disorder and the difficulty of treatment was also stressed by Todd in later papers (1965, 1968). The symptoms common to all cases were severe constipation, very infrequent bowel

actions (perhaps once every two to eight weeks) and distension. Use was made of the records at St Mark's to try to draw conclusions on the subject: for example, in 1984 Barnes, Lennard-Jones, Hawley and Todd reviewed 94 cases of Hirschsprung's disease and idiopathic megacolon in adults and adolescents, suggesting that there were differences between those who developed symptoms in childhood from those whose symptoms developed later in life.¹⁷⁴

It was uncertain as to what might upset the propulsive mechanism in idiopathic megacolon: Todd suggested that toxic substances or infective agents might be possible causes. It was suggested (Smith, 1967) that in megacolon muscle changes might be a primary defect, and there were some cases at St Mark's where the bowel wall was paper-thin from over-distension, incapable of normal propulsion but where no gross neurological changes could be found. Todd argued that in these cases there might be a primary muscular disorder or degeneration. He recommended that thorough investigation should be undertaken, with biopsy, and sensory and electromyographic studies. Resection of the 'redundant' sigmoid loop rarely helped. Preston, Lennard-Jones and Thomas reported (1984a) an attempt to define radiologically at least what constituted idiopathic megacolon.¹⁷⁵

Megacolon in its various forms, however, was a rare cause of constipation. Increasingly both the physicians and surgeons became involved in treating intractable constipation which had no apparent cause. It had been suggested that in some patients it was due to slow bowel transit time, and in 1969 Hinton, Lennard-Jones and Young reported on a technique for measuring gastrointestinal transit times using radio-opaque pellets of barium-impregnated polythene. They carried out tests on 25 normal subjects and found that all passed the first marker within three days and most passed 80 per cent of the markers within five days. They maintained that the method was simple and had both clinical and research applications. In particular, it could be used to decide whether patients complaining of diarrhoea or constipation had transit times outside the normal range. Preston and Lennard-Jones (1985a) undertook further studies on slow transit constipation, suggesting that it was possibly due to a disorder of the myenteric plexus. However, above all, they believed (1985b) that the problem needed further investigation.¹⁷⁶

Other methods were also devised to study functional bowel disorders. Preston, Lennard-Jones and Thomas (1984b) reported on the use of a balloon filled with barium to simulate a soft stool so that such defaecatory disorders could be studied radiologically. In ten patients who complained of difficulty in expelling stool from the rectum, it was found that there was no relaxation of the anorectal angle on straining, and they were unable to expel the balloon. Preston et al suggested that in such cases the pelvic

floor did not relax normally. Some patients who did not have slow transit constipation but rather were unable to expel a balloon from the rectum were treated by posterior division of the puborectalis muscle, but Barnes, Hawley, Preston and Lennard-Jones (1985) reported that this seemed to result in little benefit.¹⁷⁷

Arbuthnot Lane's procedure for treating persistent severe constipation was still favoured in the treatment of a few cases at St Mark's. In 1984 Preston, Hawley, Lennard-Jones and Todd reported on 21 women who had been treated by bowel resection. In all these cases there had been a prolonged colonic transit time. Colectomy with ileorectal anastomosis was found to give the best results: those who were treated by segmental colonic resection and other less radical procedures were not helped, while, of the 16 patients who underwent total colectomy, ten subsequently had normal bowel function and four others were markedly improved.¹⁷⁸

Patients with irritable bowel syndrome formed an increasing part of the work at St Mark's, particularly in the medical clinic. Lennard-Jones reiterated in 1983, that a few people experienced recurrent or constant symptoms that were severe enough to be disabling and for which no explanation could be found. Some patients, for example, presented with persistent pain. In order to elucidate this, Swarbrick, Bat, Hegarty, Williams and Dawson (1980) investigated sites of pain in irritable bowel syndrome by inflating a balloon at various points in the colon, so that they could identify the areas to which pain was referred. Lennard-Jones emphasised that all cases of irritable bowel syndrome should be enquired into thoroughly, taking a psychosocial history, as well as making a thorough physical examination. He thought that it would be useful to develop a simple quantitative test of colonic sensitivity. There were a variety of methods of treatment ranging from diet and drugs, to psychological measures or surgery. Psychological factors were regarded as potentially very important in irritable bowel syndrome, as Lennard-Jones also stressed elsewhere. Some patients were therefore seen not only by the medical social worker but also by the psychotherapist, P J Schoenberg. Schoenberg (1984) described some of the emotional problems which might be associated with chronic disorders of the large bowel. Despite the variety of approaches, many of the patients seemed nevertheless to have intractable symptoms which, Lennard-Jones argued, merited further research.¹⁷⁹

INFLAMMATORY BOWEL DISEASE

For its first hundred years, St Mark's had been an exclusively surgical hospital, mainly treating anorectal complaints and cancer. After the Second World War this changed dramatically: physicians began to take an

increasing part in the hospital's work and by the 1980s patients with inflammatory bowel disease outnumbered those with cancer at the hospital. Although the surgeons took an active part in their care, it was in this area particularly that the physicians' work expanded. Gastroenterology had been developing as a specialty in the first half of the twentieth century, encouraged by the growth of biochemistry and physiology, the introduction of new instruments such as the gastroscope, and the development of new drugs.¹⁸⁰ Francis Avery Jones played a leading part in the growth of gastroenterology, and when the surgeons decided in 1949 that he should be appointed honorary consulting gastroenterologist, he became the first physician on the staff who was expected to treat certain colo-rectal diseases, rather than merely assist occasionally with pre- or post-operative care. Increasing numbers of physicians in training now came from Avery Jones' department of gastroenterology at the Central Middlesex Hospital to St Mark's to serve as clinical assistants and research fellows. In 1962 Avery Jones' 'Friday morning clinic' was officially titled 'The Medical Clinic' and became available for direct referrals from general practitioners. J E Lennard-Jones was appointed in 1965 as the first paid consultant gastroenterologist, and for the first time a few beds were set aside specifically for medical cases. The first medical registrar was also appointed in 1965.¹⁸¹

The arrival of the gastroenterologists at St Mark's gradually shifted the hospital's focus. Their presence encouraged debate over whether the hospital should become primarily gastroenterological, looking at the whole of the alimentary tract and digestive process rather than concentrating on the large bowel and the anatomy and function of the anorectal region. Attention was paid to the physiology of the gut, and the role of gut bacteria, to the elements of adequate nutrition, and methods of improving the state of malnourished patients; in addition a number of controlled trials of drug treatments were carried out.

In other ways, too, the gastroenterologists changed the ethos of the hospital. Frederick Salmon had taken a holistic approach, paying attention to the diet and environment of the patient, not only to his or her operative treatment. In the later nineteenth century medical practitioners increasingly abandoned this approach, with physicians concentrating on the germ theory and other single-strand explanations of disease and surgeons emphasising operative procedures above all. Now it was the physicians at St Mark's who began to re-direct attention back to diet, psycho-social elements and the environment of the patient.

Ulcerative colitis

Patients had been diagnosed and treated at St Mark's well before the Second World War for ulcerative colitis: indeed, it was a disease in which

THE FIELD DIVERSIFIES

J P Lockhart-Mummery had had a strong interest. After the war the treatments for the disease changed considerably, and larger numbers of patients began to come to the hospital. In the first stage, the operations for severe or chronic ulcerative colitis became more radical, with the total removal of the rectum and colon and creation of a permanent stoma. By the mid-1950s, however, the corticosteroids were increasingly used in the treatment of less severe disease. In the late 1950s and 1960s a number of trials of medical treatment were carried out, and the respective indications for medical treatment or surgery were assessed. The gradations within the disease called for close coordination between the physicians and surgeons over their respective roles in its treatment.

There was some indication that ulcerative colitis was becoming more common, like other complaints such as diverticular disease. Certainly more cases were identified, and as more colectomy specimens became available for analysis, surgeons, physicians and pathologists were able to study the natural history of the disease in greater detail. Attempts were made to cast light on the aetiology of ulcerative colitis, its disposition to cancer in long-standing cases, and to distinguish between this complaint and Crohn's disease.

Most patients were treated medically for ulcerative colitis in the early 1940s, although the medical means were not regarded as satisfactory. More severe cases were treated by appendicostomy or caecostomy and washthroughs, but a few surgeons advocated bringing out the end of the small intestine as an artificial anus (an ileostomy), either with or without subsequent removal of the colon. It was at first thought that resting the bowel would be sufficient, but problems tended to return if the ileostomy was closed. By the early 1950s, colo-rectal surgeons were increasingly adopting the procedure of ileostomy rather than caecostomy. Rupert Corbett, surgeon to St Bartholomew's Hospital, reported in 1951:

Ileostomy with or without subsequent colectomy is now established as the operation of choice, and is looked upon as the greatest advance in the treatment of this disease.¹⁸²

In this instance he termed the artificial anus a 'slight inconvenience'. He described the usual course of events in a patient with chronic ulcerative colitis: the patient would have a bout of diarrhoea which did not subside, the doctor would prescribe various medicines but the diarrhoea would persist, and later blood and mucus would be passed. By this stage there would be proctitis and possibly colitis. However, as Corbett himself recorded, also in 1951, there had been serious problems with stomas. Watery faeces flowed constantly; appliances had a tendency to leak, painfully excoriating the skin and causing the patient embarrassment because of smells. Protective powders and dressings were often tried without success.¹⁸³

In 1952, Bryan Brooke in Birmingham made the point that: 'An ileostomy must work perfectly if the surgical treatment of ulcerative colitis is not to fall into disrepute'.¹⁸⁴ The closest attention should therefore be paid both to the technique of fashioning the stoma and subsequent care. Besides excoriation and obstruction, another problem which often occurred was that the stoma stenosed. Various suggestions had been made to deal with this, including skin grafting, but Brooke recommended that the stoma should be everted at the time of operation, and the mucosa sutured to the skin, a procedure which had also been recommended by D H Patey for colostomies.¹⁸⁵ It was the Brooke ileostomy which came to be widely adopted as the preferred method of forming a stoma. As will be discussed further, in Chapter XVI, improvements in collecting devices were also introduced in the late 1940s and early 1950s. Increasingly surgeons recommended that the Koenig-Rutzen bag, or its British modifications, which adhered to the skin, should be used for ileostomies. These were designed to avoid any contact between the faeces and the abdominal wall, and could be emptied without removal.

It was increasingly stressed by the early 1950s that operation was necessary in severe and long-standing cases of ulcerative colitis not only because it often seemed the only way of curbing the disease or even saving the patient's life, but also because there seemed to be a link between ulcerative colitis and cancer. Such an association had first been reported by J A Bagen in 1928, and a few papers on the subject had appeared in the 1940s, largely in America. Dukes and Counsell (1952) felt that the link between chronic ulcerative colitis and cancer was not generally recognised in Britain. They reported on the incidence of cancer in the 63 cases of severe ulcerative colitis that had been treated surgically at St Mark's between 1941 and 1951, finding it to be 11 per cent overall and nearly 40 per cent in those who had suffered from colitis for more than ten years. In most of the cases malignancy had been unsuspected, even at colectomy, it being revealed subsequently only by microscopic examination of the specimen. They had also found that when cancer followed ulcerative colitis it advanced rapidly and was exceptionally invasive, with lymphatic spread at an unusually early stage. Dukes and Counsell argued that such malignancies probably had often been overlooked in the past because of an atypical appearance.¹⁸⁶ In 1953, Dukes reported on the subject again, since a larger number of patients were now being operated on for ulcerative colitis. In eight per cent of colectomy specimens from the previous five years cancer had been found. The average 'incubation' of the cancer – from onset of ulcerative colitis to malignancy – had been fifteen years.¹⁸⁷

In 1953, a full discussion of ulcerative colitis and its surgical treatment was held at a meeting of the section of proctology at the Royal Society of Medicine: it summed up current opinion among leading colo-rectal

specialists. Richard Cattell, from the Lahey Clinic in Boston, declared that in 1948 he and his colleagues had considered that 25 per cent of colitis patients required surgery – they now put it at 50 per cent. The indications for surgery were cases which did not respond to medical treatment, fulminating cases or those with complications. It was imperative, he thought, to perform a total proctocolectomy with permanent ileostomy on patients with long-standing disease, because of the risk of cancer.¹⁸⁸ J C Goligher, speaking on behalf of the surgeons at St Mark's, agreed with Cattell regarding the risk of malignancy: the danger from cancer was vastly greater than that from operation, and the removal of the colon and rectum in such cases was therefore essential. At St Mark's the surgeons had originally followed Cattell's plan of a three-stage operation – ileostomy, colectomy and excision of the rectum – at intervals of three months or so. However, recently impressed by the work of Miller (1951) in Montreal and Crile and Thomas (1951) in Cleveland, Ohio, they had been performing primary colectomy or proctocolectomy simultaneously with the ileostomy.¹⁸⁹ It was better, Goligher thought, to remove the main site of the disease, and to quell toxic absorption and protein loss as quickly as possible. Moreover, in the past, surgery had often been spun out over nine or twelve months, entailing much hospitalisation and economic hardship. By 1953, of the surgeons at St Mark's, Goligher at least was using Brooke's method of everting and suturing the ileostomy at time of operation, to avoid stenosis. Operative mortality at St Mark's now stood at eight per cent.¹⁹⁰

Although all agreed that the colon should be removed in severe cases of ulcerative colitis, there was disagreement over whether the rectum should also be excised. Those in favour of its removal argued that it was the most likely to be affected of the whole bowel by the disease, and that even if relatively unaffected at time of operation, it would subsequently become so. Moreover, to perform an ileorectal anastomosis was both difficult and potentially dangerous. However, other surgeons felt that every effort should be made to avoid giving the patient a permanent stoma – strenuous attempts were, after all, being made to restore continuity after cancer operations – and that removal of the rectum was a dangerous procedure. In Australia, Devine had developed a method of ileorectal anastomosis which was discussed by the participants at the meeting at the Royal Society of Medicine.¹⁹¹ Rupert Corbett held that if possible the rectum should be retained. If rectal inflammation settled down, an ileorectal anastomosis according to Devine's method could then be made.¹⁹² Bryan Brooke, on the other hand, referred to reviews that indicated that Devine's patients were disabled by passing frequent loose motions.¹⁹³

W B Gabriel agreed with Brooke: he was 'thankful to think that he would never do another Devine's operation'.¹⁹⁴ The operation was

dangerous, strangulation of the small intestine could occur, and recurrence of symptoms was very likely. Patients with a permanent ileostomy, he argued, fared well: 'they were bright, cheerful and active members of the community freed from a life of invalidism'.¹⁹⁵ Lawrence Abel from the Gordon Hospital, however, took the other point of view, arguing that where possible the rectum should be retained.¹⁹⁶

The only physician to take part in the debate on ulcerative colitis at the Royal Society of Medicine was Francis Avery Jones. He held that progress in its treatment had been made in four respects. There had been an appreciation of the importance of better nutrition – surgeons and physicians had moved away from the low residue diet which had formerly been advocated, and there was now a positive emphasis on calories, proteins, vitamins and electrolytes. Secondly, there was a better appreciation of the importance of the personality of the patients and their reactions to the difficulties; he stressed the necessity of introducing new patients to those who already had an ileostomy. As the third point, he described improvements in surgery, particularly the ability of surgeons to carry out an ileostomy and subtotal colectomy at the same time. The fourth element was improvement of the ileostomy bag itself.¹⁹⁷

The concern of the medical and surgical staff over the extent to which an ileostomy was a disability was reflected in an investigation by P Brian Counsell and H E Lockhart-Mummery who reported in 1954 on ileostomy patients. In scope it resembled that undertaken by Cuthbert Dukes in the late 1940s of cancer patients left with a colostomy. Counsell and Lockhart-Mummery concluded that ileostomy patients fared well, but – like Brooke – they concluded that great care should be taken in fashioning the stoma. Moreover, its abdominal position was very important and should be agreed with the patient before operation: the surgeon should avoid the waistline, bony prominences, operation scars and the umbilicus. Patients should be taught the details of managing their ileostomy before leaving hospital; an ileostomy committee had already been formed at St Mark's, consisting of ileostomy patients, representatives of surgical instrument makers and members of the staff of the hospital, and it was hoped that through this, assistance would be given to ileostomy patients.¹⁹⁸

The surgeons at St Mark's, with the notable exception of Gabriel, increasingly endeavoured to preserve the rectum where possible. However, out of 24 patients treated by colectomy with ileorectal anastomosis at St Mark's by 1957, four later had had their rectum excised for recurrence.¹⁹⁹ The debate over the general indications for surgery continued. Dukes and Lockhart-Mummery (1957/8) suggested that the main indications were chronic invalidism, with failure of response to medical

management, acute fulminating disease, the presence of complications and risk of cancer.²⁰⁰

The options for treating ulcerative colitis were expanding in the 1950s as steroids came into use. It had been suggested that cortisone was useful in the treatment of the disease, and a multi-centre trial, led by Truelove and Witts at the Radcliffe Infirmary, Oxford, was coordinated by the Medical Research Council; one of the trial centres was Francis Avery Jones' department at the Central Middlesex. Truelove and Witts reported in 1955 that patients treated orally with cortisone had an increased chance of remission, particularly in early cases in which the disease was only moderately severe. If irreversible damage had already been done to the colon and the patient had persistently troublesome symptoms, it was best to recommend colectomy and ileostomy.²⁰¹ Francis Avery Jones, discussing the results of the trial in the *St Mark's Annual Report* of 1955, related that he had found cortisone particularly useful when treating patients in their first attack. However, some patients seemed not to benefit, and he recommended that these should be referred for surgery.²⁰²

The following year, Avery Jones tried prednisone in the treatment of the disease and found a marked improvement in some patients, although the results were 'not spectacular'.²⁰³ Newell and Avery Jones reported in 1958 that although prednisone produced remission of the disease in about two-thirds of patients, a relapse frequently occurred in the next few months. However, new drugs now began to be measured against prednisone rather than inert preparations at St Mark's. Newell and Avery Jones also argued that a better understanding of the disease was required. Analysing over 150 cases from the previous eight years from the Central Middlesex, they concluded that idiopathic proctitis was a local form of ulcerative colitis, and that proctitis extended to produce typical ulcerative colitis in about 10 per cent of patients.²⁰⁴ The records from St Mark's were later combined with those from the Central Middlesex to give a larger pool from which to base conclusions about ulcerative colitis.

Since one in three patients suffering from 'fulminating' colitis died at operation, Lennard-Jones and Vivian investigated in 1960 whether corticotrophin or cortisone could induce a remission in such cases. However, they emphasised that when a remission could not be induced medically the emphasis should be on energetic metabolic replacement and early operation: they warned that some physicians had developed too great a faith in corticotrophin or steroid drugs, and sometimes delayed operation for too long even though the patient was not reacting to the drugs.²⁰⁵ Ewart and Lennard-Jones (1960) also analysed whether the use of corticosteroids in pre-operative medical management might actually prejudice surgical success. They noted that there was some evidence that corticosteroids lowered resistance to infection, predisposed to circulatory

collapse and possibly to venous thrombosis. Examining retrospectively cases treated at St Mark's between 1951 and 1959, however, they found very little difference between the results after surgery between patients who previously had been treated with corticosteroid drugs and those not treated in this way. They argued that previous vigorous medical treatment might in fact contribute to surgical safety by reducing the proportion of patients who had to be operated on when they were very ill. However, again they warned physicians of the dangers of leaving surgery too late.²⁰⁶ Avery Jones concurred: since the use of corticosteroids did not seem to prejudice the results of surgery, more vigorous pre-operative medical management should be undertaken.²⁰⁷

All agreed, however, that corticosteroids had possible side-effects, and moreover that they were not effective in all cases, especially the more severe ones. The search for other drugs continued. Svartz in Sweden had reported in 1942 that she had found a new sulfa drug, sulphasalazine (salazopyrin), effective in the treatment of ulcerative colitis.²⁰⁸ It was some time before investigators in Britain took up the drug, but favourable reports were appearing by the late 1950s. In 1960 Lennard-Jones, Longmore and Avery Jones reported on a comparative trial between salazopyrin, prednisone and hydrocortisone retention enemas used as outpatient treatments. The trial showed that salazopyrin was indeed effective, although the response was slower than with prednisone. They concluded that prednisone was the most effective for the immediate relief of symptoms, but the relapse rate was high, while corticosteroids were potentially dangerous. Although salazopyrin, on the other hand, often gave rise to unpleasant side-effects, dangerous complications were rare and they therefore recommended it as an effective treatment of the disease.²⁰⁹ The advantages of salazopyrin were further emphasised by Baron, Connell, Lennard-Jones and Avery Jones (1962), after they had carried out a double-blind controlled trial, in which it was measured against a placebo.²¹⁰ The practice of testing drugs – even those already widely used – through such trials continued to be applied.²¹¹ The results of one trial, for example, showed that prednisolone suppositories produced significant improvement, although it confirmed once again that no simple solution to the treatment of the disease had been found.²¹²

Ulcerative colitis had a strong tendency to recur, with four out of five patients who responded to medical treatment of a first attack suffering a second one within a year. The first trials with sulphasalazine had indicated that it might be effective in maintaining remission, and the physicians now investigated the relative merits of sulphasalazine and prednisone in this context. It was found that while prednisone did not alter the rate of relapse, sulphasalazine did. As the investigators commented, this was the first demonstration in a formal trial that any treatment was able to reduce the relapse-rate in ulcerative colitis.²¹³

Attention was also paid to the manner in which patients were treated. Topical corticosteroid treatment had been used from the mid-1950s, and in 1960 disposable plastic enema bags to administer the drug were introduced elsewhere, but some of the St Mark's patients found these difficult to use. Moreover, the pre-packed bags were expensive. In 1965 Howel Jones, Lennard-Jones and Misiewicz reported on a new method which they had devised for administering retention enemas: the patient made up his or her own required solution, before administering the enema through a syringe and catheter.²¹⁴

Reflecting the level of interest in ulcerative colitis, the physicians at St Mark's began to work out a pattern of the natural history of the disease. In 1951 a prospective study of patients with idiopathic proctitis was initiated in the medical clinic:²¹⁵ in 1962 Lennard-Jones, Cooper, Newell, Wilson and Avery Jones reported on the findings in 100 patients over the previous ten years. They concluded that idiopathic proctitis and idiopathic proctocolitis were two manifestations of one disease, differing only in the extent of the colon involved. Some previous commentators had distinguished between a relatively benign granular or haemorrhagic proctitis and generally recognised ulcerative colitis. However, sigmoidoscopic findings over a period of time showed that the appearance of the rectal mucosa differed from time to time, indicating that 'granular' and 'haemorrhagic' proctitis were not two conditions but phases of one disease. They also concluded that inflammation tended to spread proximally in at least 10 per cent of cases.²¹⁶

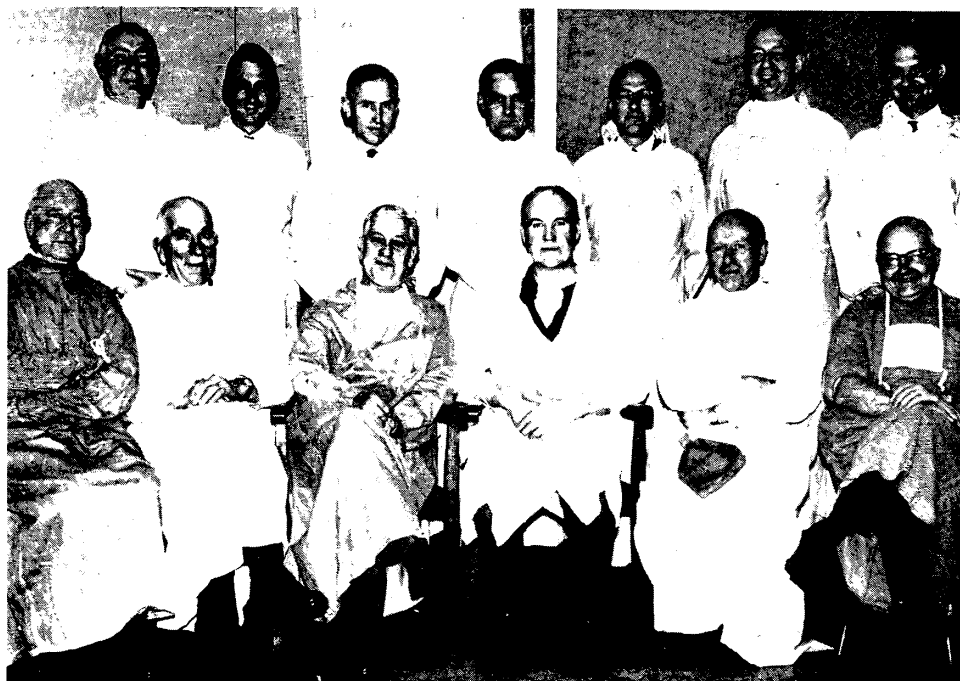
As the natural history of the disease was delineated, attempts were made to standardise descriptions of individual cases. In particular, it was argued that agreement was needed over the precise indications for surgery. Baron, Connell and Lennard-Jones (1964) thought that there was significant variation between observers in describing mucosal appearances in proctocolitis, and therefore conducted a trial among themselves which confirmed this. They concluded that terms that could be more uniformly agreed should be used: expressions such as 'granularity' were open to wide interpretation. They suggested that such discontinuous variables as the occurrence of spontaneous bleeding, bleeding to light touch (friability) and the presence or absence of ramifying blood vessels were more useful measures of the severity of the disease.²¹⁷

At the Royal Society of Medicine in 1966, Francis Avery Jones gave the presidential address to the section of proctology on colitis. With the growing interest of pathologists and the introduction of biopsy, it was argued that the essential pathological lesion was a mucosal inflammatory reaction and the ulceration was a secondary complication and was not always present. He suggested that perhaps the term 'ulcerative' should be abandoned in favour of 'idiopathic'. Moreover 'proctocolitis' was a more

accurate description than 'colitis'. He recommended the use of an instant enema x-ray, as advocated by Allan Young (1963) at St Mark's, so that the extent of the disease could be seen. Avery Jones maintained that it was easier in Britain than in many other countries to arrange controlled drug trials, and that full advantage of this had been taken by the Medical Research Council in coordinating such trials. Cortisone had now been largely superseded by prednisone because of trial results, and he argued that corticosteroids should be used for moderate and severe cases of colitis, while sulphasalazine was particularly useful for milder cases, and for the maintenance of remission. Collaboration with surgical colleagues was, Avery Jones thought, a prime task of the physician: there should be no unnecessary delay in surgical intervention if this became necessary. Where there was diffuse disease in the bowel interfering with patients' lives, such patients were better-off having an operation, particularly if they had suffered from the disease for some while and therefore had an increased risk of cancer.²¹⁸

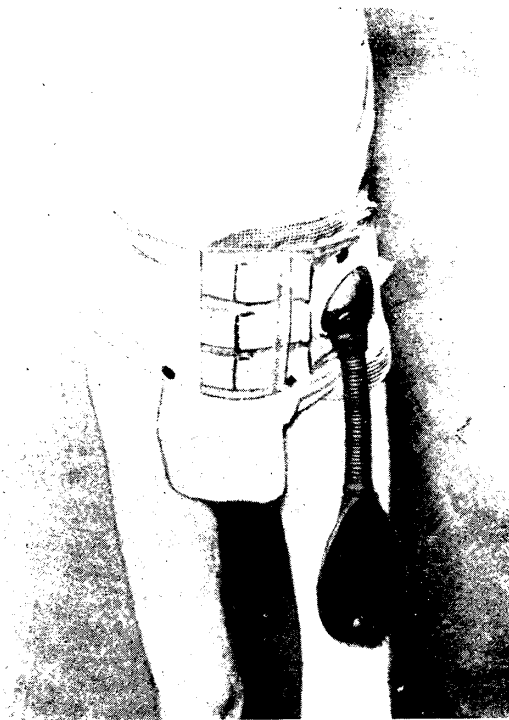
It was partly to help differentiate ulcerative colitis from other diseases and partly because of the fear of cancer, that biopsies came to be taken routinely in cases of ulcerative colitis. At St Mark's, biopsies were taken occasionally in the early 1950s, but became a routine procedure in the mid-1960s. Dukes had stressed the danger of cancer in patients with colitis. Hinton (1966) re-emphasised the point, attempting to identify those colitis patients at particular risk, by using the results from the large group of patients which had now been treated at St Mark's. It had been argued that the important factors were the extent of the disease, its duration and the age of the patient at the time of onset of colitis. Hinton concluded from the St Mark's cases that it was the extent of the disease which was critical with the other two factors acting only as modifying influences. He also argued that the prognosis of cancer in colitis in the St Mark's experience was not as poor as other investigators had found.²¹⁹

The prognosis for patients with cancer and ulcerative colitis was generally regarded as much worse than for patients with cancer alone. Morson (1966) held that this argued for prophylactic treatment in high risk patients; he also argued for more extensive histopathological studies of the pre-cancerous phase of ulcerative colitis.²²⁰ It was this aspect which Morson and Pang addressed in 1967. They recorded that they had found histological changes characteristic of pre-cancer in rectal biopsies from nine patients with ulcerative colitis. All had had total colitis and a long history of symptoms, in most cases well over ten years. Morson and Pang had found that neoplastic change in this disease seemed more commonly to occur in flat rather than polypoid mucosa. The pre-cancerous change was often very diffuse: when such changes were found in the rectum, they were often present extensively throughout the colon, and had in five cases

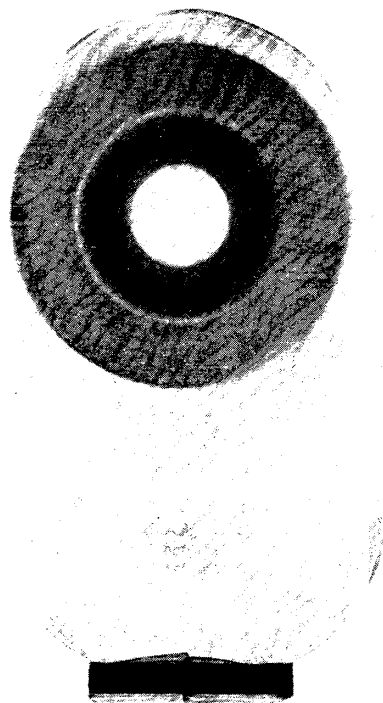


MARKING W B GABRIEL'S FINAL OPERATING LIST, 1958

*Front, left to right: CE Dukes, ETC Milligan, CNaunton Morgan,
WB Gabriel, OV Lloyd-Davies, FT Evans*
*Back, left to right: HR Thompson, HE Lockhart-Mummery, JC Goligher,
IP Todd, BC Morson, AG Parks, DV Bateman*



*Patient with colostomy
appliance, 1905*



Ileostomy appliance, 1980s

been associated with otherwise undetected invasive cancer in the colon. Such pathological studies were already having an impact on the treatment of ulcerative colitis cases at St Mark's. The diagnosis of pre-cancer had influenced the decision to carry out surgical treatment. Morson and Pang held that a policy of regular rectal biopsy in patients with a long history of total colitis could lead to some measure of cancer control in this group. The diagnosis of cancer in ulcerative colitis was often made at an advanced and incurable stage; not surprisingly the prognosis of cancer in colitis was poor. They therefore argued that if random rectal biopsy (and the incidence of cancer in the disease was higher in those areas within reach of the sigmoidoscope than elsewhere in the colon) could help to detect the patients who had entered a pre-cancerous phase, all patients with a long history of total ulcerative colitis should have regular – perhaps yearly – biopsy examinations.²²¹ As a result of these conclusions in 1966 a prospective follow-up of all patients with extensive colitis, using regular rectal biopsy, was started in the medical clinic.

The figures from Leeds (de Dombal, Watts, Watkinson and Goligher, 1966) indicated that the incidence of cancer rose markedly according to length of symptoms. The greatest risk was in those with total colitis. Edwards and Truelove in Oxford (1964) had shown similar results; their information also indicated that there was a greater risk when the ulcerative colitis started early in life. H E Lockhart-Mummery, summarising opinions in 1968, pointed out that the five year survival of cases from St Mark's with cancer and colitis had been found to be 40 per cent, and that therefore, even if colitis patients tended to have more multifocal and more high grade cancers, if earlier diagnosis could be achieved the prognosis was not necessarily poor.²²²

The first attempts to define the role of rectal biopsy in the diagnosis of ulcerative colitis and Crohn's disease had been made at the end of the 1950s. Interest in it had grown steadily. In 1971, Morson reported that rectal biopsy could be a very useful investigative tool: it could help to establish whether the disease was ulcerative colitis, to monitor its progress and document remissions and exacerbations, to judge the response to medical treatment, and to detect pre-cancerous change.²²³ With the use of the colonoscope, it was now possible to take biopsies from any part of the colon and rectum. Interpreting the biopsies was not necessarily easy: Morson (1972) argued that more accurate histologic criteria needed to be developed by coordination between gastroenterologists, surgeons and histopathologists: all histopathologists continued to have difficulties in the interpretation of rectal biopsies in inflammatory bowel disease, and equivocal reports were frequent.²²⁴

The first report on the follow-up of patients with longstanding colitis, initiated in 1966, was published in 1974. Some patients had been operated

on for acute colitis, pre-cancer or cancer, but the results overall indicated that quiescent extensive colitis could be managed conservatively with relative safety provided that close supervision was maintained. It was decided that in future regular barium enemas and colonoscopy should be included in the plan of management, especially for patients with a history of more than ten years.²²⁵

It was felt at St Mark's that the gradations of the disease were not adequately recognised elsewhere. Lennard-Jones and Ritchie (1974) argued that colitis was a common and potentially dangerous illness that affected all age groups. The severity of the disease varied greatly and depended on the extent and degree of the mucosal damage. They emphasised that although mild or moderate attacks responded well to medical measures, severe attacks were associated with a mortality rate that could be reduced by urgent treatment.²²⁶ The following year Lennard-Jones, Ritchie, Hilder and Spicer argued that the potential severity of ulcerative colitis tended to be underestimated at non-specialist hospitals, resulting in medical measures being maintained for longer than was safe, with subsequent high surgical mortality. The authors identified body temperature, pulse rate, bowel frequency and plasma albumin as the most important features to be monitored. From these could be derived a prediction of outcome of medical treatment for acute colitis.²²⁷

In 1962, Lennard-Jones et al had outlined a preliminary account of what they saw as the natural history of idiopathic proctitis. In 1977 Powell-Tuck, Ritchie and Lennard-Jones reported on a further study which included a larger number of patients, followed up for longer, and which analysed the results actuarially. The earlier study concluded that the inflammation extended proximally in at least one-tenth of the patients. The later study concluded that the extension rate was unlikely to be less than one-fifth. Their evidence also seemed to indicate that the spread of inflammation to involve part of the colon might occur at any time over a period of years. Among patients with extension of the disease, the cumulative probability of developing extensive colitis was about six per cent at ten years. The likelihood of radical surgery was about five per cent at ten years. However, the survival of a patient with idiopathic proctitis was little affected by the disease.²²⁸

Fewer patients with proctocolitis were treated surgically by the 1970s than had been the case in the early 1950s. To a large extent this reflected the increased efficacy of medical treatment. Surgery was also seen to have its problems. Williams, Watson and Goligher had reported in 1951 that about 30 per cent of men were impotent and a further 28 per cent were infertile after abdomino-perineal operations for cancer of the rectum. Since many patients with ulcerative colitis who might have to undergo proctocolectomy were young adults, such findings were particularly

disturbing. In 1966, R E May reported on 47 male patients treated by proctocolectomy for the disease, finding that three had transient sexual dysfunction, while a further eight had varying degrees of permanent impairment. These were rates which were not as high as those reported earlier, but certainly very significant.²²⁹ A survey among members of the Ileostomy Association on sexual problems resulting from their operations was reported in 1977. Although the majority had adapted well to the ileostomy, nearly one-third of the men reported some sexual dysfunction after rectal excision.²³⁰

When proctocolectomies were first undertaken, the surgeons followed the methods of radical excision used for cancer. However, the evidence on sexual and urinary dysfunction encouraged surgeons to consider less radical procedures: wide clearance in such cases was not necessary. Lee and Dowling reported from Oxford in 1972 on what they termed perimuscular excision of the rectum, and Lyttle and Parks (1977) developed a similar intersphincteric excision for the treatment of patients with inflammatory bowel disease.²³¹ In 1984, Leicester, Ritchie, Wadsworth, Thomson and Hawley reported on intersphincteric excision in a series of 98 patients at St Mark's. One patient suffered permanent sexual dysfunction from sympathetic nerve damage, but no patient showed evidence of permanent parasympathetic nerve damage. Primary healing of the perineal wound was successful in half of the cases, and in 69 per cent the wound healed within three months of operation. They argued that intersphincteric excision with primary perineal suture significantly decreased morbidity from rectal excision, compared with more extensive procedures.²³² Studies were also undertaken of the social implications of the disease itself, some of which argued for surgery. Bowel frequency was a common and troublesome symptom, but it was the urgency of defaecation with a tendency to sudden incontinence which was a major factor in limiting working life and leisure and social activities. Abdominal or rectal pain and lassitude were other symptoms. As a result of the symptoms about one fifth of the patients had a reduced earning capacity and a quarter were restricted in their social or leisure activities, even when symptoms were at their least troublesome.²³³

Where surgery was indicated, preservation of the rectum rarely seemed possible. In 1960, A F G Anderson had reported on 24 patients who had had restorative operations at St Mark's for ulcerative colitis, together with a further 10 cases treated by St Mark's surgeons elsewhere. In 16 of the cases the results were problematic, with three immediate failures and six late recurrences.²³⁴ Because of the likelihood and danger of recurrence in the rectum, Henry Thompson declared in 1964 that colectomy and ileorectal anastomosis had little place in the permanent treatment of ulcerative colitis. However he also noted that the removal of the colon at

all for colitis 'is crude and desperate therapy and I have no doubt that future generations will wonder that it was ever done'.²³⁵ Attempts at avoiding stomas were made in the 1970s. In 1969, NG Kock, a surgeon in Gothenburg, reported the development of a continent ileal reservoir, constructed out of loops of small intestine which were opened and sutured together. A nipple valve was fashioned which prevented spontaneous efflux from the reservoir via the stoma; the patient was able to drain the reservoir by means of a catheter inserted through the stoma. In 1978, Parks and Nicholls reported a variation on this continent reservoir: they brought it down into the pelvis, and performed an ileoanal anastomosis at the dentate line. They created a S-configured pouch from loops of terminal ileum; however, only five per cent of patients were able to void spontaneously, the rest needing to use a catheter to empty the pelvic pouch. In subsequent modifications at St Mark's and elsewhere surgeons made pouches from J- and W-loops of ileum which overcame this problem to a large extent. The procedure allowed the total removal of the colon and rectum without the establishment of a permanent ileostomy.²³⁶

The precise nature of the cancer risk in ulcerative colitis continued to be debated: Lennard-Jones, Morson, Ritchie, Shove and Williams made a further report in 1977 on their conclusions from following patients with extensive ulcerative colitis. They argued that the removal of the colon in cases of severe acute colitis unresponsive to medical measures had removed from the high risk group many patients who were possibly the most likely to develop cancer. Based on the information gathered from 1966, they confirmed the necessity of following up patients with extensive colitis and those in whom the rectum was retained after surgical treatment. During the first ten years after onset of the colitis, regular sigmoidoscopy and rectal biopsy were recommended. After that, the investigation should be supplemented by colonoscopy with multiple biopsies every two years, or more frequently if there was a suspicion of dysplasia. In a group of 229 cases, only four symptomless patients had been advised to undergo colectomy because of finding severe dysplasia. Three of these were then found in fact to have an early carcinoma.²³⁷

However, in 1983 Lennard-Jones, Morson, Ritchie and Williams reported that there were some dangers inherent in the policy outlined in 1977. They had found that despite regular surveillance, cancer had developed in 13 of the 186 patients with a history of disease for ten years or more. There had been one death from cancer in the total number of 303 cases. The method of follow-up had probably prevented the development of cancer in eight patients and permitted the diagnosis of carcinoma at a stage where cure was likely in eleven. They concluded that when ten years had elapsed from the onset of symptoms in a patient shown at any stage

to have extensive colitis, the matter should be discussed frankly. If the patient was averse to a proctocolectomy, regular supervision was a reasonably satisfactory alternative. However, the risk of cancer was not removed by such surveillance.²³⁸

By the 1980s a certain pattern had emerged in the treatment of ulcerative colitis. It was a disease over which close collaboration between physicians and surgeons was required, as well as with pathologists, radiologists and endoscopists. Such features as depth of ulceration were now being correlated with outcome and clinical features.²³⁹ Proctocolectomy with a permanent ileostomy, fashioned according to Bryan Brooke's method of everting the stoma, was by now regarded as a well-tried and usually satisfactory procedure where operation was required. Ileorectal anastomoses, which had a high incidence of anastomotic leakage in the early 1950s, later proved easier to accomplish, but were still regarded as a compromise, to be used for example for younger patients with a relatively undiseased rectum. Only one fifth of patients operated on for ulcerative colitis received an ileorectal anastomosis. The new pouch operation meant that patients did not have a permanent ileostomy, but only a small proportion of cases were undergoing this operation in the early 1980s.

During the 1950s new medical treatments had become available, and increasingly cases were referred for medical rather than surgical treatment. The corticosteroids appeared at a time when the idea of controlled therapeutic trials was beginning to be accepted, and at St Mark's the physicians undertook a series of such trials. However, Lennard-Jones (1984) argued that more active, non-toxic and reliable drugs were needed for use in an acute attack and for the prevention of relapse although drug therapy had become more effective, surgical treatment safer and the indications for the various measures available better defined.²⁴⁰

Crohn's disease

Crohn's disease was another inflammatory bowel complaint which was differentiated and described in the twentieth century, although somewhat later than ulcerative colitis. At first cases were regarded as types of colitis, but increasingly, particularly after the Second World War, it was regarded as a separate disease. Some references to a distinct disease, later identified as probably Crohn's disease, were made early in the twentieth century, but it was Crohn, Ginzburg and Oppenheimer (1932) in New York who established what they termed 'regional ileitis' as a clinical and pathological entity.²⁴¹ It was initially held that the disease only affected the terminal ileum, but investigators increasingly argued that it could be found more diffusely in the small bowel and even in the colon. It was largely through the influence of St Mark's that the disease came to be seen as one which might afflict the large intestine alone, without any small bowel involvement.

Not surprisingly, given the focus of the hospital's specialty, initial work at St Mark's was on the diagnosis and description of colonic Crohn's disease. Increasing numbers of patients with the disease came to the hospital, so that by 1985 it represented the largest single group of inpatient cases that the hospital treated. With this development, the staff found themselves treating larger numbers of cases with the disease in the small bowel, or elsewhere in the intestinal tract, sometimes with no colonic or anal involvement at all.

The subject of Crohn's disease aroused great controversy: some doubted that it differed from ulcerative colitis and others disagreed over its manifestations, which led to lengthy disputes over nomenclature. The concept that Crohn's disease could involve the colon, rectum and anus was the subject of particularly heated controversy over a number of years. Charles Wells, in Liverpool, stressed in 1952 that indeed there was a difference between ulcerative colitis and Crohn's disease. He described idiopathic ulcerative colitis as a disease which always involved the rectum and pelvic colon, and extended in continuity. Crohn's disease he described as a granulomatous lesion characterised by great thickening of the bowel wall and involving primarily some part, usually the terminal segment, of the ileum. It might spread by 'skips' to other parts of the small or large intestine. More rarely it extended by continuity. However, Wells also described a third condition which, like Crohn, he termed 'segmental colitis'. It resembled the lesions of the colon found in regional ileitis but was found in patients with no ileal lesion. Wells, unlike Crohn, was prepared to believe that this 'segmental colitis' was a colonic form of Crohn's disease. To confuse it with ulcerative colitis was, he argued, an error.²⁴² Independently, Bryan Brooke also concluded that certain forms of colonic inflammation were due to Crohn's disease, separating granulomatous from other forms of inflammation.²⁴³

In his MD thesis on the pathology of ulcerative colitis (1956), H E Lockhart-Mummery noted that there was considerable difficulty in defining colitis. In particular, when examining pathological specimens from St Mark's, Lockhart-Mummery found a group of cases which he could not classify. Some of these had been regarded as possibly tuberculous colitis because of their clinical and histological appearances, although no tubercle bacilli could be found in them. There were also a few unclassified cases in which several short lengths of colon were affected by a lesion which caused some stenosis, and were separated by bowel which appeared to be normal. Lockhart-Mummery suggested that these should be classified as cases of 'regional colitis'. Neuman, Bagen and Judd (1954) had suggested the term 'right-sided colitis' for cases in which the rectum was not affected but in which there were (often multiple) discontinuous lesions in the colon; Neuman and Dockerty (1954) had described the

pathology of these cases, showing that granulomatous non-caseating giant-cell systems were common, a point of difference from ulcerative colitis.²⁴⁴

Lockhart-Mummery and Morson then turned their attention to the cases which did not fit the clinical or pathological patterns of ulcerative colitis. Morson, when examining such cases pathologically, argued that the appearance was the same as those in Crohn's disease of the small bowel. When Morson and Lockhart-Mummery reached agreement on that point, concluding that Crohn's disease might affect the large bowel without necessarily affecting the ileum, they worked together to outline distinctions between the clinical, pathological and radiological features of colonic Crohn's disease and ulcerative colitis.²⁴⁵ In 1958, the research department at St Mark's officially declared that it was widening its investigations from cancer and ulcerative colitis, to include Crohn's disease. Patients with the disease were followed up in conjunction with the Central Middlesex Hospital to assess the response to different forms of surgical treatment.²⁴⁶

Biopsies were increasingly taken in instances of inflammatory bowel disease in an attempt to distinguish Crohn's disease from ulcerative colitis. Morson and Lockhart-Mummery noted (1959) that it was well recognised that in patients with Crohn's disease there was a high incidence of anal complications such as fissure and fistula. However, they held that the appearance of these lesions was less well-known: many of them appeared clinically indolent and unusual, sometimes resembling tuberculous lesions. In many cases histological examination of tissue from the fissure or fistula might reveal non-caseating giant-cell systems similar to those found in the intestinal lesions of Crohn's disease. The incidence of anal lesions in a series of 47 cases at St Mark's was 50 per cent, although the authors thought that this might reflect the nature of the hospital's specialisation. Since the early 1920s it had been customary at St Mark's to examine histologically pieces of tissue from patients operated on for anal fistula, to see whether the patient was suffering from tuberculosis. Lockhart-Mummery and Morson believed that the giant-cell systems in the anal lesions of Crohn's disease had been frequently reported in the past as 'suggestive of a tuberculous lesion', even with no bacteriological confirmation. They argued strongly that Crohn's disease should be considered as a differential diagnosis in such cases, in the absence of clinical and bacteriological confirmation of tuberculosis.²⁴⁷

In 1960, Lockhart-Mummery and Morson published an influential paper in which they sought to distinguish between Crohn's disease and ulcerative colitis. They based their argument on 25 cases of Crohn's disease, giving clinical and pathological criteria for the diagnosis. They noted that the pathogenesis of many inflammatory bowel diseases was

unclear and therefore that no classification had been generally accepted. There were various names such as regional colitis, right-sided colitis, segmental colitis, enterocolitis, ileocolitis, and ulcerative colitis for conditions which had been grouped largely on clinical appearances. Some commentators attempted to place all such cases in one group alone, while others attempted to classify them by the study of gross and microscopic appearances. By this method, 'chronic ulcerative colitis' and 'regional enteritis' or 'Crohn's disease' were beginning to be accepted as more definite clinicopathological entities.

Lockhart-Mummery and Morson emphasised that Crohn's disease and ulcerative colitis could be distinguished on clinical, radiological and pathological grounds. In the literature there were reports of Crohn's disease of the terminal ileum together with disease of the colon, cases which were regarded as the simultaneous occurrence of Crohn's disease and ulcerative colitis. Although it was recognised that Crohn's disease might affect the colon, this was thought to be rare. Lockhart-Mummery and Morson reported that they had never seen Crohn's disease and ulcerative colitis in the same patient, and argued that when Crohn's disease of the terminal ileum coexisted with ulceration in the colon, histological examination would reveal that the colonic lesions had the same pathology as the ileal lesions. Moreover, they declared, it seemed not to be generally appreciated that Crohn's disease might affect the large bowel without any disease in the small intestine. The difference between the two diseases did not rest on one feature, they thought, but on an overall picture. In ulcerative colitis it was usually the left side of the colon which showed the more advanced disease. A predominantly right-sided colitis with ileal involvement was more likely to be Crohn's disease, especially where there was a normal rectum. In Crohn's disease the mucosal changes were often discontinuous, with areas of normal mucosa in between. Microscopically, the disease showed a granulomatous reaction extending through all the layers of the bowel wall, whereas in colitis the inflammation was superficial and confined at first to the mucosa, with some later extension into the submucous tissue, but never any penetration of the muscularis externa except as a result of deep ulceration in the acute fulminating form of the disease. Moreover, in ulcerative colitis thickening of the bowel wall was due to muscle spasm rather than fibrosis, unlike in Crohn's disease. However, the most striking histological feature which helped to distinguish the two diseases was the giant-cell granuloma of Crohn's disease. The distinction between the two diseases could be aided by biopsy from anal or rectal lesions.²⁴⁸

It was not thought that the two diseases had an equal incidence: Morson (1961) held that for every one hundred patients with ulcerative colitis, there would probably be not more than ten cases of colonic

Crohn's disease. He argued that it was therapeutically useful to distinguish between the two complaints: ulcerative colitis could be permanently cured by excision of the large intestine, but Crohn's disease might involve single or multiple segments of any part of the gastrointestinal tract from the stomach to the anal canal inclusive. Surgery was not necessarily a permanent cure and excision was performed largely for the complications of the disease.²⁴⁹

In 1964, Lockhart-Mummery and Morson followed up their paper of 1960 with an analysis of 75 cases in which they described in detail the features of Crohn's disease. They made a plea for a standardised nomenclature for the disease, arguing for 'Crohn's disease' rather than the variety of other terms which identified some but not all elements of the complaint. In America in particular it tended to be called terminal ileitis or regional enteritis which now seemed inaccurate because the disease was found at other sites, and did not always include the terminal ileum. Resistance in America to the notion that the disease might affect the large bowel alone in some cases was particularly strong. Moreover, it was felt that the designation 'Crohn's disease' was not justified as credit was due to others perhaps more than to Crohn. However, Lockhart-Mummery and Morson argued that the eponymous title was more appropriate while the disease was still being defined, as it was flexible. Again they stressed the importance of anal lesions in diagnosis, having found that 80 per cent of patients in their series had had anal lesions at some time during their illness, and in 27 per cent the anal abnormality was the first manifestation. In the small group with disease confined to the rectum and distal sigmoid the incidence of anal lesions was 100 per cent. By comparison, the incidence of anal lesions in patients with ulcerative colitis was only 23 per cent, and these were mostly painful fissures. Besides indolent fistula and fissure, in Crohn's disease there was often marked perianal oedema, a dusky cyanosis of the perianal region, with small undermining ulcers, and various types of ulceration, from shallow to gross extensive ulcers. They had found that diarrhoea was the most frequent symptom, often being accompanied by abdominal pain. There was bleeding in about 45 per cent of the patients, loss of weight was very common and patients complained of malaise and weakness. In describing methods of identifying the disease, they pointed out that the bowel often had a cobblestone appearance, which could be detected radiologically. There was associated disease of the terminal ileum in 30 per cent of patients; the rectum was normal in 50 per cent. Transmural fissures were also peculiar to Crohn's disease.²⁵⁰

In 1965, Lockhart-Mummery summarised the patterns of treatment at St Mark's for Crohn's disease. Medical treatment was usually tried initially, but had had disappointing results. Although systemic steroids produced a good immediate response, most patients relapsed later and required

surgical treatment. A few elderly patients had responded fairly well to sulphasalazine and local steroids, remaining reasonably well although not in full remission. Lockhart-Mummery concluded that the main indications for surgery were persistent or recurrent bowel symptoms and general ill-health. In earlier years the surgeons had been conservative in approach, hoping that operations such as colostomy and ileostomy simply to divert the faecal stream might allow healing and later restoration of bowel continuity. The results at St Mark's had proved very disappointing with only one lasting remission out of 22 patients. Subsequently the surgeons aimed to excise the diseased bowel, trying to avoid extensive excisions and to preserve rectal function where possible. However, in some patients who had had colectomy and ileorectal anastomosis, or in whom only a short length of diseased colon had been excised, evidence of active disease had reappeared in the remaining large bowel. Twenty-two patients had had a proctocolectomy with permanent ileostomy, with good results so far.²⁵¹

Lockhart-Mummery and Morson had reported in 1959 on several cases in which the patient had an anal lesion thought to be due to Crohn's disease, although there was no intestinal evidence of the disease. By 1965, six out of 19 such patients had developed intestinal disease, and Gray, Lockhart-Mummery and Morson (1965) emphasised that the disease might therefore be diagnosed in a very early stage by the presence of anal lesions. However, Lockhart-Mummery (1965) noted that the overall incidence of anal lesions in Crohn's disease at all sites was 25 per cent, considerably lower than that for the colonic variety of the disease.²⁵²

The relative roles of medical and surgical treatment in colonic Crohn's disease was assessed by Howel Jones, Lennard-Jones and Lockhart-Mummery in 1966. Of 96 patients treated up to 1963, only 12 had been treated by medical means alone. Antibiotics and anti-tuberculous therapy apparently gave little, if any, benefit; corticosteroids still seemed limited in their usefulness although it was suggested that with earlier recognition of the disease they might have a larger part to play. Surgery was still the mainstay of treatment.²⁵³ Howel Jones and Lennard-Jones (1966) specifically reported on patients treated with corticosteroids and corticotrophin, recording that the treatment was most useful in patients with extensive small bowel disease and those with recurrent disease after resection.²⁵⁴ Increasingly it was also stressed that medical measures were needed to maintain nutrition, particularly in patients who had undergone extensive small bowel resection.²⁵⁵

Actuarial methods had long been applied to cancer, to give an idea of prognosis based upon the extent of disease at operation. In 1967, Lennard-Jones and Stalder reported their application to Crohn's disease to indicate prognosis after resection. Using as their basis 78 patients

treated surgically, they found that recurrence of symptoms was likely in about half of the patients, about one quarter requiring a second resection within ten years. The mortality rate from Crohn's disease was 12 per cent within the same period.²⁵⁶

As it was increasingly accepted that Crohn's disease existed as a separate entity, investigators carefully distinguished between the new disease and others, and attempted to describe its natural history. For the American journal *Gastroenterology*, Lennard-Jones, Lockhart-Mummery and Morson (1968) described the differences between Crohn's disease and proctocolitis. Also in 1968 Schmidt, Lennard-Jones, Morson and Young emphasised that diverticular disease and Crohn's disease might co-exist. At St Mark's, 26 patients had had both complaints, and the distinction between the two was potentially important for treatment. Simpkins and Young (1967) described the different radiological appearances of strictures in Crohn's disease and those in cancer, while Stoodley and Mann (1972) reported on carcinoma of the colon simulating Crohn's disease radiologically.²⁵⁷ Lennard-Jones (1969) emphasised that in the treatment of Crohn's disease, as in ulcerative colitis, surgeons and physicians needed to collaborate, particularly in maintaining nutrition or in controlling diarrhoea.²⁵⁸ The extent of the disease was also under review, with increasing evidence that it could occur anywhere in the gut from the mouth to the anus.²⁵⁹

Mathematical methods were applied at St Mark's to Crohn's disease to investigate its differentiation from ulcerative colitis. Several papers were produced which applied mathematical cluster methods and discriminant analysis to non-specific colitis. Symptoms, signs, radiological and histological data were gathered, without knowledge of the clinical diagnosis, and a taxonometric map was drawn up which grouped most of the cases which had in fact been diagnosed as proctocolitis as a single relatively uniform group. The vast majority of those diagnosed as having Crohn's disease did not fall within this group, clustering in several other groups, indicating that Crohn's disease was more heterogeneous than colitis and might be composed of distinguishable sub-groups which might eventually be considered separate diseases. Using discriminant analysis, the Crohn's disease patients again fell into a much greater variety of patterns than those with proctocolitis, most of which fell into only one pattern. Out of 107 features, four main discriminating attributes were identified: smoothness or otherwise of the anal canal and rectal vascular pattern as seen endoscopically, and mucosal inflammation and granulomas when encountered histologically.²⁶⁰

Lockhart-Mummery, Morson and others had described the features of Crohn's disease largely from operative specimens. As in earlier descriptions of ulcerative colitis from postmortems or surgical specimens, some argued that this did not necessarily provide a full description of the

disease, especially its milder manifestations. Lennard-Jones (1971) described features from clinical, endoscopic, radiological and biopsy evidence in the absence of a surgical specimen, with the aim of defining diagnosis at a stage when medical treatment might be effective.²⁶¹

As in the treatment of ulcerative colitis, restorative operations were used where possible. In 1971, Baker reported that in 50 per cent of patients treated in this way recurrence had occurred at the anastomosis, whether or not they had had previous evidence of terminal ileal disease; recurrence in the small intestine away from the anastomosis, on the other hand, was uncommon. However, the response of recurrent disease to medical treatment was encouraging, and further surgical intervention was avoided in most cases. Complicated anal fistulae developed in 20 per cent of patients up to seven years after ileorectal anastomosis, and these often responded poorly to conservative measures.²⁶² Lockhart-Mummery (1972) found that the recurrence rate in patients treated by proctocolectomy was less than 10 per cent,²⁶³ but nevertheless the surgeons carried out a restorative operation where possible to avoid a stoma. The fact that Crohn's disease did not have as great a cancer risk as longstanding ulcerative colitis encouraged this policy. However, Darke, Parks, Grogono and Pollock (1973) reported two cases of Crohn's disease in which cancer also developed, concluding that there was in fact a small, but significant, risk of cancer in both the small and large bowel in Crohn's disease.²⁶⁴

As larger numbers of patients with Crohn's disease, many with small bowel involvement, came to the hospital, the proportion with anal lesions was reassessed. Lockhart-Mummery reported in 1975 that the incidence seemed to be about 60 per cent rather than 80 per cent.²⁶⁵ It was also reported that a large proportion of these lesions healed by conventional means. Marks, Ritchie and Lockhart-Mummery (1981) argued from experience at the hospital that simple fistulae might be treated in the conventional manner, while with more difficult fistulae both limited surgery and intensive medical treatment should be undertaken, preferably in specialist centres.²⁶⁶

In assessing medical treatments, in 1974 Lennard-Jones mentioned that immunosuppressive drugs, in particular azathioprine, were beginning to be recommended, particularly by Bryan Brooke. Although Lennard-Jones felt that azathioprine could be useful, he noted that there were conflicting reports on its efficacy.²⁶⁷ Soon afterwards a double-blind trial of the drug as maintenance treatment for Crohn's disease was launched jointly at St Mark's and St Bartholomew's. In 1978 it was reported that although care should be taken because the drug was potentially toxic, it seemed to reduce the relapse rate in Crohn's disease, but it was of doubtful value in the treatment of patients with active disease.²⁶⁸

Once a disease had been identified, few cases were at first treated, but they tended to be those that were particularly serious. This had been the pattern in ulcerative colitis and diverticulitis as well as Crohn's disease. Thus in the earlier period a larger proportion of cases with Crohn's disease were treated surgically than was later the case. As the numbers of such patients coming to the hospital increased, a larger proportion presented with less serious symptoms which proved more amenable to medical treatment. The patient population at St Mark's still did not reflect that of the disease generally since the hospital received many patients with more complex problems from other hospitals. However, it was in the less serious cases that medical treatment proved more effective. In 1976, Ritchie and Lennard-Jones reported on the clinical features and management of 80 patients with Crohn's disease affecting initially only the rectum, with or without involvement of the sigmoid colon. Most were treated medically, with a cumulative probability of 60 per cent of completing five years under such conservative management. They stressed that Crohn's disease of the distal large bowel often caused fewer symptoms and less systemic illness than the often severe structural changes found on examination might have suggested, and that therefore conservative treatment could be surprisingly successful.²⁶⁹

In attempting to indicate where drug therapy was useful, Lennard-Jones (1983) distinguished between an 'acute' stage, where the disease was incapacitating and associated with severe inflammation, 'active', where there were persistent symptoms but the patient was not dangerously ill, and 'quiescent' where there were no major symptoms and the laboratory results were nearly normal. Sulphasalazine was often effective in active Crohn's colitis, with some disagreement over how effective it was in the ileum. The main role of corticosteroids was to settle a relapse of inflammation, although there was no evidence that long-continued treatment helped to prevent relapses. However, in those patients with extensive small bowel disease who were unsuitable for resection, Lennard-Jones recommended small doses of steroids for maintenance treatment. Immunosuppressive drugs had a possible role in chronic active disease, especially if relapse occurred whenever corticosteroids were withdrawn.²⁷⁰ The possible efficacy of medical treatment was increasingly stressed. An analysis carried out by Ritchie and Lennard-Jones (1985) of 57 patients with Crohn's disease to reveal prognosis over a five year period, indicated that about half of all patients with colonic Crohn's disease with a history of less than six months could be treated successfully without abdominal surgery, and that the need for drug therapy tended to decrease over a period of years.²⁷¹

Increasingly, the physicians aimed not only to treat the disease *per se* but also to try to rectify nutritional disturbances. In 1974, Lennard-Jones

stressed that the greatest nutritional defect was inadequate intake of calories, combined with loss of protein. Resection of the terminal ileum could also lead to vitamin B12 deficiency.²⁷² Concentration was at first on enteral feeding; increasingly, as some patients had to have parts of the small intestine removed – producing the short bowel syndrome – parenteral (intravenous) feeding began to be used. In 1976 a parenteral nutrition unit was installed on Allingham ward, initially for emergency treatment of the very ill, but subsequently for longer term care. Parenteral feeding did not only involve the physicians – a team approach was developed at St Mark's with a clinician, specialist nurse and pharmacist. A microbiologist maintained bacteriological supervision of the technique. Under local anaesthesia and in strict aseptic conditions a silicone rubber catheter was introduced into the subclavian vein through an infra-clavicular puncture. Three-litre bags containing the patient's 24-hour nutritional needs, aminoacids, glucose, electrolytes and trace elements, were prepared by the pharmacist in a specially designed aseptic room, the bags making ward care simpler than was possible with multiple smaller containers of fluids and nutrients. By 1978, patients who had learned to manage the system had left the hospital for periods of up to three days. The method of organising parenteral nutrition at the hospital meant that it moved from being an occasional procedure, supervised by different clinicians with varying regimens and causing much work for the nursing staff, to a relatively trouble-free procedure which was generally accepted as an essential part of the management of some extremely ill patients. Parenteral nutrition came to be seen in some cases as a long-term necessity, which the team approach made easier to maintain.²⁷³

Thirty-four patients received parenteral nutrition at St Mark's between 1976 and 1978: of these, ten had Crohn's disease, five had ulcerative colitis and four suffered from carcinoma of the colon.²⁷⁴ Although only a very small number of the Crohn's disease cases required parenteral nutrition, it was an important development. In 1981 the first patient on permanent parenteral nutrition was sent home, under the guidance of the unit. By 1984, thirteen patients were being maintained at home, and 26 had in all been treated in this way.²⁷⁵

It was not unusual for Crohn's disease of the small bowel, in particular, to be complicated by the development of enterocutaneous fistulae. Such fistulae, between the gut and the skin of the abdominal wall, also occurred in other complaints, or as a complication of surgical intervention, and carried a high risk of morbidity and mortality. A major problem occurred if they emanated from the high small bowel, so that essential nutrients were not absorbed. McIntyre, Ritchie, Hawley, Bartram and Lennard-Jones (1984) reviewed the management of 132 cases at St Mark's treated over the period 1976–1981. Of these, 36 per cent had had Crohn's

disease. Most of the patients required surgical intervention and 36 per cent needed parenteral nutrition. Whereas reports elsewhere still indicated a mortality rate of up to 20 per cent, the series at St Mark's had a mortality of only five per cent, and 91 per cent of the fistulae healed. The authors stressed that surgery was required in most cases and that the place of parenteral nutrition, although life-saving in a small minority of cases, was to improve or maintain the nutritional state of a patient throughout a protracted illness, particularly when there were septic complications.²⁷⁶

Over the period 1948 to 1985, patients with Crohn's disease formed an increasingly large proportion of work at St Mark's. Although the disease had been identified earlier, it was only in the 1950s that it began to be described as a disease which might afflict the large bowel alone. St Mark's played an important part in this development, and continued to argue for the differentiation of the disease from ulcerative colitis on clinical, pathological and radiological grounds. Given the hospital's reputation for treating anorectal lesions, it was in some ways not surprising that it was at St Mark's that great emphasis was placed on the importance of anal lesions in the diagnosis of Crohn's disease of the large bowel. However, it was particularly through the treatment of Crohn's disease that the surgeons and physicians at St Mark's began to meet problems of the small bowel, and even those higher up in the alimentary tract. It was especially when patients were operated upon for disease of the small intestine that the danger of malnutrition was important. The development of special methods for enteral and intravenous feeding meant not only that patients could be prepared for operation or maintained afterwards, but that they could also be nourished for as long as necessary in hospital or, in a few cases, even at home.

Conclusion

During the period 1948 to 1985 colo-proctology diversified: whereas before the war the main rival to St Mark's had been the Gordon Hospital, other centres developed within the National Health Service and teaching hospital system which now competed strongly with St Mark's, serving as a stimulus for work at the hospital. The staff at the hospital before the war had mainly concentrated on cancer and anorectal complaints. Interest in these areas persisted, but was not limited to the development of new techniques. In the treatment of cancer, prevention and early diagnosis increasingly came to the fore, as stages of pre-cancer were identified. Work on anatomy was used to explain anorectal complaints, even if treatments of diseases such as haemorrhoids and fistula were not drastically modified by these new explanations. In other disorders, such as incontinence and prolapse, anatomical and physiological studies led to new conceptions of the causes of these conditions and also suggested new

ST MARK'S HOSPITAL, LONDON

treatments. In addition, the staff – including surgeons, physicians, pathologists and radiologists – took a broader view. The treatment of inflammatory bowel diseases, as they were differentiated from each other, gradually became a predominant part of inpatient work at the hospital. With this development, the discussions over whether the hospital should be classed as a gastroenterological institute had some basis, as the staff at the hospital increasingly dealt with not only the anus, rectum and colon, but also the small intestine, and, occasionally, other parts of the alimentary tract.

CHAPTER XV

Profession or vocation?

Nursing at St Mark's, 1900-1985

The reputation of the medical staff at St Mark's was well established by the early twentieth century: their specialty, too, was beginning to be accepted. The nurses at the hospital did not fare as well. To a great extent this was reflected throughout medicine: nursing remained the subordinate profession. From the end of the nineteenth century attempts were made to professionalise nursing, but nurses were not sure whether nursing counted as a profession, a craft, an art, or perhaps a vocation. Their uncertainty was reflected in the divisions between those who fought for registration similar to that of the doctors and those who opposed it. The uncertainties were apparent at St Mark's, where some matrons urged the nurses to qualify as state registered nurses while others did not. The hospital was in a cleft stick: it suffered from a scarcity of nurses and therefore felt that it could not afford to ask for trained ones. On the other hand, with trained nurses on its staff it was easier to attract others.

In its fund-raising efforts the hospital had always been hampered by the nature of its specialisation: this was an even more acute problem when it tried to attract nurses. Whereas the doctors made their reputations – and their fortunes – in proctology, this was not the case for the nurses: St Mark's could more easily recruit when its specialty was not mentioned. Moreover, although the association with cancer might attract some nurses, for others it was off-putting because of the frequently sad outcome of the disease. Special hospitals in general often had problems in recruiting nurses. Although they seemed more attractive than the municipal infirmaries, they were always the poor relations of the large teaching hospitals. To have trained at a teaching hospital stood the nurse in better stead than if she had trained at a small specialised institution. Moreover, the work in the teaching hospitals was more varied and the social life tended to be wider. All the voluntary hospitals suffered competition from the private sector, as private hospitals and nursing homes rapidly increased in number, usually offering better pay.

By 1901, there were about 70,000 nurses in England and Wales, over 90 per cent of whom were female. Only a quarter of all nurses worked in hospitals, with the remainder mostly working in domiciliary care, since patients who could afford it were treated either at home or in nursing homes.¹ The majority of nurses had not undergone any formal training, and by the turn of the century there were increasing demands by some of

those who had trained for distinctions to be drawn between themselves and their untrained colleagues. The quality of the training varied considerably between institutions and it was also suggested that this should be standardised. A step in the development of the medical profession had been the Medical Act of 1858, which established a register for medical practitioners: in order to qualify for it, they had to train at approved institutions and be examined by approved bodies. Some of the leaders of the nursing profession requested a similar registration process for nurses.

After various divisions in the 1890s among nursing leaders (Florence Nightingale, for example, disapproved of the fight for registration), the government merely granted nurses permission to keep a 'list' of nurses, which was to consist only of those who applied to be on it. In the early twentieth century there were further attempts to secure registration, particularly after the Midwives Act was passed in 1902, which required all practising midwives to train and to register with the Central Midwives Board. In 1905 a Parliamentary Select Committee was established to consider the question: the proponents of registration reported to it horror stories of the harm wrought by untrained nurses who continued to work even after committing crimes since there was no register for them to be struck off (the arguments were very similar to those put forward in the early nineteenth century by the medical profession regarding quacks). The select committee decided in favour of registration, but recommended that it should take two forms: there should be one level for nurses from specially approved training schools, and a second register for nurses who had not been trained to that level. The members of the select committee had paid some attention to those in charge of the hospitals, who feared that they would have acute staff shortages if they could only use trained nurses from a register, since most of their nurses were in fact not formally trained. The suggestion caused further divisions in the profession, with some pro-registrationists persisting in their arguments for a single register, while others thought that this was unrealistic. Various registration bills were presented to Parliament, but none successfully proceeded through both Houses. The First World War interrupted further discussions.²

At St Mark's, the pattern of nursing before the First World War was much like that in the nineteenth century. Nurses spent most of their time cleaning. Many of them were probationers, mostly joining the hospital between the ages of 20 and 23, with no probationer before 1914 declaring herself to be under 19 or above 30. Between 1896 and 1914, 189 nurses were taken on at the hospital. Of these 34 per cent came from London, 19 per cent from the home counties, 15 per cent from the midlands, 10 per cent from the north of England, and 7 per cent from Wales. It is worth noting, in comparison with later periods, that only

about three per cent came from Ireland and another three per cent from parts of the Empire.³

Nurses were expected to be unmarried or widowed, and to be resident at the hospital. This included the matron. When the matron of 12 years, Mrs Hepper, resigned in 1908, there were 65 applicants for her position, of whom nine were shortlisted, all of them unmarried. Miss Appleyard was chosen, and awarded a salary of £80 a year, in addition to the usual board and lodging.⁴ Miss Appleyard was apparently quite elderly, and was certainly subject to lengthy bouts of sickness, during which her place was taken by the night sister, Miss Hardwicke. In 1909 Miss Appleyard was given six months' unpaid leave because of illness. Three years later she resigned, and Frederick Swinford Edwards recommended that the post should not be advertised but rather given to Miss Hardwicke.⁵ The opinion was also 'unanimously expressed' by the committee of management that no matron should hold office beyond the age of 55.⁶ Matrons had tended in the past to be appointed from a slightly higher social class than that of the nurses, which was thought to be useful in maintaining discipline, among other objectives. It was rare that a nurse was promoted through the ranks to become matron. Discipline, in fact, proved a problem to Miss Hardwicke who complained in 1913 of 'insubordinate conduct' from one of the sisters.⁷ Although the sister was asked to resign, Miss Hardwicke was also rebuked. Miss Hardwicke resigned in 1915, and this time the hospital advertised in the *Hospital*, *Nursing Mirror* and *Nursing Times*: the advertisement also specified that the new matron must be under 45. Miss Emily Hall was appointed from among 38 applicants: she proved both long-serving and an indomitable personality – kindly, but a believer in rigid discipline.⁸

A glimpse into the origins, expectations and work of the nurses in the pre-war period can be gained from the account of a probationer at St Mark's in 1910. Lucy Sutcliffe was born in Liverpool, the daughter of the head of the Liverpool Pilot Service. Mr Sutcliffe wanted his daughter to be 'a lady', and sent her to the local girls' high school. By the time that she was 17, she felt that there were too many restrictions on her at home; a school friend was leaving to become a nurse at the Edinburgh Royal Infirmary and Lucy Sutcliffe decided that she wished to be a nurse as well. Her friend told her to buy the *Nursing Mirror* and answer an advertisement in it: Lucy Sutcliffe applied to St Mark's, not knowing that it specialised in rectal diseases. Her grandfather supported her decision and paid her fare to London, although her father strongly disapproved, saying that he would never have her back in the house. (However, when she returned a year later in uniform, she was treated 'like the Duchess of York'.⁹) Lucy Sutcliffe gave her age on arrival at St Mark's in 1910 as 21. She was startled and embarrassed to discover the nature of the specialty at

When neither group won majority support, Dr Christopher Addison, newly appointed Minister of Health, introduced another bill to establish nurse registration, to be regulated by General Nursing Councils for England and Wales, Scotland and Northern Ireland. The Nurses' Registration Act (1919) laid down the obligations of the General Nursing Councils: they were to decide on a syllabus for instruction and examination and compile a register of qualified nurses. After a prescribed time, no nurse could be registered unless she or he had undergone an approved training and passed the Council's examinations.²⁰ However, in effect, there was now a two-tier system in nursing: nurses who had undergone the appropriate training could register as state registered nurses (SRNs), but there was no obligation on hospitals or other employers of nurses to use SRNs. Since there was an insufficient number of registered nurses to supply nursing needs, the majority of those whom the hospitals employed remained unqualified. Moreover, there was a mixed reaction to registration in the profession itself – many matrons and nurses did not see a necessity for it – and nurses continued to be divided into two groups, those with formal training and those without.

In 1922 St Mark's employed five sisters and sixteen nurses. It was anticipated that an extra sister and eight nurses would be required to cope with the increasingly onerous medical work, once accommodation for them had been acquired. Pay had been considerably improved in 1919: sisters received £55 a year, rising to £60, staff nurses £35 rising to £40, assistant nurses £30 rising to £35 and probationers £25 rising to £30, increases which ranged between 20–40 per cent over wartime pay.²¹ Between the two wars, St Mark's found it more difficult than previously to secure nurses. The hospital continued to take 'probationers' and to award them certificates, but in the 1920s it could not offer training which led to registration. In particular, it was difficult to attract an adequate number of experienced nurses, and it was difficult to secure nurses of high calibre. The matron, Miss Hall, was sceptical of the advantages of formal training, and for most of her time at the hospital saw little need to ensure that those nurses already at the hospital were fully qualified. There was a period after the Nurses' Registration Act during which nurses with experience could take an examination to become SRNs without undergoing formal training, but Miss Hall told her nurses that they had no need to do this, a policy which stored up problems for later, when Miss Hall's successors would not promote unqualified nurses. Miss Hall ensured that the nurses were appropriately trained for their work at St Mark's, and as time passed she was particularly anxious to retain the services of good nurses rather than to encourage them to go elsewhere to secure qualifications. Those who did go to other institutions to train, but then failed their examinations, were welcomed back if Miss Hall judged them to be effective nurses.

PROFESSION OR VOCATION?

Since the College of Nursing was not responsible for registration, as originally had been intended, it developed as an independent professional organisation, seeking to improve conditions of service among its members. In 1919 it published a charter, calling for a 48-hour week, improved and coordinated training, higher salaries, better accommodation and a pension scheme.²² At St Mark's, the charter was merely 'noted'.²³ Division within nursing ranks persisted, as outside groups pressed for improvements in probationers' conditions, since most of the nursing in non-teaching hospitals was undertaken by probationers and other unqualified nurses, but the professional nursing bodies were reluctant to acknowledge their contribution.²⁴

The recruitment patterns at St Mark's between the wars reflected its reduced ability to attract nurses: its recruits were younger and came from further afield than before. Some of the changes, however, reflect changes which were felt more generally in nursing, with probationers coming from a younger age group. Between 1919 and 1930, 111 probationers came to St Mark's. Of these almost 20 per cent were 18 and 15 per cent were 19. Between 1931 and 1939 the shift in age was even more marked. Of 107 probationers, at least 25 per cent were 17, 24 per cent were 18, and 14 per cent were 19, with the rest in their early 20s. A change in the geographical origin of all the nurses, including probationers, can also be seen. Before the First World War a large proportion came from London and the home counties, but between 1919 and 1930 the number of nurses from London halved, while the number from Wales and Ireland rose considerably. Between 1931 and 1939 the drop in the number of nurses from the home counties was particularly noticeable, with a proportionate increase in those from Ireland.²⁵

*Geographical origin of nurses at St Mark's, 1896-1939*²⁶

	Total number	London %	Home counties %	Wales %	Ireland %	Rest of British Isles %	Else- where %
1896-1914	189	34	19	7	3	32	5
1915-1918	43	18	18	18	12	33	1
1919-1930	184	17	17	20	13	33	—
1931-1939	177	21	9	20	24	26	—

The importance of offering some sort of training to nurses, even if it did not lead directly to registration, was recognised by those at the hospital. From the early 1920s a 'home sister' was employed. The post had originally been devised by Florence Nightingale for the Nightingale Training School at St Thomas's, where the teaching and supervision of the probationers had initially been undertaken by the matron and resident

St Mark's particularly since she was immediately placed on one of the men's wards. She remembered that she spent much of her time cleaning: as soon as patients came in they were washed and deloused; she cleaned the ward, scrubbed the lockers and even polished the leaves of the plants with castor oil to make them shine. She fed the patients: 'I had 26 pieces of bread to cut up every morning to go round the ward' and she made boiled eggs for them 'and as I went in the door, they started "Rock of ages, cleft for me" ... all boiled hard, I suppose!'¹⁰

Not all Lucy Sutcliffe's tasks were cleaning and feeding: she also took an active part in nursing. She recalled that the surgeon, Frederick Wallis, taught her how to pack a wound with gauze. She remembered that his cases of haemorrhoids, 'done with silver rings', were very painful but very effective. Swinford Edwards, the other full surgeon, would 'snip' at the haemorrhoids that he treated, but although less painful to the patient, his treatments, according to her, were not as good. Lucy Sutcliffe served both on the male and female wards, and in the operating theatre. She was charged with taking patients up to the theatre, and during the operation she stood on a high pedestal and worked the carbolic acid spray. She recalled that most of the patients had haemorrhoids, some had fistula – 'that was caused very often through riding on a bicycle' – and a few had cancer.¹¹ She remembered the case of a 26-year-old soldier who had been diagnosed elsewhere as having syphilis, but was later found to have cancer. Lucy Sutcliffe was detailed to take special care of him and told: 'you've got to be very careful, you mustn't eat anything with your bare hands ... this is a very complicated disease and if you catch it ...'¹² One of the surgeons 'took a snip' from the patient's rectum and 'put it in his test tube'; the patient was returned home while the biopsy was analysed. In another case of cancer she and another nurse cared for the patient until he died: 'he could hear the angels singing'.¹³ The other men on the ward were so sorry for the nurses that they took over their cleaning tasks, while the nurses sat on the bath and cried.

The relations between nurses and patients were good, with less evidence of strict discipline than in the teaching hospitals. On E N ward, one of the men's wards, Lucy Sutcliffe remembered that the night nurse was particularly friendly with one patient. She herself recalled that 'I never made eyes at the patients' but she used to have cups of tea with those whom she favoured. The mother of one male patient asked her to come to lunch, but she told the ward sister that she could not, 'knowing what I had done for him!'¹⁴ A similar embarrassment clouded her relationship with the doctors: one visiting doctor invited her out to the theatre, but in the circumstances she felt that she could not be friendly with him. Lucy Sutcliffe remained at St Mark's only for her probationary year: it was a pattern frequently found at St Mark's, and elsewhere, that probationers

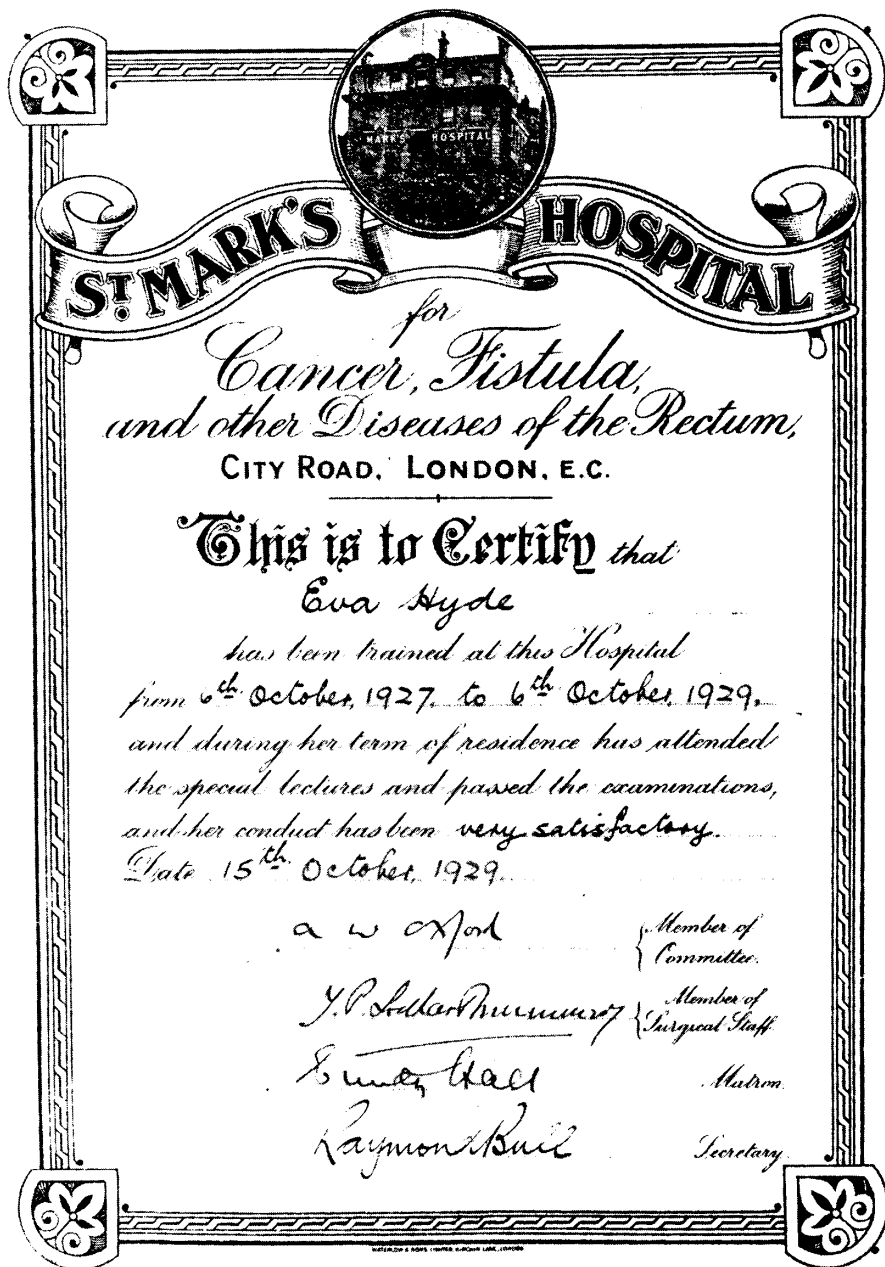
moved on to other hospitals once they had received their training. There was little possibility of promotion at a small specialist hospital.¹⁵

Just before the First World War it was decided that probationers at St Mark's should be issued with certificates on completion of their year's training – such certificates were a useful means of attracting nurses to train at the hospital.¹⁶ Having a training school at St Mark's was very important in staffing the hospital: it relied upon its probationers, and a reasonably steady supply was forthcoming. This was a necessity since the nursing complement was frequently reassessed, and as medicine became more demanding more nurses were needed. However, during the First World War, St Mark's had particular problems in attracting nurses, several times increasing their pay in the hope of improving recruitment, and offering bonuses after the completion of one year's continuous service. Because of a particular shortage of the more experienced nurses, in 1916 it was decided that probationers should act where necessary as assistant nurses: such problems highlighted the need to be able to recruit reliably.¹⁷

The First World War had a great impact on nursing. An immediate acute shortage of nurses generally was met by the formation of Voluntary Aid Detachments. However, some of the experienced nurses resented the appearance of VADs, and in the ensuing controversies it was suggested that a body analogous to the Royal College of Physicians or the Royal College of Surgeons should be established to protect nursing interests. In 1916 the College of Nursing came into existence. Its specific aims were to promote better education and training of nurses, to advance nursing as a profession, to promote uniformity of curricula, to recognise approved nursing schools, to maintain a register of nurses to whom certificates of proficiency or training had been granted, and to promote parliamentary action in the interests of the profession, especially regarding the education, organisation, protection and state recognition of nurses.¹⁸

The new College laid down that it would only recognise for training those hospitals with at least 250 beds, a resident medical officer and at least one course of lectures a year: St Mark's, with only about 70 beds, although able to fulfil the other requirements, therefore did not qualify. In order to continue to attract probationers, St Mark's made an arrangement for probationers who had successfully completed two years' 'training' at St Mark's to undertake their general training at Guy's Hospital, the fee of six guineas being paid by St Mark's.¹⁹

Both the Royal British Nurses' Association (founded in 1887, and very pro-registrationist) and the College of Nursing sponsored nurse registration bills in Parliament shortly after the war: the former put forward a plan to secure high standards, regardless of the staffing needs of the hospital, while the latter was more sympathetic to hospital managements.



Nurse training certificate, 1929

medical officer, but was subsequently placed in the hands of a home sister (based in the nurses' home) in order to monitor the training and activities of the nurses more effectively. The concept of a nurses' home with a home sister was closely associated with training according to the Nightingale model. It was significant, therefore, that a home sister was appointed at St Mark's, even though there was no nurses' home, and little systematic training.²⁷

The need to improve and increase nursing accommodation had been a pressing concern since before the First World War, as the ratio of nurses to patients was improved. When the new wing was opened in 1927 it was decided that a total of 32 nurses were required. Each of the main wards (Fournier, Holgate, A and B) had a sister, a staff nurse, either one or two probationers and a 'runner'. At night the whole hospital had one night sister, several night nurses, one probationer and one runner. The outpatient department had a staff nurse, and the theatre a sister and a probationer.²⁸ Accommodation was provided for some of the nurses on the third floor of the new wing, but the eventual aim was to have a nurses' home. The first nurses' home, in the Nightingale Training School, had served several functions: it reassured parents who were anxious that when their daughters left home they would be supervised and safe (iron discipline became a feature of such homes); a home adjacent to the hospital kept a ready supply of nurses available for work night and day; and it also enabled those in charge of nurse training to offer the probationers a generally 'improving' social education while in their care.

In 1930 the General Nursing Council permitted small hospitals to affiliate to provide nurse training: St Mark's duly made an arrangement with the London Temperance Hospital, which enabled the two institutions to train probationers for registration. Probationers were to come to St Mark's for two years' training, after which they were to go to the London Temperance, a combination which enabled the two hospitals to fulfil the requirements for state registration. The General Nursing Council officially recognised the arrangement, and at St Mark's a skeleton was obtained for teaching purposes, and it was decided that the resident surgical officer should give 30 lectures on anatomy and physiology to the nurses.²⁹ The project went smoothly into operation, until 1932 when it was noted that some of the resident surgical officers 'were very indifferent lecturers' and the nurses were learning little from them.³⁰ The medical committee suggested that Cuthbert Dukes should lecture on physiology and Clifford Naunton Morgan on anatomy, but the committee of management was not satisfied, feeling that the nurses' education might be neglected if left to such senior members of staff, with their other commitments. They referred the matter back to the matron, and after discussion it was decided that the training should be regularised further: a sister

tutor, Miss H Copley, was appointed to give the lectures, at a fee of £10 for the whole course.³¹

St Mark's found that it was now able to attract a sufficiently large number of probationers, which proved very useful to the running of the hospital. However, there was concern in 1937 at a change in policy by the General Nursing Council. The GNC was worried by the number of trainee nurses who did not complete their courses or who failed their SRN examinations (certainly a significant number of those at St Mark's failed or left the hospital) and it decided that nurses should pass an entrance examination before they began their training. Members of the committee of management at St Mark's were anxious that this would reduce the number of applicants to become SRNs and that their supply of probationers would dry up. They appealed to the British Hospitals Association to try to prevent the implementation of such a test, fearing that it would 'seriously handicap this Hospital in obtaining nurses'.³² Despite such appeals, the entrance examinations were implemented.

The difficulties in recruiting staff at a more senior level were always apparent: in 1936 repeated advertisements in the nursing papers produced no response at all, and temporary nurses from agencies were employed.³³ Again in 1937 Miss Hall advertised for two months without success. She then expressed alarm because 'the work in the wards was exceptionally heavy, owing to the increase in cancer cases'.³⁴ Salaries were boosted, but the difficulties possibly contributed to Miss Hall's resignation at the end of 1937, 'owing to trouble with my eyes'; she had served at the hospital for 22 years.³⁵ Early in 1938, Miss Dora Willoughby was selected to replace her, and presided over the opening of the nurses' home by the Princess Royal on 5 May 1938.³⁶ Miss Willoughby fully accepted the need to make nursing more professional, and that registration played an important part in that. She appointed only SRNs as sisters, keeping those without formal training, whatever their experience, as assistant nurses.

Various demands had been made during the 1930s for improvements in nurses' conditions of service, partly because of problems that the voluntary hospitals were having in securing adequate staff numbers. In 1937 the government appointed the Athlone committee to enquire into the conditions of service in nursing. An interim report was published in 1939 (no final report was made because of the war) which recommended that trained nurses should have better pay and that a salaries committee should be established to regulate this. Nurses should work no more than a 96-hour fortnight, and their accommodation and diet should be improved. Domestic assistants should be employed to relieve them of domestic tasks. Some of the rules and restrictions implemented in hospitals and nurses' homes should be reviewed. It was suggested that the

government would need to assist the voluntary hospitals if such measures were to be implemented, but the government took no immediate action.³⁷

Despite the extended facilities of the new nurses' home at St Mark's, with its recreation rooms as well as individual bedrooms, Miss Willoughby experienced the same difficulties in recruitment as had her predecessor. In June 1938, she was forced to hire seven nurses from the Nurses' Co-operation Associations. Such nurses cost much more than the other nurses at St Mark's: the associations were paid £20 per week for each nurse, which far outstripped the wages paid to the resident staff, although these were given board and lodging as well.³⁸ The committee of management noted that the problem of recruitment had been felt at other voluntary and municipal hospitals for at least the previous two years, and that the salaries at St Mark's were comparable to those elsewhere in the voluntary sector.³⁹ It was argued that an increase in pay would probably not attract more candidates, and the notion of a 96-hour fortnight was regarded as 'not practical politics at present'.⁴⁰ There were certainly sufficient probationers: it was a matter of offering similar inducements to the more experienced nurses. The committee of management decided to offer some sort of training with a certificate to unregistered nurses: this time it was agreed that the honorary medical staff should give lectures. A brochure which described the amenities of the nurses' home was also prepared.⁴¹

With the coming of the Second World War, the shortage of nurses of the 1930s seemed mild in comparison with what the hospital now suffered. The number of beds which the hospital could keep open depended entirely on how many nurses could be employed. The matron was given permission to recruit from wherever she could – special government sanction was sought so that a German Jewess could be taken on as a probationer in January 1940.⁴²

It was during the war that nurses generally began to see some improvements in their conditions, terms of employment and salaries. It was not through the efforts of their associations that this was achieved, but rather through the government's attempts to swell the numbers of nurses.⁴³ At St Mark's, nurses received boosts to their salaries of about 10 per cent several times during the war.⁴⁴ In 1941, the government set up a committee under Lord Rushcliffe to discuss nurses' salaries and conditions of service. In its first report, in 1943, it recommended that nurses should have a 96-hour fortnight and considerable salary increases, with ward sisters receiving £130-£180 a year. The committee recommended that a living-out allowance should be paid to nurses, an important change since it implied that married women rather than simply single women living in nurses' homes should be considered as a substantial pool of applicants.⁴⁵

St Mark's was immediately obliged to adopt the Rushcliffe recommendations. At the same time some domestic responsibilities were removed from the home sister (she had formerly looked after much of the house-keeping, particularly within the nurses' home) and a housekeeper was appointed: the committee of management decided that it wanted someone with a domestic science certificate 'and not necessarily a nursing sister'.⁴⁶

The voluntary hospitals endeavoured, much more successfully than their municipal counterparts, to ensure that their trainee nurses had undergone secondary education. However, there was a limited supply of such girls: when the Athlone committee considered the number of probationers which would ideally be required each year, it amounted to about half of the number of girls in total who passed through secondary school. Obviously nursing could not hope to attract such numbers, especially as other occupations, such as teaching and clerical work, began to appeal to women who sought employment. The notion that the voluntary hospitals could staff themselves exclusively with nurses of this level of education was therefore unrealistic. There were some demands, particularly from the voluntary hospitals in the 1930s, that a second level of entry into nursing should be formalised. The professional nursing organisations resisted this, saying that it would undermine the profession and confuse the public, which would not necessarily distinguish between two types of nurses.⁴⁷

During the war there were repeated requests that at least a 'roll' of assistant nurses, with experience if not qualifications, should be accepted, and in 1943 the Nurses' Act was passed, establishing the principle of dual entry. The General Nursing Council was now responsible for keeping a roll of assistant nurses, designing suitable courses of training for them and approving hospitals for training. Initially assistant nurses with experience could be admitted as state enrolled (assistant) nurses (SENs or SEANS) without training but after passing a test (as had been arranged in the early 1920s with the register). The change was introduced partly because the professional organisations, in particular the (now Royal) College of Nursing, felt that it was necessary in order to protect the status of the registered nurses: the wartime shortage meant that the demand for untrained nurses was so great that it looked as if the registered nurses would be swamped.⁴⁸

The British Medical Association had pushed for an official two-tier system from the late 1930s, and the medical staff at St Mark's similarly was less concerned about the position of the nursing profession than the need to attract, retain and promote good nurses, even if they were not registered. In 1943 a battle commenced which persisted for years – and which neither side could win – between two successive matrons and the

PROFESSION OR VOCATION?

medical staff over the status of two unregistered assistant nurses, Nurse James and Nurse Hook. The two nurses efficiently carried much of the burden in the outpatient and x-ray departments, and in July 1943 the medical committee recommended that 'in appreciation' of the work of Nurse James, she should be given the status and salary of a sister. The minutes of the committee of management recorded that the matter was 'fully discussed', the matron 'interviewed', but that the proposal was referred back to the medical committee.⁴⁹ In 1945 the medical committee sought again to secure the promotion of Nurse James. Despite her abilities, because she had joined the hospital when registration was not regarded as essential or even desirable, her promotion was blocked. It was not an uncommon phenomenon in the voluntary hospitals, as sisters were increasingly selected from among registered nurses, and as new matrons were appointed who considered registration to be a necessary means of improving the profession. The medical committee requested that since Nurse James was

... such a valuable person in the very important out-patient and X-ray departments ... her services should be recognised by giving her the title of Nurse Supervisor with an increase in salary as a bonus of £50 p.a.⁵⁰

Registered nurses had by now accrued significant advantages in pay and pension rights over their unregistered colleagues. The committee of management side-stepped: 'in appreciation of the long, faithful and efficient service' of Nurse James she should be given 'a present' – not a bonus, not a salary rise – of £50.⁵¹ It was a battle which was to continue for some years.

The controversy over Nurse James reflected the fact that the matron's control over the nursing establishment had its limitations. This was also revealed in the establishment in November 1945 of a nursing and house committee, which consisted of two members of the committee of management, and two of the surgeons – but not the matron. And yet the task of this committee was to consider whether the hospital should stop taking probationers, whether the Royal College of Nursing should be approached to establish a diploma in rectal nursing, whether ward helps should be engaged to lighten the housekeeping load of the nurses, and what the level of nursing salaries should be.⁵² The Royal College of Nursing, however, would not give its approval to the course, and on the other points it was decided that Ministry of Health guidelines should be adopted. Following the Rushcliffe committee recommendations, the difference between the registered and assistant nurses, although somewhat less clearcut at St Mark's than elsewhere, can be seen. Sisters were paid £160 rising to £260 a year, staff nurses £120 rising to £160, and

(enrolled) assistant nurses only £90 rising to £160.⁵³ A nurse like Miss James, who would in previous years have long since been promoted to the rank of sister, was therefore significantly penalised by having to remain as an assistant nurse.

Between the end of the First and the close of the Second World War the nature of nursing at St Mark's changed. As the surgeons began to treat increasing numbers of cancer and other serious cases, the nurses found themselves caring for very ill patients who had undergone major operations. They were trained to maintain careful antiseptic and aseptic precautions (Dukes wrote a book for nurses on bacteriology) and they had to learn to do the dressings and monitor the condition of such patients post-operatively. Cancer patients almost invariably had a colostomy, and it was accepted practice at St Mark's that these should receive a daily washout, and it fell to the nurses to perform this task as well as to work the apparatus devised by Dukes to irrigate the bladder to avoid urinary infections. Nurse James remembered the colostomy washout as a tedious procedure, although it did mean that the patient often had no bowel action for the next 24 hours. About two pints of fluid were introduced into the colostomy; the patient was left alone for about an hour, covered in mackintoshes, while bowel actions took place, and then cleaned up.⁵⁴ Patients with minor rectal problems also received considerable care: patients with haemorrhoids treated by Gabriel had their wounds painfully dilated soon after operation, and their dressings frequently changed, a practice which declined in the 1950s. All this meant more (and more skilled) work for the nurses.

The reminiscences of nurses who worked at St Mark's from the 1920s fill out some of the picture of their experiences at the hospital, and what those who left subsequently did. Lenobia Lloyd came to St Mark's in 1926. She had spent two years nursing in Malvern, and entered St Mark's as an assistant nurse. She remembered that she was very happy there but that the pay was not very good. When she married and moved to Worthing she nursed in a private nursing home where she earned 50 per cent more. However, she remembered that at the time she and the other nurses 'never thought of it ... moneywise'.⁵⁵ Nurse James came to the hospital as a probationer from her home in Wales in the 1920s. She remembered Miss Hall as a strict disciplinarian, who watched over the nurses but also showed a keen interest in all her staff, from the charwomen to the sisters, and organised social activities for them. Nurses had to have special permission if they wished to go out and, if they planned to stay with friends, their families' agreement was first sought. Probationers still spent much of their time cleaning – everything but the floors – and did not perform tasks like colostomy washouts until they had been at the hospital for a year, for fear that they might perforate the bowel. Nurse

PROFESSION OR VOCATION?

James described the nurses' daily routine. They came on to the wards at 7 am (an hour before the sister). The night nurse had already given the patients their breakfasts, directed them towards the baths and changed small dressings. The day nurses then performed colostomy washouts and major dressings, made the beds and pulled them out so that the maids could sweep and polish the floors. The patients' temperatures were taken and they were given medicines. The night nurse made a report for the sister when she arrived at 8 am. The nurses polished lockers, washed mackintoshes in lysol, dusted them in powder and rolled them up and dusted the ward. Lysol was used extensively – bedsteads and lockers were scrubbed out and carbolised when each patient left. Everything had to be in order – beds made, everything clean, castors turned in, patients silenced – before the matron made her round at 10 am. The matron spoke to every patient, although not to the nurses, consulting the sister instead. Her round was followed by that of the resident surgical officer who took the dressings off and re-did them. The surgeons either made a round at a specific time or after their operating sessions. The nurses had two hours off either in the morning or the afternoon. Lunches, teas and suppers were served and cleared by the nurses, and before supper the patients took their second bath of the day and had their dressings changed. During the day the nurses had to wash the sluice rooms and bathrooms, sterilise bottles and wash bandages. (The night nurses then took over the responsibility for the bandages, drying them so that they could be ironed before morning.) Pulse rates were taken half-hourly. Besides giving colostomy patients a washout, patients with ulcerative colitis who had been treated by appendicostomy required wash-throughs which often took a long time. There was little that was used in the treatment of patients that was disposable, and everything had to be washed and sterilised. When Robert Officer, an Australian who worked at St Mark's in the 1930s, introduced a new system of intravenous drips, this was regarded as a great advance by the nurses.⁵⁶ The night nurse came on at 8 pm and received a report from the day sister. Besides seeing to the bandages, she had to pack drums for sterilising dressings and clean instruments during her stint. She also maintained a constant supply of warm milk to give to the patients who could not sleep.⁵⁶

In the outpatient department the nurses also had to maintain strict cleanliness, getting everything in order for the surgeons. The patients were called up individually to have their histories taken; new patients were seen first and then patients who were already on the books, in order of the severity of their complaint. Once a patient had been seen, the nurse told him or her what the treatment was and whether they needed to make a return visit. The nurses assisted the surgeons with some procedures carried out in the outpatient department. Haemorrhoids, if injected, were

treated there, and some sphincterotomies for fissure were performed in the outpatient department; such patients subsequently returned daily for their dressings to be changed by the nurses.⁵⁷

Constance Bates and Eva Hyde came to St Mark's as probationers in October 1927, directly from home, remaining at the hospital for two years before going to the West London Hospital to obtain their SRN qualifications (although Miss Hall protested). They received certificates from St Mark's on completion of their probationary years (see p 392).⁵⁸ However, they described themselves as 'glorified ward maids' because of all the cleaning they had to do. All the nurses, including the probationers, were known only by their surnames (the same practice was also used for male patients, with no title being given to them, although women were known as Miss or Mrs). Training at St Mark's, the two nurses remembered, helped very little with later work, except for its great emphasis on asepsis. They remembered the careful use of autoclave drums, and soaking wads of cotton wool in perchloride of mercury before cutting them into squares and packing them into glass jars for later use. They had large fish kettles in which to boil instruments, and sterilisers for dressings. They remembered occasional blood transfusions in which the donor was brought in, placed next to the recipient and bled directly into him or her. Medicines, including morphia and strychnine, were kept in an unlocked cupboard in the kitchen (only with the passage of the Dangerous Drugs Act were drugs kept in a locked cupboard). Morphia, they remembered, was given somewhat haphazardly.⁵⁹

Constance Lucas came to the hospital in 1930. She had begun her training for registration elsewhere but did not complete it due to ill health; she acted as assistant nurse at St Mark's and did not complete her training until many years later, back at her original hospital where she later became a sister. She remembered that there were quite a few assistant nurses at St Mark's who had not finished their training – but they did precisely the same work as those who were registered. She thought that the specialisation in which the hospital dealt was off-putting to nurses who might otherwise have worked there. She vividly remembered her mortification when the bus conductor called out to her on her arrival at the hospital: 'Here we are, miss – it's the bum hospital!'⁶⁰ Like the others, she remembered that her work was 'not all nursing – a lot of it was domestic. I suppose every hospital was the same.'⁶¹ The nursing itself seemed to her relatively straightforward – 'not complicated, at all'.⁶²

Irene Tonks, who started at the hospital in 1938, said that she did not like it when she first went there, because she had all rectal cases rather than abdominal ones. As a probationer, she received instruction from the sister tutor and the surgeons also lectured on how the operations were performed and on after-care. However, she felt she learned most on the



Nurses and patients on roof of St Mark's, 1920s



B Ward (later Salmon Ward) in 1928



Sitting room in the nurses' home



Matron Cable and a probationer, late 1940s

PROFESSION OR VOCATION?

wards. Although she later left the hospital, she retained such an affection for St Mark's that she returned in 1949 to spend the next 19 years nursing there.⁶³

In January 1946 Dora Willoughby resigned to become matron at the London Chest Hospital. The new matron was Miss E J Cable, previously assistant matron at the Royal West Sussex Hospital in Chichester. She had also acted as assistant matron at the Gordon Hospital between 1937 and 1939. The medical committee who interviewed her were particularly interested in her work there, and made a few less than charitable remarks about the other hospital. Interestingly, when she was at the Gordon, Miss Cable apparently heard nothing at all about St Mark's.⁶⁴ Miss Cable was even more anxious than her predecessor to improve the status of nursing by promoting only state registered nurses. She also regarded the nurses' home as a vitally important part of the hospital. However, as nurses began to seek more independence, married women were recruited and the hospital endeavoured to expand various medical departments, the home, only ten years or so after it had opened, was already under attack. In addition to fighting off encroachments on the nurses' home, Miss Cable presided over the changes introduced by the establishment of the National Health Service.⁶⁵

The arrival of the National Health Service made perhaps less difference to the nursing profession than had been anticipated. A shortage of nurses continued to be a problem nationally, with some hospitals faring better than others. Improved education and career expectancies in other areas continued to hamper recruitment into nursing, with its low pay, long hours and uncertain professional status. The Wood committee, reporting just before the NHS came into being, addressed some of the problems which had plagued the profession in its recruitment, concluding once more that too much of a probationer's time was taken up in domestic duties: it was argued that courses could be reduced from three to two years if such duties were removed. It emphasised that in such training the needs of the nurse, not the staffing needs of the hospital, should be paramount. Moreover, probationers should be given student status, rather than being regarded as junior employees subject to an outdated system of discipline. Leaders in the profession, however, were still averse to improvements in the status of trainee nurses. Both the profession and the hospitals opposed any reduction in the length of courses, for their different reasons. It was also argued that improvements in pay would attract the wrong type into nursing. There was the continued pull between the desire to improve the status of the profession, and to improve standards within it, and the need to bend the rules simply to attract sufficient staff. There was the constant dilemma, once the health service was established, that there was an insufficient number of nurses but

nursing was judged to cost too much. Many leaders in the profession wished to abandon the 'roll' of nurses who had passed a test but not qualified for registration. However, by the 1950s three tiers were now more or less evident: state registered nurses, state enrolled nurses and those without any such qualifications.⁶⁶

Under the National Health Service, new systems of agreeing salaries were established. Whitley Councils had been set up during the First World War to assess the salaries of civil servants, and the principle was later extended to other groups in the public sector. A Whitley Council was now established for the nursing profession, consisting of representatives from both management and staff. Although the Royal College of Nursing had excluded from its membership the majority of nurses, including students and unregistered nurses, such professional organisations had more representatives on the Whitley Council than the trade union organisations which, by the time of the Second World War, were attracting large numbers of nurses. The National Health Service, therefore, helped to strengthen the professional associations in relation to the trade unions. One change which early Whitley Councils attempted to implement, was to shift nurses from salaries which assumed that they lived in, to gross salaries so that they could choose to live out. There was some opposition to this, as gross salaries were taxable in a way that such perquisites as board and lodging were not. In fact the salaries usually remained weighted in favour of the nurses who were in residence at the hospitals, since this was cheaper in the short term to the National Health Service (and often preferred by nurses living in London). In the longer term, however, this policy caused problems because it reduced the size of the pool from which the NHS could recruit: married women, those who wished to work part-time, and male recruits tended to look elsewhere for employment.⁶⁷

The problems of hospitals which could not easily attract nurses were often exacerbated by the National Health Service: in earlier years (as at St Mark's) they could pay higher salaries than competing institutions, or offer other incentives. No such salary differential was allowed under the NHS. The position of the matron, too, was sometimes initially weakened. In former times, she could appeal directly to the hospital secretary or the committee of management. Under the National Health Service, the matron at St Mark's was not a member of the house committee, and reported only to the nursing committee at the Hammersmith. As decision-making was removed from the hospital, so the matron's influence diminished. Matron Cable soon expressed dissatisfaction with her position under the NHS and the house committee decided that she should be allowed to attend its meetings with the proviso that 'matters to be dealt with in the presence of the Matron should be decided at each

meeting, . . . any excluded matters to be taken first'.⁶⁸ Later it was decided that the matron should become a full member of the house committee.

At St Mark's it was suggested that probationers, already renamed as 'student nurses', should be trained partly at the Hammersmith and West London Hospitals, with which St Mark's was now linked, rather than going to the (now National) Temperance Hospital.⁶⁹ The General Nursing Council agreed to terminate the affiliation with the National Temperance, but did not approve of St Mark's affiliating as an equal partner in nurse training with the other hospitals: it was agreed only that nurses could work at the small hospital as part of their three-year training at the other hospitals.⁷⁰ This arrangement made things more difficult at St Mark's as nurses left after a matter of months to continue their training at the Hammersmith or West London Hospitals: the student nurses stayed too short a time at St Mark's to be as useful as the probationers had been. Difficulties were even more acute at the level of experienced nurses, and increasing numbers were employed from agencies. In 1949, for example, there were two permanent staff nurses, and twenty from cooperations, four permanent assistant nurses, and a further fifteen from cooperations, together with only six student nurses. This still left a shortfall of nine nurses.⁷¹ Miss Cable requested in July 1949 that owing to the increasing number of cancer cases, seven additional female SRNs should be appointed. She noted that applicants 'show reluctance to join the staff when they realise that St Mark's is not a training school at present'.⁷² Attempts to persuade cooperation nurses to join the staff had had minimal success, as had efforts to employ nurses from the other two hospitals. The matron began to investigate the possibility of recruiting nurses – but only those who were trained – from overseas.⁷³

In 1950 the Ministry of Health requested that all nursing staff receiving remuneration above the Whitley scale be laid off. Matron Cable warned that if this policy was implemented at St Mark's half of the hospital's beds would have to close.⁷⁴ However, once the Ministry of Health had laid down a policy, it was difficult to secure exemption from it: the services of the agency nurses were duly terminated. The policy forced the three hospitals to think again and some nurses were officially seconded to St Mark's from the Hammersmith and West London. The idea of asking the General Nursing Council if the hospital could establish a training school for assistant nurses was rejected because the hospital was too small.⁷⁵ The surgeons became concerned about untrained foreign nurses taking charge of wards in a sister's absence and their use for night duty. It was felt that they were too inexperienced to have such responsibilities and that there were language difficulties. The matron agreed:

. . . there is frequently a complicated array of tubes and bottles which

require careful supervision, and it is all too common for the RSOs to be informed in the morning that half the drips have stopped and that none of the gastric suctions are working.⁷⁶

Despite such worries, the number of nurses from abroad continued to increase at the hospital. Matron Cable wrote to Tasmania House in 1951 after hearing that they had a number of nurses visiting Britain. In August 1951 the hospital took on 12 new nurses: of these, three came from New Zealand, one from Australia, one from Denmark, one from South Africa, one was described as coming from Ireland via India and only five came from the United Kingdom.⁷⁷ However, each month a lay visitor inspected the hospital, and in December 1951 the visitor (Arthur Brewin) reported that all the nurses were giving 'excellent' service: 'No one can visit the wards or speak to patients without being made aware of this.'⁷⁸ However, Miss Cable reported in June 1952 that two staff nurses, one Norwegian and the other French, were on duty although both their nursing knowledge and their spoken English were only fair. They therefore could not be given charge of wards, although they were counted by the authorities as staff nurses working to their full capacity. Miss Cable therefore argued that in future such nurses should not be employed.⁷⁹ Despite this decision, shortages again became critical and in November 1952 it was recorded that three new staff nurses had been taken on: two were from Holland and one was 'a native of the Gold Coast'.⁸⁰ In February 1953 the matron requested that half of the beds should be closed for a two week holiday period because of lack of staff.⁸¹

It added to the matron's problems that in 1953 Nurse James and Nurse Hook both resigned; Miss Willoughby had managed to persuade both to become state enrolled, but since they were still not SRNs, they remained as assistant nurses. Miss James now refused to wear the new uniform which had been chosen for assistant nurses because she did not count herself in that category. Miss Hook followed her.⁸² The problem took some resolving, but in the end both nurses were allowed to wear some different elements from the rest of the assistant nurses. Matron Cable had resolutely refused to allow either to be made sisters, although she was not slow to agree that they were excellent nurses. The medical staff, she pointed out, expected their own people to have appropriate qualifications: why should the nursing profession not have similar standards. The surgeons were, perhaps, the only ones who could have persuaded the nurses to register, with the improved status, pay and better pension rights that this would imply.⁸³

Although Miss Cable managed to preserve the status of the nursing staff on this matter, she was less able to resist the incursions of the medical staff in other ways. The most important point, perhaps, was the space

allocated within the hospital. As the notion of a separate nurses' home came under greater attack, the medical staff looked to this building in order to expand departments such as pathology and x-ray, and the whole of the ground floor of the nurses' home was gradually taken over for these purposes. Particularly resented by the nursing staff was the takeover of their large sitting room and its conversion into a board room and lecture theatre for the medical staff.⁸⁴

Staffing shortages persisted. In 1956 it was decided that special advertisements should be placed in nursing journals circulating in Commonwealth and European countries.⁸⁵ There was also a plan afoot for all the special hospitals to band together to offer their specialties as an element of nurse training. Many meetings were held with matrons and hospital secretaries of the postgraduate special hospitals in London under the chairmanship of Sir Desmond Morton to formulate a plan. However, when the proposal was finally put to the General Nursing Council it was not accepted on the grounds that the basic training was inadequate.⁸⁶ The notion that the hospital might perhaps become a training school for assistant nurses was considered again, although opposed by the medical committee, which felt that this would in fact lower the quality of the staff, since those who trained to become assistant nurses usually had fewer school qualifications than the student nurses training to be SRNs. The medical staff also remarked that the establishment of such schools had not usually assisted other small hospitals with similar staffing problems. The nursing committee for the three hospitals, however, rejected most of the medical committee's conclusions, and began to consider ways of introducing such a scheme.⁸⁷

In 1964 Miss Cable retired; Miss JM Jell was appointed in her place. A six-months' course in rectal surgery for state enrolled nurses was established at the hospital in October. Attempts to establish a training school for SENs foundered: the General Nursing Council in August 1965 declared that such pupils would have to be seconded to other hospitals for almost half of their training in order to comply with new requirements. However, the six-month course was continued.⁸⁸ Even more critically, the General Nursing Council in their inspection in 1965 decided that St Mark's should no longer be accepted even as a part of a nurse training school with the Hammersmith Hospital, and at the end of 1965 the last student nurses returned to the Hammersmith and for the first time in decades St Mark's ceased to be part of a nurse training school.⁸⁹ A brochure was produced to attract nurses to the SEN course and also to improve general recruitment. The position of St Mark's as one of the 'foremost Post-Graduate Teaching Hospitals for the University of London' was emphasised together with the hospital's international reputation.⁹⁰ Its colonic work rather than rectal work was

stressed. It recorded that state enrolled nurses could gain a certificate after the course: 'Vacancies occur twice yearly in April and October but there are sometimes opportunities to join the staff during the intervening months.'⁹¹ There was a series of pictures: the trainee nurse was shown examining the colonic lavage machine, a barium mixer and a sigmoidoscope. There was also a picture of a nurses' class in the lecture theatre, surrounded by specimens of colons, and one of a nurse changing a dressing for a colostomy patient.⁹² Some of the non-nursing duties were beginning to be lifted: ward clerks were appointed to look after flowers, linen and stores, run errands and perform other tasks.⁹³

Miss Jell was blunt in her assessment of the nursing problems at St Mark's. It had been suggested by a member of the medical staff that a special training course for post-registration nurses rather than simply state enrolled nurses should be established. Miss Jell argued that despite extensive advertising, the hospital had failed to attract the attention of more than a few such nurses. She pointed out that St Mark's was not the only postgraduate teaching hospital which relied heavily on agency nurses. 'All such hospitals employ large numbers of Agency Nurses to supplement the few who choose to take the various courses available.'⁹⁴ For many years St Mark's had been fortunate to form part of the Hammersmith Hospital nurse training school, the matron continued. It was now in a very difficult position, especially as it competed with hospitals 'which have considerably more to offer than we have'.⁹⁵ Miss Jell ascribed the main problem – one that had dogged the hospital in its recruitment of nurses ever since it was established – to the treatment at St Mark's of rectal diseases:

To put it bluntly, rectal diseases may provide a fascinating source of study for doctors and research workers but insofar as nurses are concerned it has little to recommend it in comparison with other specialities.⁹⁶

Miss Jell said that it was 'for this very reason' that the General Nursing Council had withdrawn approval for the secondment of student nurses from the Hammersmith, together with the fact that experience in rectal surgery 'is available in all general hospitals for the purpose of nurse training'.⁹⁷ There were courses for nurses in neuro-surgery, plastic surgery, ear, nose and throat surgery, ophthalmic, orthopaedic, thoracic and open heart surgery, all of which had their own attraction. As far as cancer was concerned, the Royal Marsden Hospital had a very strong emotional appeal, in addition to being able to provide a more comprehensive general education than St Mark's. The other specialist hospitals either had a recognised certificate or a qualification such as the Diploma of the Ophthalmic Nursing Board or the Orthopaedic Nursing Certificate, or

they had the advantage of specialising in branches of medicine with popular appeal. 'Cardiac surgery, for example, is on everyone's lips at the present time, but when did a colostomy ever get into the news?'⁹⁸ In other specialties nurses learned to use the latest advances in medical technology, such as respirators, patients' monitoring systems and artificial kidney machines – 'but we have none of these'.⁹⁹ Miss Jell recalled that when she was searching for material for the brochure on the SEN course, 'I was unable to find anything more exciting than the Henderson lavage machine!'¹⁰⁰ Moreover, the hospital was in an old building with inadequate facilities. 'The fact must be faced that state registered nurses today have many avenues open to them and the one leading to St Mark's leaves much to be desired.'¹⁰¹

One member of the medical staff thought that the matron had lost faith in St Mark's. Whether or not that was the case, or whether she had put her finger on the persistent problems of nurse recruitment at the hospital, by April 1968 Miss Jell had left to take up a position elsewhere.¹⁰² In view of the need to have a strong commitment to the future of nurse training at St Mark's, it is of interest to note that Miss Jell's position was now taken by Miss CH Liddiard, who was at that time assistant matron.¹⁰³ In the hope of recruiting future staff nurses and state enrolled nurses, Miss Liddiard organised several study days for pupil and student nurses from other hospitals.¹⁰⁴ However, when Miss Liddiard tried to implement a post-certificate course for staff nurses along slightly less ambitious lines than had been suggested by the medical staff, Miss Jell was proved right: the course had to be postponed through lack of applicants. Even the number of SENs applying to take the six months' post-enrolment course had begun to fall.¹⁰⁵

In 1965 the Salmon committee reported to Parliament on reorganising the nursing staff structure. By 1969 some of its recommendations were beginning to be implemented at St Mark's. Miss Fraser Gamble, previously matron at the Hammersmith Hospital, was now appointed as senior nursing officer to the group. Miss Liddiard became senior nursing officer, rather than matron, at St Mark's. One of the main recommendations of the report – yet again – was the removal of non-nursing tasks from nurses. The responsibilities for recruiting, training and organising the domestic staff (part of the original nineteenth century matron/housekeeper's tasks) were removed from the matron's hands. Domestic superintendents were appointed to look after such tasks. It was also suggested that ward housekeeping teams be established to assist the nurses on the wards. Some of the sisters also now began to attend ward sisters' management courses at Chiswick Polytechnic.¹⁰⁶

As nursing staff became increasingly difficult to secure generally, St Mark's found that it was difficult even to employ sufficient agency

nurses.¹⁰⁷ It was noted that the nurses increasingly wished to be accommodated by the hospital, a trend no doubt influenced by the decline of the rigid discipline of former years, together with soaring rents in London, which were not compensated for by high salaries. The nurses' home at St Mark's was inadequate for the demands now placed upon it.¹⁰⁸

In 1973 St Mark's severed its links with the Hammersmith Hospital and joined St Bartholomew's. At first the change made no difference to the staffing position at St Mark's. In 1980, however, the beginnings of a solution to the perennial problem began to materialise: several staff nurses came from St Bartholomew's Hospital School of Nursing to seek post-registration experience. Representatives of the General Nursing Council visited the hospital and St Mark's expressed the hope that the GNC would give permission once again for the hospital to take part in nurse training. By 1981 this had been agreed, and nurses began to come from St Bartholomew's on a regular basis but only to work in the operating theatre. Since St Bartholomew's had no shortage of nurses seeking to train there, the staffing problems at St Mark's began to be resolved.¹⁰⁹

Despite problems over staff, it was reported that there was a cheerful and forward-looking attitude on the wards. The work had changed greatly since the 1950s. The introduction of the medical beds meant that nurses were tending increasing numbers of patients with inflammatory bowel disease. Moreover, a quicker turnover among patients meant that each patient was nursed for a shorter time, but that the work was generally more intensive. Nurses' hours had now been reduced below the 40 hour week level. However, they were no longer involved in lengthy procedures to prepare bandages. Dressings were now received in individual sterile packs from a central sterile supply department. Such changes left more time for actual nursing duties.¹¹⁰

One of the problems which Miss Jell had identified in 1967 was that the hospital found it difficult to attract nurses who wished to specialise. By the early 1970s this was beginning to change. As medicine itself became more specialised, and nursing more professionalised, different levels of specialisation began to appear within nursing. Such different levels, reflecting those in medical training, had been suggested much earlier. In the 1940s the Horder committee had recommended that the enrolled nurse should be the main grade and the registered nurse should be the officer grade. There should therefore be many more enrolled than registered nurses, and the latter should be trained to a much higher level. It also recommended that both undergraduate and postgraduate degree courses should be introduced for registered nurses. Increasingly, developments within the health service demanded more specialists, a move which

the Royal College of Nursing encouraged. Divisions appeared between the specialists, as they looked for greater professionalisation through the Royal College of Nursing, and the generalist nurses, who sought improved economic status through trade unions. However, since only two 'O' levels (after 1962) were required of potential SRNs, any distinction between pupil (SEN) and student (SRN) nurses was difficult to establish. Although many training hospitals demanded higher entrance qualifications than these, the training they offered had to be geared to the General Nursing Council minimum level. In the 1970s, evaluations of nurses' work failed, in fact, to find any difference between that of an SEN and an SRN. The real divisions came in post-registration training, as the SRN specialised.¹¹¹

Specialisation in nursing had in some ways always existed at St Mark's. However, certain aspects of it were recognised in the 1970s and 1980s, which in turn attracted nurses to the hospital. In the late 1960s a sister at St Bartholomew's, Barbara Saunders, in conjunction with Ian Todd who was a surgeon there as well as at St Mark's, began to organise stoma care as a distinct specialty at St Bartholomew's. It was a development which had major implications for St Mark's.¹¹² Stomas had been created by surgeons at least since the end of the nineteenth century, but stoma care only became a nursing specialty in the 1970s. By 1971 there was already a stoma clinic at St Mark's, and by 1975 a stoma therapist was listed among the senior nursing staff. In 1976 it was mentioned that several patients from hospitals with no stoma service had been referred to St Mark's for advice. Students taking the St Bartholomew's stoma care course gained practical experience at St Mark's.¹¹³ The information began to spread more widely: an article on 'special care at St Mark's' appeared in the *Nursing Mirror* in 1977.¹¹⁴ In 1980 the district stoma care department with six staff members (including two nursing officers and two sisters) made its own report in the St Mark's *Annual Report*. That year it had seen 603 patients at the three district hospitals in the scheme, St Bartholomew's, the Hackney and St Mark's, and 305 of those patients were at St Mark's. This proportion continued: in 1982, 53 per cent of stoma patients were at St Mark's, 32 per cent at St Bartholomew's and 15 per cent at the Hackney.¹¹⁵ The Joint Board of Clinical Nursing Studies established a course on stoma care at St Bartholomew's in 1972 – by 1980 it had an 18-month waiting list. As the stoma course increased in popularity, St Mark's was at last able to use its specialty to encourage rather than discourage recruitment.

Another specialty within nursing was also developing at St Mark's: care in parenteral nutrition. A parenteral nutrition unit was established at the hospital in 1976, and in September 1977 a student came to St Mark's to undertake a research project, in conjunction with Manchester University,

in which she studied the nursing problems associated with parenteral nutrition.¹¹⁶ In 1979 Susanne Wood was appointed as research sister in the parenteral nutrition unit and in 1982 became clinical nurse specialist at St Mark's, specialising in parenteral nutrition and intravenous therapy. She was already lecturing in various parts of the world as well as in Britain.¹¹⁷

Such developments reflected the increasing professionalisation and improved training within nursing and its effects on St Mark's. Other aspects of nursing care were also changing – nurses began to reclaim the kind of control over ward arrangements and the care of individual patients that they had had in the early nineteenth century but which had gradually been assumed by the medical staff as medicine developed. The 'nursing process' stressed an individual style of nursing, and concentrated on each patient rather than on a number of tasks. Instead of the nurses having a list of tasks to perform around the ward, they were assigned certain patients. They took charge of all aspects of their care, which was organised according to patients' individual timetables. The nursing process was laid down in guidelines from the General Nursing Council in 1977, and the City and Hackney District appointed Sarah Whitfield in 1979 to oversee its introduction into the district's hospitals. A trial of the method was introduced into Allingham ward in 1982. It was intended that the nurses should have greater responsibility, making their own assessment of the particular needs of the patients, not simply paying attention to the medical diagnosis. There was some opposition from medical staff generally, not only at St Mark's, since some felt that the system poached on their preserve. It was emphasised to them, however, that the nurses assessed nursing rather than medical needs; it was also argued that the nursing process made explicit what had in fact often been the pattern before. The arrangement also reflected a newly perceived need to involve both patients and families in their care. The patients should be assessed in the context of their reactions to their illness, and their family and work, not simply in medical terms. Where patients wished to be better informed, the nurse was charged with helping with this. It was intended that the new method should be based on a problem-solving approach: the nurse should try to assess what type of nursing care was appropriate for a particular patient. More discussion between those handling individual cases was encouraged, not simply between sisters.¹¹⁸ Nursing care should embrace more than simply the medical model established at the end of the nineteenth century, and so strongly enforced by Florence Nightingale.

Reactions to the nursing process were varied. Some stated that patients liked routine – of knowing when particular things were to be done. Others maintained that it made little difference, although in theory it was good. Some complained that there were too many forms, and that with-

PROFESSION OR VOCATION?

out a checklist things tended to be omitted. However, others were more enthusiastic about it. Among other features, the nursing process seemed to require greater responsibility and initiative among the nurses: the profession was therefore looking to a time when it would be regarded as a particularly demanding career, with educational milestones, not simply a vocation based on 'female qualities', the nineteenth century conception. Teamwork between doctors and nurses was required, rather than a hierarchy of authority in which doctors expected their instructions simply to be carried out. Nursing had long been seen as 'women's work', even though prejudice against men entering it had receded since the Second World War. That association remained, but as women were demanding equal status in other walks of life, this was applied to nursing as well.

The history of nursing at St Mark's can be seen against the background of the struggles of professionalisation. Throughout the century, the hospital had suffered from acute shortages of staff, except at the level at which training could be offered. Nurses at St Mark's may have undertaken more nursing tasks at an earlier stage than their counterparts in the general hospitals, but they too were dogged by the conception of them partly as domestic help. It was almost a century after medical practitioners found that specialisation was useful to their profession that the same kind of specialisation was recognised within nursing.

The expansion of the hospital class

Patients at St Mark's, 1900-1985

It was only in the twentieth century, particularly after the Second World War, that patients from all classes attended the voluntary hospitals. The shift in the social composition of the patients reflected changes in medicine, the medical profession and in nursing. As surgery became more extensive, medicine more technological, as the elite in the medical profession increasingly stressed their hospital work, so the middle classes more frequently sought hospital treatment; as nursing was visibly reformed, so the image of the hospital changed. With the changing class of the patient the charity stigma of hospital treatment began to fade. The 'hospital class' which had formerly included only the poor began to expand: the establishment of the National Health Service in 1948 enhanced a process which had already been set in motion.

The experiences of the patients in hospital also began to change, as many now underwent far more radical surgery than had their nineteenth century predecessors. As medicine became more technological there were complaints that hospitals became more impersonal: this was probably a reflection too of the changing class of patient since those who would formerly have been treated on an individual basis at home by their own medical practitioner now came to the hospital. St Mark's suffered from such problems perhaps less than other, larger, institutions throughout its history if only because of its small size. As prevailing political and social notions increasingly stressed the individual, and his or her social environment and quality of life, attention began to be paid to the social effects of the radical treatments which medicine and surgery now had to offer. In this context the patients themselves once more began to play a part in reassuring others who were about to undergo similar procedures, much as they had been encouraged to do in the mid-nineteenth century, before the dictates of medicine and nursing suggested that this was an inappropriate part for them to play.

These changes came about slowly: there was far more similarity in the period before the First World War with the nineteenth century than with the mid-twentieth century. The great majority of patients at St Mark's were still from the poorer classes. Most suffered from distressing but not life-threatening afflictions, such as haemorrhoids or fistula. The recollections of Lucy Sutcliffe, probationer nurse in 1910, show how little had

changed from the earlier period. Patients frequently pawned their clothes on arrival at the hospital, and they were very concerned about the fate of their families while they were in hospital.¹ On arrival, patients were far from clean, and Lucy Sutcliffe's first task was 'comb all the heads with the dust comb' and apply flea powder; 'if they wanted nitting, I had to get a nitting comb'.² She then washed their feet with lysol, and patients would frequently remark: 'I haven't had my feet washed since I was born'. Lucy Sutcliffe later remembered: 'You've no idea – it was dirty in those days'.³

There were occasional patients, particularly ones with intractable problems, who were better-off – there was a cancer patient, for example, who was collected in a car after it was decided that nothing could be done for him. Most of the cancer cases were sent home, as few seemed amenable to operation; some cases were treated by simple colostomy or perineal excision. The apparatus used as a collecting device was rudimentary: the bed frequently had to be mopped up. Such patients often seemed more upset by the colostomy than the cancer, hoping only that the colostomy would be closed. Charles Gordon-Watson declared that at the turn of the century there was a 101 per cent mortality rate for colostomy: the 1 per cent represented the patient 'who died when he heard of it'.⁴

Patients were admitted on Saturdays and discharged on Fridays. While they were in hospital, their diet was quite good. They had bread, butter and boiled eggs for breakfast, and generous quantities of other foods at other meals. (They were expected, though, to bring in their own tea and sugar, and often butter and eggs as well.) Most patients were able to entertain themselves: 'They played a game on the bed, or something like that ... And they used to walk around'. Few were illiterate: 'They read a lot ... most of them could do something'.⁵ The patients were known only by the numbers on their beds: Lucy Sutcliffe remembered 'Number 7, now, he was very friendly. ...'. Patients clearly showed an interest in their well-being: 'They had glass urinals, you know, ... [and] they would hold them up and say "John, look, good colour today"'.⁶

The suggestion that a few slightly better-off patients were coming to the hospital in the early twentieth century put the committee of management in a quandary. It was wondered whether this should be acknowledged, and such patients charged for services, or whether an 'almoner' should be appointed, as at other hospitals.⁷ The almoner's task was usually defined as two-fold: she should assess the needs of the very poor and perhaps render them assistance (the traditional meaning of almoning) or, as the obverse of this, she should assess the income of patients so that inappropriate applicants would either be sent away or a fee levied from them. In fact most almoners were employed to turn away apparently better-off patients. The indigent continued to be assisted at St Mark's by the Samaritan Fund, run by the ladies' committee. It was decided in 1903

that an almoner was not necessary but that each new outpatient should pay one shilling for the first attendance and sixpence for subsequent attendances. Inpatients were to be charged between five and ten shillings a week for maintenance and treatment, although this was subject to remission if they were very poor. It was also decided that private patients should be admitted, paying fees of four guineas a week.⁸ The opposition from the surgeons over levying a fee from public patients, since they did not wish to offend local practitioners, resulted in the policy being abandoned, although the treatment of private patients was continued.⁹

It was, however, an issue which was repeatedly raised over the next forty years. Mark Merriman argued in 1914, against some opposition, that a 'lady almoner' should now be appointed. She should ensure that suitable cases were sent to convalescent homes but also that no patients 'who could possibly afford the outside practitioners' fees, should receive treatment at the hospital'. After some discussion it was decided that an almoner should be appointed for a trial period of six months at a salary of £52 a year.¹⁰ When approaches were made to the Almoners Association, however, the hospital found that almoners already had a sense of professional status. No almoner would be supplied for half-time work: 'A lady would give her whole time at £130 p.a.'¹¹ The committee of management decided that this was too great an expense, especially if inappropriate patients were simply sent away, and the project was for the moment abandoned.¹²

The arrangements for patients at St Mark's before the First World War provided little more than the bare essentials. In the outpatient department, patients waited on crowded benches. If they were admitted as inpatients, they were allowed visitors only on Wednesday and Sunday afternoons, with no more than two at a time.¹³ Patients who disobeyed hospital rules were warned that St Mark's felt no obligation to treat them, whatever the stage of their ailment. It was noted in 1906 that patients 'frequently dropped foul dressings not in special receptacles but . . . on the lavatory floors'; they also had a tendency to smoke in the toilet rather than in the room specially provided. Patients were reminded that violation of such rules 'will render a patient liable to immediate expulsion from the Hospital'.¹⁴

The surgeons sometimes had a tendency to forget about intractable cases in the wards, a tendency which those in charge of the hospital's finances wished to curb. The voluntary hospitals generally endeavoured not to treat 'incurables' as these occupied beds in which more amenable cases might be tended. The surgeons at St Mark's were therefore informed in 1906 that two patients, William Hammond and Albert Roberts, had been in the wards 'for some considerable time'.¹⁵ The committee of management now decided that if a patient had been in hospital for six weeks or

THE EXPANSION OF THE HOSPITAL CLASS

more, the surgeon was to be reminded and had to decide whether the patient should be discharged or whether he or she should remain for further treatment.¹⁶

By the time of the First World War, two trends at the hospital were apparent. One was the increasing number of serious cases – in particular, those requiring colostomies (special colostomy gowns and nightdresses were bought in 1911).¹⁷ St Mark's usually endeavoured to send colostomy patients to convalescent homes: they needed continued care but the hospital did not want them to occupy beds when the surgeon's attention was no longer required. However, convalescent homes became increasingly reluctant to take such cases because of the special care they needed and because they were regarded as 'offensive' to other patients. In 1916 Mrs Merriman wrote to the committee of management on behalf of the Samaritan Fund to recommend that the hospital should buy its own cottage for colostomy patients. Although nothing came of this suggestion, it was a suggestion to which the committee repeatedly returned.¹⁸

The second trend was increasing evidence that better-off patients were in fact coming to the hospital. The hospital originally sought to treat labourers and their social group. Others were expected to be able to pay a little for treatment outside hospital. Clerks and other such workers were not deemed suitable, and yet it was this group that was expanding within society.¹⁹ Those who supported the hospitals by charitable donations were increasingly concerned. As the First World War drew to a close, the King's Fund made it clear that St Mark's should seriously consider appointing an almoner to screen patients. The Fund's recommendation was accepted: Miss Hamilton was appointed as lady almoner at a salary of £150 a year, an amount which compared favourably with that of the house surgeon, who received about £100 (although he was also given board and lodging).²⁰

With such a financial outlay, the committee of management soon decided that Miss Hamilton's work should be extended. Since she was already required to interview all the patients it was decided that she should have the entire responsibility for the registration of both in-patients and outpatients, and for all case papers. Not surprisingly, within five months Miss Hamilton threatened to resign.²¹ The rules for the position were once more reconsidered, and her task again became social and financial. She was to visit patients in the wards on specified days and times, as arranged with the matron. She should provide belts for colostomy patients and together with the ladies' committee should make arrangements for the convalescent treatment of patients. She should also continue to assess the financial position of the patients. A subcommittee consisting of four members of the committee of management and three members of the ladies' committee which investigated the role of the

almoner reported that Miss Hamilton had found 'very little abuse of the Hospital by patients who could afford to pay privately'. Not only did this committee reject the idea that the almoner should look after the records, it also criticised the committee of management for supplying her with inadequate office facilities.²² The committee of management decided at the end of Miss Hamilton's first year that there was no longer any need for an almoner: they argued that the hospital's funds were too meagre. Since she was now acting in much the same capacity as the voluntary ladies' committee, and was discovering no charity abuse nor keeping the records, her usefulness seemed to them limited.²³ However, although they no longer wanted a lady almoner, shortly afterwards they decided to appoint a more lowly 'enquiry officer'. They decided to combine the officer's duties with other tasks: an extra sister was appointed and her task was to undertake the clerical work in the outpatient department, record patients, act as almoner, assist the matron and help the ladies' committee.²⁴ Such a combination of tasks meant that the sister could not adequately screen patients and the medical committee requested again in 1923 that a lady almoner should be appointed: they had 'reason to believe that the Charity was being abused'.²⁵ The committee of management immediately imposed a charge of one shilling per outpatient attendance, but did not feel it worth making the additional appointment. Again, in 1924, William Gabriel complained about those attending as outpatients 'whom he considers could afford to consult a specialist privately'.²⁶ He mentioned in particular the proprietor of a small draper's shop, who had an income of about £6 a week, and another man with an income of £4 a week. However, the committee of management argued that 'as no hard and fast rule could be laid down as to patients eligible for Hospital treatment', the admission of patients should be left to the discretion of the hospital secretary, Raymond Bull.²⁷

Throughout the hospital's history, there had always been more male patients than female, usually in a ratio of two to one. Lockhart-Mummery noted in 1923 that male patients predominated in all special hospitals. Frequently in the hospital's history the women's wards were used for male patients to reduce the number of men on the waiting list.²⁸ A report on the number of patients in the hospital was made at each committee of management meeting. The number of each sex was given, and from 1925 the number of patients who had been in the hospital for four weeks or more was added. When private rooms were set aside from the end of the 1920s, the number of private patients was also given each month. In the 1930s the number of cases of cancer of the rectum in the hospital and on the waiting list at any one time was added. The numbers in all categories confirmed the preponderance of male patients over females. Typically there would be between 35 and 40 men in the hospital and between 10

THE EXPANSION OF THE HOSPITAL CLASS

and 15 women. It was only after the Second World War that some reduction in this disparity occurred, but even then it remained for many years at about three male inpatients to two female.

Increasing indications that the class of patients was indeed changing began to appear. Patients and sometimes those who sponsored them, such as working groups, became more vociferous, literate and effective in both their complaints and praises. When a patient named Harry Elstone died in 1915, his sponsors, the Amalgamated Society of Carpenters and Joiners, wrote to the hospital complaining that he had not received 'proper treatment', and that the case should be investigated. In 1925 a patient, Mr JH Pilley, complained of the negligence of the house surgeon, attending the committee of management to make his point – the committee, however, found for the house surgeon.²⁹ From 1926, former patients began to second votes of thanks at the Annual General Meeting. Mr MJ Young declared that year that he was particularly pleased to undertake this task 'as it gave him the opportunity of speaking from the patients' point of view'. He had had eight operations elsewhere, came to St Mark's for his ninth, remained in hospital for 33 weeks, but now could walk again, having previously despaired of ever being able to do so. Moreover, he now enjoyed good health, 'thanks to the skill of the surgeon, and the very efficient staff of Nurses'.³⁰

As a reflection of the resources which some patients were now thought to possess, it is interesting to note that when the hospital found itself in some financial difficulties in 1920 Dr Oxford wrote to all past patients requesting help, an action which would not have been worth undertaking in earlier years.³¹ In 1926 Raymond Bull suggested that an Old Patients' Association should be formed, to raise funds for the hospital. It was also noted that increasingly patients came from all over the United Kingdom.³² In recognition of the demand, when the hospital was expanded in 1927, special beds were set aside for private patients. The Lord Mayor speaking at the Annual General Meeting 'noted with pleasure' that there would be a private ward 'to accommodate patients of limited means', hitherto unable to be treated by 'experienced' (that is, specialist) surgeons and nurses.³³ Such patients paid the hospital six guineas for a single room and five guineas for a double, in addition to the surgeon's fees. Private patients, unlike those in the public wards, could be visited daily.³⁴

Restrictions on patients within the public wards persisted. It was decided in 1926 that children were too noisy to be visitors. When an orthodox Jewish patient in Holgate Foster ward refused to eat the food provided by the hospital and requested to have his own kosher food brought in, the request was refused. It was decided that 'all patients must conform to the regulations laid down by the Committee of Management'.³⁵ The hospital remained Church of England in its outlook: in

1925 the chaplain was instructed to hold two services every Sunday, each lasting at least half an hour, to visit the wards for at least one afternoon each week, and conduct communion 'when necessary'.³⁶

The increase in the number of patients with cancer treated at the hospital, often by radical operation, was apparent throughout the 1920s and 1930s, with concomitant problems.³⁷ The continued difficulty of persuading convalescent homes to accept colostomy patients was raised once more in 1928 by the ladies' committee, again with the suggestion that the hospital buy its own convalescent home. Again it did not seem feasible.³⁸ Some attention was paid to the particular problems of patients with colostomies: a pamphlet on the management of a colostomy was printed, to be distributed to patients.³⁹ Lionel Norbury at the Annual General Meeting in 1934 reiterated the need for the hospital to have its own convalescent home: he claimed that no convalescent home would now take colostomy patients.⁴⁰ This was an overstatement, but the cost of such beds was considerable – in 1934 one in the Reckitt Convalescent Home cost two guineas a week.⁴¹ On the eve of the Second World War, Norbury specifically appealed for a philanthropist to underwrite the cost of a home, arguing that it was a great help to patients with colostomies to be able to be trained in the management of their colostomy, if only for a few weeks: 'That made all the difference to their after life in the world.'⁴²

An increase in demand for the hospital's services was reflected in outpatient attendances: in 1923, just under 4,000 visits were made. By 1928 this had risen to almost 7,000. Around 900 operations a year were performed in the late 1920s.⁴³ The social pool from which patients were drawn continued to expand, and with it the expectations now placed on the hospital. In 1932 there was a complaint from Charles W Pipkin of Elm Lodge, Park Hill, Ealing W5, regarding the treatment in the public wards of a close relative. Mr Pipkin's address did not mirror those of earlier patients, and nor did the eventual success of his protest: the resident surgical officer was admonished.⁴⁴ A complaint from the husband of a patient, also in the public wards in 1932, sounded an ironic note: he objected that he was not able to park his car in the hospital drive.⁴⁵ On a more positive note, a former patient, Mr Bunting, leapt to his feet at the Annual General Meeting in 1931 to express his appreciation of the surgeons; the following year Mr Bunting was invited to second a vote of thanks to the staff.⁴⁶ He mentioned that he could identify several other former patients in the audience, and spoke of 'the wonderful service that the hospital is rendering to London and to humanity'.⁴⁷ The following year he declared even more effusively that 'with regard to the members of the honorary staff, their names were written in the hearts of the patients'.⁴⁸

Patients had continued to be asked to bring in their own tea and sugar.

THE EXPANSION OF THE HOSPITAL CLASS

The resolution was reconsidered but re-affirmed in 1920 and only rescinded in 1936, as other areas of the hospital's practice were rendered more systematic.⁴⁹ There was increasing concern in the 1930s about the experience of patients in hospital. In 1932 the King's Fund wrote to St Mark's to find out when patients were woken up in the morning. The hospital secretary wrote back that patients were given their breakfast at 6 am but that if they were asleep they were not disturbed.⁵⁰ When the medical staff decided that they wished to see outpatients from 5 pm, 'after careful consideration' the idea was rejected by the committee of management, and 2 pm was declared more convenient both for patients and nursing staff.⁵¹

Private patients provided welcome income for the hospital, but also brought their own problems. Conditions for them were frequently upgraded: a sister rather than a staff nurse was placed in charge of the private wards in 1929, some of the double rooms were divided to make single rooms in 1930, and the private patients were given a better diet and surroundings than those in the public wards. However, there was the recurrent problem of patients who failed to pay their bills, even though it had been laid down that these should be paid in advance.⁵² Occasionally the committee of management was lenient, as in the case of a patient with fistula from South Africa, E Mockford, a sub-editor on the *Argus* newspaper. Mr Mockford wrote that his operation in London had followed three other operations in South Africa, all necessitating long treatment in hospital: 'The heavy financial strain entailed, followed by the cost of my voyage to England, and the medical expenses here dispensed, has now outrun my cash resources'.⁵³ A temporary respite was granted. In 1938 Mr H M Blenkinsop, the brother of another private patient, complained forcefully about the treatment of his sister at the hospital. The vice-chairman of the committee of management, Norman Daynes, who knew Blenkinsop, took it upon himself to find out the details. Some indication of her protests can be gained from the letter of apology to Mr Blenkinsop: the hospital secretary wrote that since his sister's departure there had been a change of matron, improvements in the service of meals, a new nurses' home, and a new waiting room for private patients' visitors.⁵⁴ In 1939, shortly before the Second World War, there was express recognition that voluntary hospitals now served more than the poorer classes: those at the hospital considered a scheme 'to meet the needs of the middle class patient'.⁵⁵

Other patients clearly did not feel critical of what the hospital provided: outpatient attendances in 1938 now numbered almost 12,500 – three times the number of 1923. The patient who seconded the vote of thanks to the surgeons in 1938, Mr L Silver, regarded himself 'as a marvel of surgery': he had been operated upon 15 years previously for cancer.⁵⁶

The friendliness of the hospital was often remarked upon. The chaplain, the Reverend FJ Dove, recorded in 1941 that one patient told him that 'he was very comfortable and happy, as in St Mark's Hospital the patients had a name and not merely a number'.⁵⁷ Another told him that on coming round from his operation 'he didn't want to live, he was feeling very down; but after a talk with the Doctor he felt better; he felt that he was being treated as a man and not merely as a case'.⁵⁸ Using a rather ambiguous expression, the Reverend Dove noted the following year: 'I have had a good deal to do with Hospitals, but this one has the spirit of happiness from top to bottom'.⁵⁹

The establishment of the National Health Service had its greatest impact not on the doctors or the nurses or even the governors, but on the patients. An elaborate system of insurance had grown up since the end of the nineteenth century, as workers contributed to schemes to assist them when they were ill. David Lloyd George's National Insurance Act of 1911 had taken this further, and during the Second World War the original scheme had been extended to some degree to include a wider group of people. There were also the municipal infirmaries, which took on increasing importance between 1929 and 1948. However, ill-health could still prove disastrous. If the patient had some form of insurance, it might not be adequate to cover him or her for long periods, or it might not provide the care sought for. To complement the new systems of social security, the health service helped to alleviate the economic hardships of ill-health. The whole population was covered by it, whether a patient worked or was a dependent, young or old. Hospitals were given a very prominent role in the health service, reflecting both the greater public desire to use them and their importance to the medical profession. Developments in medical technology enhanced this process. After the Second World War, the trend of earlier years of the middle classes using the hospital finally came to fruition. Although some beds continued to be set aside for well-off private patients, the outpatient department at St Mark's increasingly saw patients from all classes. As the years progressed and the hospital moved away from simply the treatment of cancer and minor rectal diseases (now treated effectively elsewhere) and towards the treatment of inflammatory bowel disease, patients came from further afield.

The arrival of the National Health Service brought other changes, too. With money from the Exchequer, certain basic standards were expected. Things also became more institutionalised and a few familiar complaints began to appear – protests at long waiting lists, impersonal treatment and poor quality food were voiced more frequently. On the subject of food, a report issued in 1951 condemned 'apathy and indifference ... and apparent lack of the most elementary common sense' among the kitchen

THE EXPANSION OF THE HOSPITAL CLASS

staff.⁶⁰ The kitchen was now supervised by the catering officer from the Hammersmith Hospital, and the system proved ineffective. Cooking jam instead of the table variety had been sent up to the wards for days on end, eight weeks' worth of cooking fat had been 'squandered in barely half that period', resulting in 'a monotonous reappearance of steamed fish and mashed potatoes instead of the fried fish and chips announced in the menu', and on one day a full week's cooking fat ration – 21 lbs – had been used in a single meal because no fat at all had been strained off after frying. (Ironically, the cook's name was Lawless.)⁶¹ In 1953 the Ministry set out regulations for hygiene in hospital catering departments: Cuthbert Dukes and Francis Avery Jones were given the responsibility to supervise this at St Mark's.⁶² When further complaints about food were received from private patients in 1955, it was decided that they should be issued with a special notice when entering hospital that their payment covered the cost of the bed, and did not include any special food. The kind of special arrangements which had been made before the National Health Service no longer operated.⁶³

Poor patients far from disappeared under the National Health Service, and the role of the almoner now regained some of its former meaning. In 1947 Miss Miller, who had earlier been given the task both of record-keeping and almoning, but who had seemingly 'no capacity to be apparently kind', although she had great skills at record-keeping, expressed dislike of almoning, and it was decided that a lady almoner should once again be appointed.⁶⁴ The new almoner saw all inpatients and any outpatients referred to her, looking not only at their economic but also their social needs. Her tasks reflected increasing concern about not only the cure of disease but also the restoration of a good quality of life, particularly in patients treated for cancer or inflammatory bowel disease.⁶⁵ In 1942, the National Society for Cancer Relief had approached the hospital for the first time to assist needy cases 'for whom nothing more can be done'.⁶⁶ The Society continued to be actively involved in helping patients at St Mark's. In 1953, for example, it made grants to patients who were entering convalescent homes, to relatives visiting patients at the hospitals, and towards 'extra nourishment' for patients after they were discharged from hospital.⁶⁷

From the late 1940s particular attention was paid to patients with colostomies. Irene Tonks, who came to the hospital as a nurse in 1938, remembered that the type of equipment which colostomy patients were then given to wear was 'grotesque'. Gradually 'this was all fined down to very dainty types of appliances. They could really feel they could go out and enjoy life'.⁶⁸ Cuthbert Dukes made the first social assessment of the implications of medical treatment on the patient's quality of life, largely to discover whether it was necessary for patients to undertake daily colos-

tomy washouts, a procedure which had been advocated for at least 40 years. Dukes concluded that the washout actually made little difference to the health and life-style of the patient, except in the drudgery of the procedure, and in finding this out, he uncovered a great deal about patients' ability to cope with such problems. Dukes noted that the adaptations that a patient with a colostomy needed to make were seldom discussed fully before operation because of the urgency of the situation. The patient woke up with a colostomy and turned to the doctor for advice. An editorial in *The Lancet* had advised in 1945 that:

The surgeon who gives a patient an artificial anus should always find time to teach him how to manage it. Often such patients are sent home with but little preliminary practice and instruction, and the misery in the household while experience is being gained may then be intense.⁶⁹

Most of the 100 patients whom Dukes visited lived in or around London: 'Nearly all the patients visited belonged to the hospital class and were either insured persons or in receipt of public assistance.'⁷⁰ They therefore formed, he argued, a fair sample 'of the outpatient class' although the conclusions drawn from the survey would not apply 'without qualification' to other social classes.⁷¹ Nearly all of the patients were in good health; only two were bedridden, while eight or nine were semi-invalids. There was one man who had been operated on for cancer by Swinford Edwards in 1911. He had remained in good health, and for more than 30 years continued to work in his own boot shop, only retiring when his business premises were demolished by a flying-bomb. He gave up daily washouts in about 1915, during First World War air raids. On the other hand, Dukes visited a lady of 83 who had been operated on by Lockhart-Mummery 30 years previously, and for most of the ensuing time she had been living in a single room attending to herself, performing daily washouts without questioning their necessity. There seemed to be no difference in the health of the patient who performed the washout and the one who did not.⁷²

Nearly all of the patients could do some sort of work. Three-quarters of the men were able to earn their living. Dukes recorded some of their occupations: there was a musical instrument maker, a wood-turner, a tobacconist, an optician, a bookpacker, a taxi-driver, a cabinet maker, a night-watchman and several clerical workers. He found some remarkable cases: one man had served as caretaker at a council school, and in spite of his colostomy he had acted as a local air-raid warden throughout the war, subsequently receiving a letter of commendation from the mayor and corporation. 'This is framed and hung on the wall above the enamel can from which he gives himself his daily washout.'⁷³ There was also a local champion at bowls and a head postman. He found the case of a woman

who had wished to work as a nurse during the war particularly interesting: thinking that she would be rejected if it was known that she had a colostomy, she kept this quiet. She often nursed patients with colostomies and found that many were despondent at the thought of difficulties that they would meet at home: 'when no-one was about, she sat down and gave these patients a little first-hand information'.⁷⁴

Surgeons had advocated daily washouts with little thought as to the living quarters of their patients. Dukes found that in many of the houses he visited there was no bathroom 'and often a single lavatory was used by more than one family'.⁷⁵ Some houses had no indoor sanitation at all: 'for the ordinary hospital patients the abolition of the washout would be a merciful deliverance'.⁷⁶ Dukes also noted that most patients felt very depressed when they first realised that they would have an artificial opening for the rest of their lives: 'it would be a help to have a talk with someone of their own age and social class who has made a successful adaptation to colostomy life'.⁷⁷ He thought that a patient who was married 'and in possession of a home' fared better than one without. However, he noted that although most patients 'made a brave and successful adaptation to the disadvantages of a colostomy life, many are haunted by a secret anxiety about what will happen to them if they were taken ill'.⁷⁸

From the 1940s, occasional patients with ulcerative colitis were treated by proctocolectomy and permanent ileostomy. The procedure was often complicated by stenosis of the stoma and episodes of profuse liquid discharge. The social problems of such patients were potentially more severe than those of colostomy patients, who often followed a regular pattern of perhaps two bowel actions a day. The unsatisfactory nature of ileostomy appliances which often caused discomfort or worse still, leaked, exacerbated the problem. The skin around the stoma frequently became excoriated by the faeces. Colostomy patients were usually fitted with collecting appliances, but few proved satisfactory, and patients relied mostly on pads, absorbent dressings and binders. From the 1940s rubber bags tended to replace the earlier celluloid collecting cups, but even these were bulky, time-consuming to fit and clean, often failed to protect the skin, and did not disguise smells.

In Chicago in 1944 the Koenig-Rutzen bag was developed, and it and its successors proved a marked improvement on earlier devices. Using newly developed plastics, the bag covered the stoma and did not permit secretions to come into contact with the skin. The bag was held to the skin with adhesive; its upper opening had a metal disc covered with rubber and was made in different sizes to fit individual stomas. It could remain fixed to the skin without a belt. In the early 1950s the introduction of the mucosal eversion stoma by Bryan Brooke of Birmingham

greatly reduced the risk of stenosis and excoriation of the skin: by this time an increasing number of colitis patients were being given ileostomies. Adhesive appliances were also further improved. Subsequent bags were made in laminated polythene and virtually eliminated the problem of odour. Adhesion remained problematic, as some adhesives excoriated the skin, particularly if this was already irritated by intestinal contents. From 1966, however, karaya gum powder was combined with refined glycerine to form a solid ring that was both adhesive and had protective qualities.⁷⁹ A few of the practical problems involved in having a stoma were therefore alleviated.

The almoner turned her attention in the 1950s to such cases. She continued to arrange convalescence: in 1953, 172 patients were sent to NHS convalescent homes. However, of the two main homes for men, one would not accept ileostomies and the other only two stoma patients at a time, and therefore patients occasionally had to be sent to private convalescent homes. If they could not afford to pay the bills themselves, the Ladies' Association, the Endowment Fund or the National Society for Cancer Relief assisted. The almoner also arranged grants for relatives to visit patients – particularly when these were elderly or when younger patients received no pay from their employers while they were unable to work. Looking beyond convalescence, patients with stomas had particular problems at home: the almoner noted in 1953 that 'There is little doubt that one of the worst social problems of today is housing.'⁸⁰ One patient with a colostomy lived with his wife and two teenage daughters in only two rooms. They all shared the same bedroom, the single toilet in the house was shared by three families, and the only running water was on the landing. The almoner eventually secured the rehousing of the family in a council flat.⁸¹

In 1954 Brian Counsell and H E Lockhart-Mummery made an assessment of the disability incurred by ileostomy, since this was increasingly the end result for treatment for severe ulcerative colitis. 'An ileostomy was formerly considered so severe a disability that it was recommended only when the issue seemed to be between life and death.'⁸² Although this attitude had changed, a permanent ileostomy 'is still regarded by many medical men as an overwhelming disability'.⁸³ The two surgeons interviewed 52 patients from St Mark's who had ileostomies, asking them about the detailed management of the ileostomy, and about their lives: work, sports and social life, diet, sexual activity, and any episodes of obstruction. The patients were also asked about the best position for the stoma. Counsell and Lockhart-Mummery concluded that surgeons should exercise meticulous care in the fashioning of an ileostomy: 'an apparently trivial oversight may lead to great difficulty and make the ileostomy a burden'.⁸⁴ The patients were much improved in health, both

THE EXPANSION OF THE HOSPITAL CLASS

physically and mentally, than they had been when badly afflicted by ulcerative colitis: 'We suspect that too much emphasis may have been placed on the emotional factor in the aetiology of the disease.'⁸⁵ Except for those who had only recently left hospital, the patients now lived active lives. Amongst the group they interviewed, there was a lorry-driver, a Trinity House pilot, a bricklayer, an electrician and a chauffeur. Two women worked as typists in large offices without any of their colleagues being aware of their disabilities. Many were active in sports, and the surgeons also concluded that 'The presence of an ileostomy appeared to be no bar to normal sexual relations.'⁸⁶ The patients found that they could mostly follow a normal diet, and soon learned if there were any foods to avoid. One patient found that if he limited his evening consumption of beer to five pints he suffered no ill effects. Several of the patients wished that they had had the operation years earlier: even those patients who found the ileostomy a particular disability 'considered themselves to be happier and better off than before their surgical treatment'.⁸⁷ Patients stressed that it was particularly helpful to talk to someone who had successfully adjusted to living with an ileostomy.

The realisation that patients could help each other in this way, and that support needed to be projected beyond the patient's stay in hospital or in a convalescent home, lay behind the creation of the Ileostomy Association in 1956. There were already such societies in America, known as QT Associations: the name 'QT' had its origins in the Q and T wards of Mount Sinai Hospital in New York, where the idea was first developed in 1952. A similar group had already been established in Birmingham under the initiative of Bryan Brooke. John Goligher also formed one in Leeds, and other groups were soon established in Scotland and Ireland. In 1956 the research department at St Mark's invited former hospital patients treated by colectomy and ileostomy (for ulcerative colitis or polyposis coli) to attend a meeting at the hospital. About 70 patients came, and the meeting was addressed by a former patient who proposed that an association should be formed, the objects of which should be the sharing of experiences and the promotion of research. The group was known at first as QT Great Britain (London Division), subsequently becoming part of the Ileostomy Association. By 1957 the Ileostomy Association had 600 members.⁸⁸

The active role of the almoner or medical social worker had been confirmed in 1955 when the Ministry decided that the after-care of patients should be removed from almoners to local health authorities. Henry Thompson, as honorary secretary of the medical committee, noted this with alarm, arguing that local health authorities seemed to take little action: 'My personal views are that it is far better to keep the after-care of patients under the control of ourselves and our own Hospital Almoner.'⁸⁹

In 1964 the title of the almoner was changed to medical social worker, which now more accurately reflected her role – she found herself dealing with the social and economic problems consequent on illness and disability.⁹⁰ During the 1960s the work of the medical social worker was extended, as arrangements were reorganised for patients to convalesce or to enter homes for the terminally ill. With the growth of social work generally in other areas of the community, more systematic help was given to resolve the problems of unemployed, ill, economically deprived and anxious patients. In 1973 a medical social work department was established at St Mark's with the appointment of Lady Juliet Bingley.⁹¹

In 1979 a new society for assisting patients was formed: the National Association for Colitis and Crohn's Disease (NACC). While the earlier Ileostomy Association had catered for patients who had already undergone a particular operation, NACC looked somewhat wider, to establish a group for patients suffering from the two diseases, whatever their stage of treatment. Both diseases had a strong tendency to recur, requiring treatment over long periods of time, with the possibility of operation after years of medical treatment, and the society sought to bring sufferers together. It was initiated by patients and relatives of other sufferers, together with Professor Lennard-Jones and Lady Bingley, and was analogous to the Ileitis and Colitis Foundation in America. Like the Ileostomy Association its objectives were to be self-help among the patients, and the raising of money for research.⁹² Over 80 people attended the inaugural meeting at St Mark's, and the society continued to expand. By 1984 NACC had 3,000 members and several local groups had been formed.⁹³

There was a great deal of change at St Mark's, as at other voluntary hospitals, in the type of patients who came for treatment in 1900 from their successors in 1985. The later patients suffered from more serious complaints, underwent more intensive medical and surgical treatment, but often spent less time in the hospital. The social class had changed: in 1900 there was a class of 'hospital patients' – not the destitute, who turned to the municipal infirmaries, but labourers, and poorer artisans, craftsmen, servants and clerical workers. After the First World War this began to change, but it was only after the Second World War that 'hospital patients' began to come from all classes. Gradually, more attention was paid not simply to the medical but also the social needs of the patients. Surveys of how patients fared after particular operations began to be carried out, and medical treatment and counselling was adapted accordingly. The changes were crystallised in the role of the almoner: formerly her task was to dissuade those who could afford to pay for treatment from 'abusing the charity', but in later years she began to take The part of medical social worker. As self-help groups were established in

THE EXPANSION OF THE HOSPITAL CLASS

other walks of life, so they became a feature of medicine, and a new role was given to voluntary effort in hospitals: that of assistance by patients towards other patients.

CHAPTER XVII

A study in specialism

This book has been a study of the history of St Mark's Hospital in its first 150 years. However, it has also been about the development of specialised hospitals and specialised medicine more generally. It serves as a case study of a successful specialist hospital – successful, in that it survived – even though its field was not always or fully accepted by the medical profession as a distinct specialty. Although there were special institutions in other large cities, and even in some of the smaller towns, it was in London that the multitude of special hospitals developed. This is therefore, in part, a story about an important aspect of the development of London medicine in the nineteenth and twentieth centuries.

As often happened, those who were in the most powerful positions within early nineteenth century medicine were conservative towards new developments. They defended the *status quo* while outsiders led the movement towards greater specialisation. At the same time the new specialists rigidly distinguished between themselves and those regarded to be lower in the socio-medical scale, so-called quacks and those without the qualifications of the Society of Apothecaries, or the Royal Colleges of Surgeons or Physicians, however experienced they might be. The social change generated by the Industrial Revolution promoted specialisation. The social disruptions meant that positions within society were far from secure, breeding competition. Doctors specialised to mark themselves out from others in the competition for patients, even though they also maintained general practices as well. The massive influx of rootless former country-dwellers into the city gave them their opportunity. Such 'immigrants' had lost their traditional sources of medical care, and in many instances no longer had extensive family networks to look after them when ill. Such potential patients therefore often turned to dispensaries and the outpatient departments of hospitals, as well as to druggists, apothecaries and the variety of other medical practitioners in London.

In this context Frederick Salmon came to London, dissatisfied with the prospects in his native town of Bath. He secured all the necessary training and qualifications to succeed in the major London hospitals, even paying – as was the custom – to become a house surgeon at St Bartholomew's. But at that time the medical system was closed except to the relatives, friends or especially favoured pupils of those who were already on the staff of these hospitals. Such positions, although unpaid, yielded great dividends: the surgeons and physicians on the staff were also those who ministered to fashionable London – their positions opened the doors to

such practices. Having failed to secure an appointment at a major hospital – and with little realistic chance of ever being able to do so – Salmon began to specialise in the treatment of rectal diseases, an area in which he may already have had experience while in Bath. William White, to whom Salmon dedicated one of his books, had had a successful practice there in this field. Like White, Salmon published on the subject and began to build up a practice in the City of London. He could have remained there, probably with relative success if in some obscurity, but his ambition and abilities took him further.

A key factor in the establishment of many special hospitals was a medical entrepreneur, blocked from advancement to the highest echelons of medicine. Critical to the success of such ventures, though, was whether such an entrepreneur was able to sustain public interest in his institution. Salmon's entrepreneurial abilities were very evident. He secured election to the City of London Club, although not in the narrow sense of the term 'a City businessman'. Even before he lost his position at the Aldersgate Street Dispensary, which he had made valiant, repeated and expensive attempts to join in the first place, Salmon had already cultivated links with those in the City. Support for his new venture came from many of those in the City who not only saw philanthropy as appropriate to – and an endorsement of – their station in life, but who were also (just as much as Salmon) seeking to establish themselves against the opposition of the older established gentry and aristocracy. By the end of the nineteenth century, and certainly by the twentieth century many had achieved this, but in the early Victorian era, with 'old' money valued more than new (especially when earned from trade, industry or banking), they still had much to fight for. Such patrons overwhelmingly comprised those who supported London's hospitals, not, by and large, the aristocracy. And yet, tapping the City was a very promising way in which to gain support for a hospital. In addition, middle class traders joined the subscribers, perhaps in the hope that contact with the better-off City merchants would bring trade their way. Hospitals also often rewarded those who subscribed to them with patient admission tickets. This perquisite has probably been overstressed in the past: at St Mark's as at other special institutions established by medical men, it was the surgeon or house surgeon who actually controlled admissions, but nevertheless an employee of a subscriber probably received more rapid treatment than other applicants. In many hospitals, including St Mark's something of an insurance system operated, in which subscribers could invest for the benefit of those who worked for them.

The special hospitals were founded almost exclusively by medical men, not, as the general hospitals had been, by philanthropists. They reflected a need within the developing medical profession which could not be met

within current institutions as they then existed. It was within the special hospitals that the claims of the profession were often first mapped out. The lay governors of the older institutions controlled not only patient admissions, but also appointments and terms of service. The medical founders of the special hospitals from the first not only oversaw patient admissions but otherwise secured medical supremacy, controlling appointments and other important aspects of the hospital's existence.

Many of the special institutions of the nineteenth century fell by the wayside, usually within a few years of their foundation. Others were well established by the end of the century, including, besides St Mark's, such institutions as St Peter's Hospital for Stone, the Hospital for Sick Children, Great Ormond Street, St John's Hospital for Diseases of the Skin, the Ophthalmic Hospital at Moorfields (probably a model for St Mark's), and the Cancer Hospital. The secret of the success of such hospitals was not the nature of the diseases they treated (others specialising in the same areas often went under) nor even being first in the field (although this helped) but the ability of the founders to attract and sustain support, followed by a continued interest in the project. From the second half of the nineteenth century some hospitals were established or joined by already well known physicians and surgeons with a dedication to the specialty, thus helping to sustain them – the Samaritan Hospital for Women (the second surgeon there was Spencer Wells, who pioneered the practice of ovariectomy) and the Hospital for Paralysis and Epilepsy (Brown-Séquard was on its staff) were two examples.

Complaints against special hospitals were long and loud throughout the nineteenth century, from general practitioners with whom they undoubtedly competed, and from those at the general hospitals who at first simply ignored them and then attacked them for absorbing charitable funds which, they argued, should rightly come to them. Moreover, it was held, they drained the general hospitals and their growing medical schools of instructive cases. Despite such protestations, however, many of those at the general hospitals also held appointments, although sometimes only when just starting up in practice, at the special hospitals. From the second half of the nineteenth century the general hospitals bowed to the pressure for specialisation and attempted to undermine the position of the special hospitals by establishing their own special departments.

Salmon had already marked out a special area before he established his hospital, but little notice was taken of his work by the medical profession, which even ignored his resolution of the problem of the treatment of haemorrhoids, later popularised by Allingham. It was no doubt sufficient in terms of his own practice to be known to be a rectal specialist, but Salmon probably received few if any referrals from other hospital surgeons. However, his institution came to play a large part, as was the case

A STUDY IN SPECIALISM

with other special hospitals, in the development of his specialty. By the end of the nineteenth century those who could expect to succeed in the elite institutions also increasingly regarded it as important to have a special hospital affiliation. Some of them viewed their specialist work as the most important part of their endeavours: it was these men, from their special hospital bases, who began to develop their fields. At St Mark's, it was William Allingham who concentrated on rectal diseases. He was well respected within the elite of the profession, and served on the Council of the Royal College of Surgeons. He also had a very successful practice, first in the City, where his predecessors at St Mark's had been established, but later moving to the West End of London, to treat the upper classes. He was far from being in a peripheral position, and yet he published the main late Victorian textbook on rectal diseases. It differed from Salmon's works in its extent, and with each edition it grew in size: where Salmon had discussed only stricture and prolapse, referring briefly to other problems, Allingham (and his son) discussed a comprehensive range of almost 20 different rectal complaints. By differentiating between disorders, Allingham demonstrated that a large number of diseases, more than a generalist might think, afflicted the rectum. By dividing up the types of treatment which were appropriate for the different stages of each complaint, he also indicated where specialist care was needed. This was reinforced by making the point that if patients were treated in a particular way, disaster would ensue, and the medical practitioner's reputation would evaporate. Allingham made the case not only for specialisation, but also for referral and a hierarchy of expertise within the profession. By this stage there was evidence that other hospital surgeons were referring patients to him, if only to undertake operations jointly, while he also referred patients to other specialists, usually ones with dual appointments at both general and special hospitals.

Textbooks by specialists such as Allingham were directed both at general practitioners and hospital surgeons. A second stage developed when writings were directed towards predominantly hospital-based practitioners, or even other specialists. The vogue in writing textbooks began to fade at this stage, to be largely replaced by a wealth of journal articles. In the development of other special areas within medicine, journals and societies specific to the specialty were established at this point, through which a community developed. In proctology, developments did not quite follow this pattern. The specialty had an institutional base, St Mark's, and later also the Gordon Hospital, but was not sufficiently accepted as a distinct area within medicine, unlike ophthalmology or orthopaedics, for special departments to be set up within general hospitals. At the instigation of those at the two hospitals a proctological society, with its own transactions (usually the forerunner of a journal),

was established. However, it was then immediately drawn into the Royal Society of Medicine, a mark of recognition, but one which stifled further independent growth.

The focus therefore remained at St Mark's and the Gordon. From early in its history, St Mark's had attracted visitors, with foreign interest keener than British, since there was continuing disapproval of special hospitals among British medical men. The influence of the hospital and its specialty was particularly felt overseas, at first in America and later in Australia and other dominions. By the early twentieth century larger numbers of British visitors, too, came to the hospital. The Gordon did not have quite the strength of St Mark's, as its reputation was based largely on the work of Miles, and seemed to attract fewer visitors. However, the rivalry between the two institutions was acute, stimulating initiatives in some areas and retarding developments in others. It was immaterial that until the 1930s the Gordon had under 30 beds: it was the reputation of the surgeons that was significant. With the two hospitals dominating the field, most of those who developed an interest in diseases of the rectum and colon spent at least some time at one or other hospital. The field *was* the two hospitals. In other special areas, too, more than one institution dominated the area, for example in urology or dermatology. Attempts to stay ahead of each other drove the specialty on, largely in terms of techniques and the development of expertise rather than research.

Another important element which encouraged the development of specialisation, in addition to professional dynamics, was patient demand. Both in the nineteenth and twentieth centuries patients sought specialised treatment long before those on the Councils of the Royal Colleges of Surgeons or Physicians expressed their grudging approval of such emphases. Hospitals were charitable institutions, and they carried with them, as far as the patients were concerned, a charity stigma, almost as much as did the workhouse. The notion that hospitals were dirty and engendered disease reinforced their undesirable image. Strenuous efforts were made to avoid using hospitals. Reforms in nursing, more particularly in its image, helped to change this view, but already, by the last third of the nineteenth century, there was a gradual shift in the class of patients coming to the special hospitals – before this occurred at the general hospitals. The general practitioners were right: their patients were making their way to the hospitals, less to avoid payment than to seek special care. At the special hospitals, too, the medical care was more intensive than at the general hospitals, where the patient rarely saw a senior surgeon or physician. Those in charge of outpatients and those operating at the special hospitals were from a higher level than their counterparts at the general hospitals. Moreover, they regarded it as important to learn from the special cases: this was, after all, where new treatments were tried

out, as shown time and again in the surgeons' textbooks. For all these reasons, the lower middle classes and later the middle classes came to the special hospitals long before they considered treatment at general institutions like St Thomas's or St Bartholomew's.

By the 1920s and 1930s many voluntary hospitals were facing acute financial problems. Patient demand continued to grow, staff costs rose and medicine itself, as it became more intensive, more drug-based, and somewhat more technological, became increasingly expensive. It was difficult therefore to support hospitals simply on a charitable basis, where patients were not expected to pay for treatment and money was raised through voluntary donations. The hospitals had several answers: some charged their patients, which others had done since the end of the nineteenth century, while others drew money from workers' cooperatives, the Hospitals Saving Association or other insurance schemes. However, with the large numbers of worthy institutions all clamouring for support, and with the Depression of the late 1920s and early 1930s, some of the smaller hospitals failed. St Mark's in this instance was anomalous – and this was due to its association with cancer. Tuberculosis has been termed the nineteenth century disease, cancer the twentieth.¹ Whereas nineteenth century novelists portrayed pale heroines dying from consumption, in the twentieth century it was cancer that captured the popular imagination. The century had barely begun when a charitable *matinée* was held for St Mark's because of its association with cancer, and it pulled the hospital out of financial crisis. By 1909 cancer had even been added to the hospital's title. In the inter-war years, this brought rewards not only to the surgeons in their practices, but also to the hospital. J P Lockhart-Mummery was a driving force in the establishment of a major cancer fund-raising organisation, the British Empire Cancer Campaign, and through that the hospital came to greater public notice. The social acceptance of the hospital was recognised in the Greyhound Balls of the 1920s, attended by the rich and famous. Therefore, while other hospitals were in crisis, St Mark's notably flourished. However, that very success, and the hospital's concentration on cancer and anorectal complaints did not enhance the development of the field to the same extent as had happened in the late nineteenth century. The importance of postgraduate teaching was nevertheless recognised – it was, in many respects, a useful way in which referrals could be guaranteed (a factor which had always been borne in mind in the general hospitals' medical schools). The postgraduate teaching reinforced the central place of the hospital in colo-proctology.

With the introduction of the National Health Service, special hospitals – but not specialisation – received a considerable shock. Specialisation was increasingly built into the teaching hospitals and they in turn were more closely linked to universities. Research was stressed, and resources,

certainly until the 1970s, were forthcoming. University departments now began to take the lead in many special areas, and the specialist hospitals, focussing often on practice and experience rather than research, came under threat. In London, those special hospitals which were initially linked to larger institutions under the NHS soon lost their identities, becoming little more than outposts for the overflow of patients from the larger hospitals. They were not able to compete for funds on the same basis as hospital departments and were gradually starved of resources. However, in London about a dozen special postgraduate institutes were established, built around the most successful of the special hospitals. St Mark's was recognised as successful, but its specialty was not, partly because it had not needed during the inter-war period to develop its field as much as formerly due to its concentration on the treatment of rectal cancer. However, it was not simply a rectal cancer hospital, and therefore did not become part of the cancer institute. In its anomalous position, its link with the Hammersmith proved fortuitous since the distance between them meant that St Mark's could not simply be an outpost of the larger hospital.

During the inter-war period St Mark's had led in research and the development of techniques in its chosen area, and in training colo-rectal practitioners. Now its very *raison d'être* was questioned. It was not simply a matter of what the hospital staff and its supporters felt was the best course for the future, but rather whether it would fit into the NHS. The successful special hospitals in this period were those which, having been surgical, now included medicine, or *vice versa* (as with the Royal Marsden, the Hospital for Diseases of the Chest, or the urological hospitals) and St Mark's also began to diversify in this way. Gastroenterology had developed separately from colo-proctology: the two had hardly overlapped at all. Now, increasingly, gastroenterology was recognised as a distinct specialty, and gradually gastroenterologists became involved in work at St Mark's. The medical interests of the staff at the hospital began to extend proximally, into the small intestine. There had been a tendency for the special hospitals to be isolated from work elsewhere – a criticism levelled at them from their inception – but closer hospital and university ties, often through research fellows, reduced this. Even if clinicians had little time for research, as elsewhere within the hospital system, research fellows now gathered at the special hospitals. At St Mark's both the field and the practitioners within it diversified: other groups of diseases were studied, treated and differentiated, new procedures were developed, and further research suggested.

St Mark's began as the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum, in a terraced house with seven beds, in 1835. By 1985 it was housed in a heterogeneous building

A STUDY IN SPECIALISM

dating from the early 1850s, the mid 1890s, the late 1920s and the mid 1930s, with 93 beds at its disposal. It had remained small, but it had played the central role in the development of its specialty. From being outsiders unable for social reasons to break into the elite groups controlling London's upper class practice, its surgeons (and physicians) now played a leading role in metropolitan medicine. In the early 1980s, for example, one of the St Mark's surgeons served as President of the Royal College of Surgeons. St Mark's was recognised as a centre of excellence, but its place within a nationally coordinated system was uncertain. In the past it had always had to fight for its continued existence: there was no indication that this would change in future years.

REFERENCES AND NOTES

The material for this book is drawn both from archival information and printed sources. Certain abbreviations have been used in the references. Most of the material relating to St Mark's is held in the City and Hackney Health Authority Archives, at St Bartholomew's Hospital. The minutes from various committees have been abbreviated as follows:

CM	committee of management
FC	finance committee
HC	house committee
MC	medical committee
AGM	annual general meeting (minutes included in committee of management minutes)

Other documents held in the archives at St Bartholomew's are designated SBHA.

Certain papers remain at St Mark's. These are designated as follows:

SMH	held in the relevant department at St Mark's Hospital
PDP	pathology department papers, St Mark's Hospital
CSP	Chelsea Scheme papers, currently held in the pathology department

Other abbreviations for organisations or archives are as follows:

BECC	British Empire Cancer Campaign, later known as:
CRC	Cancer Research Campaign
GLRO	Greater London Record Office
MRC	Medical Research Council

Standard reference sources are abbreviated as follows:

DNB *Dictionary of National Biography*

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The first reference to any printed source within a chapter is given in full; subsequent citations within the same chapter are abbreviated to author's surname, abbreviated book title, date and page number. For full citation, therefore, consult first reference to the source within the chapter. Names are given as in the original source, even when this does not correspond to later accepted spelling. See for example J. P. Lockhart-Mummery in chapters X, XI and XII.

CHAPTER I

- 1 Information from *London Medical Directory* and *Medical Directory* of various years.

CHAPTER II

- 1 *Bath Directory* (1787), *Holden's Triennial Directory* (1805, 1806, 1807), *Bath Directory* (1809, 1812, 1819).
- 2 Bath Abbey Registers: Christenings (1569-1800) Edward and William Salmon, 17 March 1788; Harriet Salmon, 30 August 1790; Caroline and Louisa Salmon, 26 November 1792; Henry and Frederick Salmon, 16 May 1798; Bath Abbey Registers: Christenings (1801-1840), Louisa Salmon, 23 June 1802; Denne Salmon, 29 September 1807; Bathampton: Burials (1599-1840), Henry Salmon, 14 December 1827; Bathampton: Burials (1841-1980), Denne Salmon, 7 April 1853. Bath City Record Office.
- 3 *Bath Directory* (1812 and 1819).
- 4 Frederick Salmon: Freemen of the City of Bath, document No 214, Bath City Record Office.
- 5 Joseph Hume Spry: Freemen of the City of Bath, document No 124; James Spry: Freemen of the City of Bath, document No 164, Bath City Record Office. Tom Pocock to Area Librarian, Bath, 25 March 1979 (Avon County Library, Letter No 1169); V J Kite, Area Librarian to Tom Pocock, 10 April 1979; Correspondence with Roger Rolls, Bath Medical History Group; *Bath Directory* (1783-1819); 'Bath City Common Council Minutes' vol 4 (March 1783-December 1834) 1 June 1808; *Bath Directory* (1829).
In 1836 J H Spry became medical director of Basilbrook House, a private lunatic asylum near Bath (information from Roger Rolls).
- 6 Frederick Salmon, *A Practical Essay on Stricture of the Rectum* (London: pr James Bullock, 1828), dedication and pp v-vi. The Casualty Hospital was founded in 1788 to receive casualties from a nearby building site. By the early nineteenth century it also accepted patients requiring minor surgery, for example the treatment of boils and abscesses. It served mostly as an outpatient facility. It was amalgamated in 1824 with Bath City Infirmary and Dispensary to become the Bath (later Royal) United Hospitals.
- 7 Frederick Salmon, 'Clinical lecture', *The Lancet*, pt 2 (1831-32): 103.
- 8 William White, *Observations on the Contracted Intestinum Rectum, and the Mode of Treatment* (Bath: pr Wood and Cunningham, 1812); William White, *Observations on Strictures and Other Affections Occasioning a Contraction in the Lower Part of the Intestinal Canal* 2nd ed (Bath: pr H Gye, 1815); William White, *Observations on Strictures of the Rectum* 3rd ed (Bath: pr H Gye, 1820); William White, *Further Observations on Strictures of the Rectum* (Bath: pr H Gye, 1822).
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- 22 'General Dispensary Aldersgate Street', *The Times* 28 October 1833, p 3.
- 23 *Kelly's Post Office London Directory*; the *List of Members of the Royal College of Surgeons* (1822, 1825, 1828, 1833, 1855) does not list Salmon for 1822, although it does list J Hume Spry for Charterhouse Square. In 1825 it lists Salmon for Bucklersbury with no entry for Spry. In 1828 it lists Salmon for Broad Street and Spry for Charterhouse Square. In 1855 Salmon is still in Broad Street, but the last entry for Spry in Charterhouse Square is 1833. *Pigot's London Directory* of 1823-24 has no listings for Spry or Salmon. In 1826-27 Salmon is listed in Bucklersbury and Spry for Charterhouse Square. James Hume Spry, who obtained his mastership in 1828 is then listed for Charterhouse Square in 1828-29 and 1836.
- 24 Salmon, *Stricture of the Rectum* (1828); Frederick Salmon, *Practical Observations on Prolapsus of the Rectum* (London: Whittaker, Treacher and Arnot, 1831); Frederick Salmon, 'Extraordinary instance of stricture at the sigmoid flexure of the colon in a female with a communicat between the intestines and the bladder, the faeces etc passing by the urethra', *The Lancet* pt 1 (1831-32): 881-884; 'Clinical lecture on a case of stricture at the sigmoid flexure of the colon', *The Lancet* pt 2 (1831-32): 102-105; see *The Lancet* (1831-34), and *London Medical and Surgical Journal* (1833-34), for further communications by Salmon.
- 25 Frederick Salmon, *Oration of the Necessity for an Entire Change in the Constitution and Government of the Royal College of Surgeons, Delivered before the Medical Society of London, March 8 1833* (London: Whittaker, Treacher and Arnot, 1833).
- 26 Ibid, p 3.
- 27 Ibid, pp 3, 12.
- 28 Ibid, p 11.
- 29 Ibid, p 24.
- 30 Ibid, pp 25-26.
- 31 Dr Clutterbuck, 'Letter to the Editor', *The Times* 16 September 1833, p 4.
- 32 'Aldersgate Street Dispensary', *The Times* 12 September 1833, p 3.
- 33 Ibid.
- 34 Ibid.
- 35 Ibid.
- 36 'Meeting of medical gentlemen resident in Sheffield, from the *Sheffield Mercury*, September 21', *The Lancet* pt 1 (1833-34): 29.
- 37 'General Dispensary Aldersgate Street', *The Lancet* pt 1 (1833-34): 109.
- 38 'The Westminster Medical Society and the Aldersgate Street Dispensary', *The Lancet* pt 1 (1833-34): 214-219.
- 39 George Birkbeck, 'Letter to the Editor', *The Lancet* pt 1 (1833-34): 249-250; John Epps, 'Letter to the Editor', *The Lancet* pt 1 (1833-34): 250-251; Veritas, 'Letter to the Editor' *The Lancet*, pt 1 (1833-34): 339-340.

CHAPTER III

- 1 Correspondence with John Masterman, Dorset, for information on his great grandfather, John Masterman of St Nicholas Lane. List of founding members; List of members of committee of management; City of London Club, 19 Old Broad Street, London.
- 2 William Taylor Copeland's father, William Copeland, had joined Josiah Spode in partnership in the porcelain works when the Spodes had sought a London outlet for their work. Like many a son of self-made entrepreneurs of the time, he sought to rise up the social ladder, which he could most easily do amongst the merchants and stockbrokers who ran the City of London's institutions. He was a member of the Goldsmiths Company, and in

REFERENCES AND NOTES TO PAGES 17–25

- 1828–29 he served as Sheriff of London and Middlesex and during his shrievalty in 1829 was elected as an alderman for Bishopsgate Ward. *DNB* sv William Taylor Copeland; Alfred B Beaven, *The Aldermen of the City of London*, 2 vols (London: Eden Fisher and Co Ltd, 1908), vol 1, pp 43, 152, 311, 321, 325, 344; vol 2, pp 143, 149, 204.
- 3 Mask, 'William Taylor Copeland – better known as Turncoat Copeland' in 'Sketches of Aldermen', Guildhall Library, MS 591.6.
- 4 *Ibid.*
- 5 'William Taylor Copeland', *The Hornet*, 22 April 1868, p 96.
- 6 *Governors of the Fistula Infirmary, Charterhouse Square, September 11, 1849* (London: Thompson and Davidson, 1849), p 10.
- 7 *Ibid.*
- 8 *Ibid.*
- 9 'William Taylor Copeland', *The Hornet*, 22 April 1868, p 96. Correspondence with John Masterman, Wimborne, Dorset.
- 10 'William Taylor Copeland', *The Hornet*, 22 April 1868, p 96; *DNB* sv John Masterman and John Pirie. Further information on Masterman from correspondence with Janson Masterman.
- 11 *DNB* sv Henry Lascelles, second Earl of Harewood.
- 12 Boase, sv Hon Earl Digby.
- 13 *DNB* sv Thomas Denman.
- 14 *DNB* sv Sir Joseph Littledale. He was also a cousin of Benjamin Brodie.
- 15 His bank was a forbear of the London and Westminster Bank and later the National Westminster Bank.
- 16 Correspondence with Mr Lloyd, Historical Museum, C Hoare and Co, Bankers, 37 Fleet Street, London.
- 17 Boase sv David Barclay.
- 18 *List of Subscribers to the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum* (London: pr WH Cox, 1837).
- 19 See Salmon, *A Practical Essay on Stricture of the Rectum* (1828), p 50, and Salmon, *Practical Observations of Prolapsus of the Rectum* (1831), plates, for information on surgical instrument makers.
- 20 *List of Subscribers* (1837).
- 21 *Ibid.*
- 22 Percy Howell died 18 June 1893. William Mayer became a Bombay civil servant and left an illegitimate son, William Sizmur, by Fanny Sizmur or Sinclair. Frederick Breese Salmon seems to have predeceased his parents. Clare Breese may have been the daughter of James Breese, clock manufacturer, 5 North Place, Gray's Inn Road, London. By 1849 the family had moved to 18 Lower Berkeley Street, Manchester Square. Emma Breese was a beneficiary in Salmon's will.
- 23 Howell was clearly well-to-do, having a house in West Wickham as well as in London. In the 1830s he lived at 9 Charles Street, just off Berkeley Square, and in the 1840s he moved to 7 Rutland Gate, Hyde Park.
- 24 Information from Nellie Kerling, former archivist, St Bartholomew's Hospital.
- 25 *Kelly's Post Office London Directory*.
- 26 *List of Subscribers* (1837), p 20.
- 27 *Ibid.*
- 28 *Ibid.*, p 21.
- 29 *Ibid.*, p 21.
- 30 *Ibid.*, p 8.
- 31 *Ibid.*
- 32 *Ibid.*, pp 13–16.
- 33 *Ibid.*, p 9.
- 34 *Ibid.*, p 12.
- 35 *Ibid.*, pp 16–17.
- 36 *Ibid.*, p 14; *The Times*, 12 September 1833, p 3.
- 37 *List of Subscribers* (1837).
- 38 *Ibid.*, p 14.

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- 39 Ibid, p 15.
- 40 Ibid.
- 41 Ibid.
- 42 Ibid, pp 17-19.
- 43 Ibid, p 3.
- 44 Ibid.
- 45 Ibid.
- 46 Ibid.
- 47 Ibid, pp 3-4.
- 48 Ibid, p 4.
- 49 Ibid, p 4.
- 50 Ibid.
- 51 Ibid, p 5.

CHAPTER IV

- 1 *List of Subscribers to the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum* (London: pr W H Cox, 1838), p 3.
- 2 Correspondence with Beatrice Sizmur Mahoney, widow of Salmon's great grandson.
- 3 *List of Subscribers* (1838), p 4.
- 4 Ibid, p 3.
- 5 Ibid.
- 6 *List of Subscribers* (1838).
- 7 Ibid.
- 8 Ibid.
- 9 *List of Subscribers to the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum* (London: pr W H Cox, 1841), p 7.
- 10 Ibid. Among doctors listed for 1841, there were only four surgeons, practising respectively in Poplar, New Broad Street, Covent Garden and Euston Place.
- 11 *List of Subscribers to the Fistula Infirmary, Charterhouse Square* (London: pr W H Cox, 1844), p 7.
- 12 *List of Subscribers* (1841); *List of Subscribers* (1844).
- 13 Ibid.
- 14 Madeline House and Graham Storey, eds, *The Letters of Charles Dickens*, Vol II, 1840-41 (Oxford: Clarendon Press, 1969), p 401.
- 15 Ibid.
- 16 Ibid, pp 402, 405.
- 17 Ibid, p 419.
- 18 Ibid, p 416.
- 19 Ibid, p 408.
- 20 W H Bowen, *Charles Dickens and His Family* (Cambridge: pr W Heffer and Sons, 1956), p 138.
- 21 David Waldron Smithers, *Dickens' Doctors* (Oxford: Pergamon Press, 1979), p 3.
- 22 *List of Subscribers* (1841), p 8.
- 23 Ibid.
- 24 Interview with David Roy Balfour Park, 3 December 1982.
- 25 *List of Subscribers* (1844).
- 26 Ibid.
- 27 *List of Subscribers* (1841), p 8.
- 28 A few years later, Benjamin Bond Cabbell made a similar offer to St Thomas's where he was also a governor, when the hospital was thinking of moving to a healthier site in the country; St Thomas's eventually refused the offer.
- 29 *Report of Proceedings at an Extraordinary Meeting of Governors of the Fistula Infirmary, Charterhouse Square, September 11, 1849* (London: pr Thompson and Davidson, 1849), p 4.
- 30 Ibid, p 5.
- 31 Ibid, p 6.

REFERENCES AND NOTES TO PAGES 36-46

- 32 Ibid.
- 33 Ibid, p 7.
- 34 Ibid, p 8.
- 35 Ibid, p 9.
- 36 Ibid.
- 37 Ibid, p 10.
- 38 Ibid.
- 39 *Fourteenth Annual Report of the Fistula Infirmary, Charterhouse Square* (London: pr WH Cox, 1850), pp 2-3.
- 40 Ibid, p 3.
- 41 Ibid, pp 4-5.
- 42 Ibid, p 5.
- 43 'Minutes of Dyers' Company' (1849-1854); 6 February 1850, p 29, The Worshipful Company of Dyers, London.
- 44 Ibid, 6 March 1850, p 37.
- 45 Ibid, pp 40-41.
- 46 Ibid, 5 June 1850, p 69.
- 47 Ibid, 3 July 1850, p 76.
- 48 Ibid, pp 81-83; 4 September 1850, pp 89-92; 2 October 1850, p 108; 6 November 1850, p 116.
- 49 The Worshipful Company of Dyers, *Estate Book and List of Title Deeds*, 1852, pp 113-114. Also 'Minutes', 4 February 1852, p 165 and 7 April 1852, p 175.
- 50 'St Mark's Hospital', *Illustrated London News*, 14 August 1852, p 118.
- 51 Ibid. The plate recorded that F Salmon founded the Infirmary; that Wm Hunter, Alderman, Lord Mayor, laid the stone; and that John Wallen was the architect.
- 52 *Twenty-third Annual Report of Saint Mark's Hospital* (London: pr WH Cox, 1859), p 7.
- 53 *Eighteenth Annual Report of Saint Mark's Hospital* (London: pr WH Cox, 1854), p 6.
- 54 Ibid, p 5.
- 55 Ibid.
- 56 Ibid, p 15.
- 57 Ibid, p 13.
- 58 Ibid, p 6.
- 59 Ibid.
- 60 Ibid, p 7.
- 61 Ibid.
- 62 *Twenty-first Annual Report of Saint Mark's Hospital* (London: pr WH Cox, 1857), p 6.
- 63 Ibid.
- 64 'Practice in London Hospitals', *Medical Times and Gazette*, 14 (1857): 213-214, 261-262, 285, 386-387.
- 65 *Twenty-first Annual Report* (1857).
- 66 CM, 6 October 1857; CM, 12 October 1858.
- 67 *Twenty-third Annual Report of Saint Mark's Hospital* (London: pr WH Cox, 1859), p 6.
- 68 CM, 3 November 1857.
- 69 *Twenty-first Annual Report* (1857), p 6.
- 70 Ibid.
- 71 Ibid.
- 72 Ibid, p 7.
- 73 Ibid.
- 74 Ibid.
- 75 The artist initially chosen was Mr Ward, RA, but the portrait seems to have been carried out by Francis Grant RA. An earlier painting of Salmon in 1837 was carried out by George Brown.
- 76 CM, 12 March 1857. In contrast, Salmon could simply dismiss the house surgeon, and did so in 1857 for negligence. 'Rules and regulations for the government of the hospital, 1857'
- 77 *Plarr's Lives* sv Peter Yeames Gowlland; 'Peter Yeames Gowlland: Obituary', *BMJ* pt 2, (1896): 484.
- 78 *Plarr's Lives* sv James Robert Lane and Samuel Armstrong Lane; 'James R Lane: Obituary',

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- BMJ* pt 1 (1891): 1312.
- 79 CM, 18 March 1857.
- 80 CM, 14 May 1857; CM, 14 July 1857; CM, 7 January 1858.
- 81 *Twenty-second Annual Report of St Mark's Hospital* (London: pr WH Cox, 1858), p 6.
- 82 *Twenty-second Annual Report* (1858), p 6.

CHAPTER V

- 1 CM, 7 April 1859.
- 2 *Twenty-fourth Annual Report of Saint Mark's Hospital* (London: pr William Henry Cox, 1860), p 8.
- 3 Ibid.
- 4 *Twenty-fifth Annual Report of Saint Mark's Hospital* (London: pr William Henry Cox, 1861), p 7.
- 5 CM, 10 April 1862.
- 6 *Twenty-eighth Annual Report of Saint Mark's Hospital* (London: pr William Henry Cox, 1864), p 6.
- 7 CM, 10 March 1864.
- 8 CM, 10 March 1864, and sub-committee 26 March 1864.
- 9 Sub-committee, 26 March 1864; Extraordinary meeting CM, 7 April 1864.
- 10 *Plarr's Lives* sv William Allingham; 'Obituary: William Allingham', *The Lancet* pt 1 (1908): 'William Allingham', *BMJ* pt 1 (1908): 420-421.
- 11 'Obituary: Sir Alfred Cooper', *The Lancet* pt 1 (1908): 901.
- 12 Ibid.
- 13 *Plarr's Lives* sv Alfred Cooper; 'Obituary: Sir Alfred Cooper', *The Lancet* pt 1 (1908): 901-902; 'Sir Alfred Cooper', *BMJ* pt 1 (1908): 660-661.
- 14 CM, 12 April 1864; CM, 7 July 1864; CM, 27 October 1864.
- 15 CM, 12 January 1865; CM, 13 April 1865; CM, 12 January 1865.
- 16 CM, 12 January 1865.
- 17 Ibid.
- 18 CM, 13 July 1865.
- 19 CM, 19 September 1865; CM, 10 October 1865; *Thirtieth Annual Report of Saint Mark's Hospital* (London: pr WH Cox, 1866), p 8.
- 20 Sometimes as at St Thomas's the two would collude in their corrupt practices.
- 21 *Thirtieth Annual Report of Saint Mark's Hospital* (London: pr WH Cox, 1866), p 6.
- 22 CM, 23 January 1868.
- 23 'Frederick Salmon', *The Lancet*, pt 1 (1868): 68.
- 24 Ibid.
- 25 'Frederick Salmon', *BMJ*, pt 1 (1868): 41-42.
- 26 Ibid, p 42.
- 27 Last Will and Testament of Frederick Salmon, Somerset House. Proved 4 April 1868; Report of FC, 10 October 1866; FC, 15 January 1867; CM, 31 January 1867.
- 28 'Hospital Distress', *BMJ* pt 1 (1860): 458.
- 29 Ibid.
- 30 Ibid.
- 31 Ibid.
- 32 Ibid.
- 33 Ibid, p 459.
- 34 Ibid.
- 35 'The Week', *BMJ* pt 1 (1860): 476.
- 36 'Annual Meeting of the British Medical Association', *BMJ* pt 2 (1860): 627.
- 37 Ibid, p 628.
- 38 Ibid, p 629.
- 39 'A Special Hospital', *BMJ* pt 2 (1864): 582.
- 40 Ibid.
- 41 'Mr Walter Coulson and the Hospital for Stone', *BMJ* pt 2 (1866): 703.

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- 42 Ibid, p 704.
- 43 'Note', *BMJ* pt 1 (1868): 561.
- 44 Ibid.
- 45 CM, Special Meeting, 28 May 1868.
- 46 *Medical Directories* for 1860s.
- 47 *Medical Directory* (1868, 1870, 1872, 1877, 1878). Pirrie had served in the Central India Campaign. Strange had appointments at the London City Missions and Royal South London Dispensary.
- 48 CM, 9 July 1868.
- 49 CM, 7 March 1868; CM, 22 June 1868; CM, 29 October 1868.
- 50 CM, 9 July 1868; CM, 29 October 1868.
- 51 CM, 15 April 1869; CM, 15 July 1869; CM, 14 October 1869.
- 52 CM, 15 April 1869. Report of FC, 10 April 1869.
- 53 CM, 14 October 1869; CM, 13 January 1870; Special CM, 28 May 1870.
- 54 CM, 10 April 1873.
- 55 *Plarr's Lives* sv DH Goodsall; 'David Henry Goodsall', *BMJ* pt 2 (1906): 812-813; 'Obituary: David Henry Goodsall', *The Lancet* pt 2 (1906): 904.
- 56 'Suggestio falsi', *BMJ* pt 1 (1873): 19.
- 57 'St Mark's Hospital', *BMJ* pt 2 (1873): 765.
- 58 FB Smith, *The People's Health, 1830-1910* (London: Croom Helm, 1979), p 282.
- 59 CM, 11 April 1872.
- 60 *Fortieth Annual Report of Saint Mark's Hospital* (London: pr Stevens and Richardson, 1876), p 10.
- 61 CM, 9 February 1871.
- 62 CM, 11 July 1872.
- 63 Ibid.
- 64 CM, 23 July 1874; CM, 14 January 1875.

CHAPTER VI

- 1 William Allingham, *Fistula, Haemorrhoids, Painful Ulcer, Stricture, Prolapsus and other Diseases of the Rectum* (London: J and A Churchill, 1871), p 97.
- 2 CM, 12 October 1871.
- 3 CM, 11 July 1872; CM, 10 October 1872.
- 4 *Thirty-seventh Annual Report of Saint Mark's Hospital* (London: pr Stevens and Richardson, 1874), p 7.
- 5 CM, 22 July 1873.
- 6 CM, 9 October 1873.
- 7 Special meeting of CM, 22 January 1874.
- 8 *Thirty-ninth Annual Report of Saint Mark's Hospital* (London: pr Stevens and Richardson, 1875), p 7.
- 9 CM, 8 April 1875.
- 10 CM, 20 July 1877.
- 11 CM, 17 January 1877.
- 12 *Forty-First Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Sons), 1877.
- 13 Ibid, p 8.
- 14 CM, 12 April 1877.
- 15 CM, special meeting, 11 December 1877. Information on Owden from Guildhall Library.
- 16 *Forty-Second Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1878), p 7.
- 17 CM, 11 July 1878.
- 18 HC, 7 August 1883.
- 19 *Forty-Third Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1879), p 8.
- 20 CM, 14 October 1880.
- 21 Special meeting of CM, 15 March 1881; AGM, 10 February 1881.

REFERENCES AND NOTES TO PAGES 66-73

- 22 *Forty-Sixth Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1882), pp 13 and 9; CM, 2 March 1886.
- 23 Special meeting of CM, 28 March 1882; Special meeting of CM, 4 April 1882; CM, 13 April 1882.
- 24 HC, 5 June 1883.
- 25 *Forty-Eight Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1884), p 10.
- 26 *Forty-Second Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1878), pp 8, 12-13.
- 27 *Fifty-First Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1887), p 50.
- 28 CM, 10 January 1878.
- 29 CM, 12 February 1880.
- 30 'Editorial', *BMJ* pt 1 (1889): 1187.
- 31 CM, 18 October 1892.
- 32 Ibid.
- 33 CM, 18 July 1895.
- 34 *Forty-Ninth Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1885), p 9.
- 35 *Fifty-Fourth Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1890), p 50.
- 36 Ibid, pp 9, 25 and 39.
- 37 *Fifty-Seventh Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1893), pp 67-70.
- 38 CM, 15 December 1881 and CM, 12 June 1882. CM, 16 October 1883: William Sizmur was a midshipman.
- 39 CM, 19 October 1893; CM, 17 January 1895.
- 40 Special meeting of CM, 29 July 1879.
- 41 *Forty-Fifth Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1881), p 8.
- 42 Special meeting of CM, 3 February 1876. Very illegible.
- 43 *Fortieth Annual Report of Saint Mark's Hospital* (London: pr Stevens and Richardson, 1876), p 7.
- 44 *Medical Directory* (1885).
- 45 Ibid, p 1449.
- 46 *Fifty-Fifth Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1892), p 6. Italics theirs.
- 47 Ibid.
- 48 Ibid.
- 49 *Fifty-Seventh Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1893), p 7. Italics theirs.
- 50 *Thirty-Fourth Annual Report of Saint Mark's Hospital* (London: pr Stevens and Richardson, 1870), p 8.
- 51 Allingham, *Fistula, Haemorrhoids* (1871), and subsequent editions of *Diseases of the Rectum*; S G Gant, *Diagnosis and Treatment of Diseases of the Rectum and Anus* (New York: F A Davis and Co, 1896); Leon Banov, 'British influences of the nineteenth century on American proctology', *Proc Roy Soc Med* 67 (1974): 60-62.
- 52 Banov, 'British influences', p 62.
- 53 Leon Banov, 'St Paul's Infirmary for haemorrhoids, fistula, and other diseases of the rectum', *Southern Medical Journal* 71 (1978): 1559-1561.
- 54 *Munk's Roll* sv Francis de Havilland Hall.
- 55 *Plarr's Lives* sv Alfred Cooper.
- 56 'Sir Alfred Cooper', *BMJ* pt 1 (1908): 661.
- 57 Ibid.
- 58 'Sir Alfred Cooper', *BMJ* pt 1 (1908): 1299.
- 59 Personal communication with Lady Diana Cooper, widow of Alfred Duff Cooper MP, Cooper's son. Philip Ziegler, *Diana Cooper* (London: Hamish Hamilton, 1981).

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- 60 'Sir Alfred Cooper', *BMJ* pt 1 (1908): 661.
- 61 Special CM, 26 February 1891.
- 62 *Plarr's Lives* sv Frederick Swinford Edwards.
- 63 CM, 18 October 1888.
- 64 Medical staff meeting, 6 November 1888; Special meeting, CM, 6 November 1888.
- 65 *Plarr's Lives* sv Herbert William Allingham.
- 66 CM, 16 April 1889.
- 67 'St Mark's Hospital' *BMJ* pt 2 (1888): 635.
- 68 *Plarr's Lives* sv Herbert William Allingham; CM, 25 April 1895.
- 69 Meeting of medical staff, 10 December 1895; Special CM, 10 December 1895.
- 70 CM, 19 January 1886.
- 71 CM, 30 April 1891; HC, 5 May 1891; HC, 4 October 1892; CM, 18 October 1892; Special CM, 6 December 1892.
- 72 HC, 5 October 1893. Medical staff meeting, 6 February 1894.
- 73 Letter from Emmanuel Klein, Special CM, 27 February 1894.
- 74 Special CM, 15 March 1894; Special CM, 13 September 1894; HC 4 October 1894; Special CM, 29 November 1894.
- 75 *Fifty-Ninth Annual Report of Saint Mark's Hospital*. (London: pr James Truscott and Son, 1895), p 7.
- 76 Building Committee, 11 June 1895; *Sixtieth Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1896), p 7; *Sixty-First Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1897), p 7.
- 77 *Sixty-Second Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1898), p 8.
- 78 Third Report from the Select Committee of the House of Lords on Metropolitan Hospitals, *British Parliamentary Papers* 13 (1892), pp lix–lxvii.

CHAPTER VII

- 1 *List of Subscribers to the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum* (London: pr WH Cox, 1837), p 1.
- 2 See Gareth Stedman Jones, *Outcast London* (London: Penguin Books, 1976), including pp 152, 175, 216, 221, 231 and Appendices.
- 3 FB Smith, *The People's Health, 1830–1910* (London: Croom Helm, 1979), pp 204–214, 197.
- 4 *List of Subscribers to the Fistula Infirmary* (London: pr WH Cox, 1845), p 12.
- 5 *Fourteenth Annual Report of the Fistula Infirmary* (London: pr Thompson and Davidson, 1850), p 17.
- 6 *Eighteenth Annual Report of Saint Mark's Hospital* (London: pr WH Cox, 1854), p 12.
- 7 CM, 12 April 1864; CM, 7 July 1864.
- 8 *Twenty-eighth Annual Report of Saint Mark's Hospital* (London: pr WH Cox, 1864), p 16.
- 9 CM, 9 July 1868.
- 10 HC, 1 March 1892.
- 11 *List of Subscribers* (1837); *List of Subscribers to the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum* (London: pr WH Cox, 1840); *Sixty-ninth Annual Report of Saint Mark's Hospital* (London: pr Henry Good and Son, 1905), p 18.
- 12 *List of Subscribers to the Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum* (London: pr WH Cox, 1838), p 3.
- 13 CM, 26 October 1876.
- 14 CM, 9 October 1879.
- 15 HC, 1 March 1883. It was a trend followed at other hospitals as well.
- 16 CM, 26 April 1892.
- 17 *List of Subscribers* (1837), pp 17–20.
- 18 CM, 13 April 1871.
- 19 CM, 14 October 1880.
- 20 HC, 15 February 1898.

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- 21 *Twenty-third Annual Report of Saint Mark's Hospital* (London: pr W H Cox, 1859), pp 8, 12 and 13.
- 22 CM, 14 October 1875.
- 23 CM, 12 April 1877; CM, 9 October 1879; Special meeting, CM, 21 October 1879.
- 24 CM, 8 January 1880.
- 25 Ibid.
- 26 *Forty-fourth Annual Report of Saint Mark's Hospital* (London: pr Truscott and Son, 1880), p 10.
- 27 CM, 12 January 1882.
- 28 CM, 17 July 1883; HC, 7 August 1883; and HC, 2 October 1883.
- 29 CM, 16 July 1896; HC, 21 December 1897.
- 30 'St Mark's and other hospitals,' *Medical Times and Gazette* 14 (1857): 214.
- 31 Ibid.
- 32 Ibid.
- 33 *Twenty-eighth Annual Report of Saint Mark's Hospital* (London: pr W H Cox, 1868), p 6.
- 34 CM, 22 October 1891.
- 35 CM, 12 January 1882.
- 36 *Forty-third Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1879), p 6.
- 37 *Forty-fourth Annual Report* (1880), p 9.
- 38 *Forty-fifth Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1881), p 10.
- 39 *Forty-seventh Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1883), p 9.
- 40 *Fiftieth Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1886), p 10.
- 41 CM, 10 October 1863.
- 42 CM, 19 April 1888; HC, 21 September 1897.
- 43 CM, 13 October 1881.
- 44 CM, 23 April 1868; CM, 20 July 1886; CM, 24 January 1888; HC, 19 September 1899.
- 45 HC, 5 April 1883.
- 46 FC, 15 January 1867.
- 47 *List of Subscribers* (1837); *List of Subscribers* (1838).
- 48 *Thirty-fourth Annual Report of Saint Mark's Hospital* (London: pr Stevens and Richardson, 1870); *Sixty-ninth Annual Report* (1904).
- 49 E W Morris, *A History of the London Hospital* (London: pr Edward Arnold, 1910), pp 149-150; Lindsay Granshaw, 'St Thomas's Hospital, 1850-1900,' PhD thesis, Bryn Mawr College: 1981, pp 105-106; W R Merrington, *University College Hospital and its Medical School: A History* (London: Heinemann, 1976), p 52.
- 50 CM, 29 October 1868.
- 51 Ibid.
- 52 Ibid.
- 53 *Thirty-third Annual Report* (1869), p 9.
- 54 Ibid, p 13.
- 55 Ibid, p 14.
- 56 Ibid.
- 57 Ibid.
- 58 Ibid.
- 59 CM, 11 April 1872; *Fifty-first Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1887), p 9.
- 60 *Thirty-seventh Annual Report of Saint Mark's Hospital* (London: pr Stevens and Richardson, 1874), p 17.
- 61 Ibid, p 16.
- 62 *Fortieth Annual Report of Saint Mark's Hospital* (London: pr Stevens and Richardson, 1876), p 16; *Forty-second Annual Report of Saint Mark's Hospital* (London: pr James Truscott and Son, 1878), p 17; *Forty-third Annual Report* (1879), p 17; *Forty-seventh Annual Report* (1883), p 17; *Forty-eighth Annual Report of Saint Mark's Hospital* (London:

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- 11 *Plarr's Lives* sv William Ernest Miles.
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- 27 CM, 16 October 1900.
- 28 As recorded in HC, 18 February 1902.
- 29 Special committee on payments by patients, 30 October 1903.
- 30 Special CM, 17 November 1903.
- 31 Interview with Mrs Furnivall by B C Morson, 15 March 1962.
- 32 Special CM, 27 November 1904.
- 33 AGM, 9 February 1905.
- 34 AGM, 8 February 1906.
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- 36 Special CM, 15 December 1903; MC, 19 January 1904; CM, 19 January 1904.
- 37 *Plarr's Lives* sv John Percy Lockhart-Mummery; *Plarr's Lives* sv John Howard Mummery; 'Obituary: John Percy Lockhart-Mummery', *The Lancet* pt 1 (1957): 938-9; 'Obituary: J P Lockhart-Mummery', *BMJ* pt 1 (1957): 1066-7; P Lockhart Mummery, *The After Treatment of Operations* (London: Baillière, Tindall and Cox, 1903).

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- 42 Special CM and HC, 18 February 1908; HC, 17 March 1908.
- 43 Interview with Mrs Furnivall by B C Morson, 15 March 1962. Furnivall's health broke after the war, and he retired in 1919 to Devon. He lived until 1938, when he died after suffering greatly from the ill-effects of radium treatment for cancer of the throat. He kept a diary of the after-effects of radium treatment, and maintained an extraordinary correspondence on the subject in the *British Medical Journal* until his death, little more than a year after first being treated. He concluded that nothing justified the pain of the treatment.
- 44 CM, 21 July 1908.
- 45 Sir Charles Gordon-Watson, 'Forty Years in Surgical Harness: jottings from a surgeon's private case book', Typescript, 3 vols, St Bartholomew's Hospital Medical College Library, vol 1, p 1.
- 46 Ibid, p 15. Emphasis his.
- 47 Ibid.
- 48 Ibid.
- 49 'Obituary of Aslett Baldwin', *BMJ* pt 1 (1945): 537.
- 50 Interview with Mrs Swinford Edwards by B C Morson, 8 February 1962.
- 51 Interview with A C Morson and Lionel Norbury, by B C Morson, 27 November 1962.
- 52 HC, 19 December 1905; MC, 13 February 1906; HC, 20 November 1906.
- 53 HC, 20 November 1906.
- 54 CM, 20 October 1908.
- 55 CM, 20 October 1908.
- 56 Special CM, 17 November 1908.
- 57 'King's Fund Papers', GLRO/A/KE/301/1.
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- 68 John R Parry to A W Sowden, secretary of St Mark's, 9 July 1909.
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- 70 CM, 21 November 1911.
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- 73 Interview with Mrs Peggy Pollen by B C Morson, 4 July 1962.
- 74 CM, 21 May 1912.
- 75 CM, 18 June 1912; *Plarr's Lives* sv Henry Graeme Anderson; Richard Beith, 'Flying with the Glasgow-London Air Mail of 1919', *Stamp Collecting*, 24 March 1983; 'Obituary: H Graeme Anderson', *BMJ* pt 2 (1925): 41-42; Application by H Graeme Anderson for the post of junior surgeon and junior orthopaedist to King's College Hospital.
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- 86 CM, 19 October 1915.
- 87 CM, 21 December 1915; CM, 20 June 1916; CM, 19 February 1918.
- 88 CM, 18 June 1918.
- 89 CM, 16 July 1918; CM, 21 May 1918.
- 90 Gordon-Watson, 'Forty years in surgical harness' (1942), p 5.
- 91 Special CM, 8 September 1914.
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- 95 CM, 18 May 1915; CM, 16 November 1915.
- 96 AGM, 10 February 1916.
- 97 CM, 15 June 1915; CM, 18 April 1916; CM, 21 March 1916; CM, 18 July 1916; Special FC, 11 September 1917; CM, 16 October 1917; CM, 19 February 1918.
- 98 CM, 9 November 1918; CM, 17 December 1918.
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CHAPTER XI

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- 19 BECC executive committee minutes, 26 July 1923; 19 June 1924.
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- 22 CM, 21 June 1927; CM, 20 September 1927; CM, 15 November 1927; CM, 18 March 1930.
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- 28 *Visitors' Book*, Operating Theatre, St Mark's Hospital.
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- 42 CM, 15 December 1925; CM, 19 January 1926.
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- 44 Appeal Committee, 15 February 1926.
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- 69 MC, 9 February 1931; MC, 9 March 1931; MC, 15 June 1931; MC, 27 July 1931; MC, 28 September 1931; MC, 28 October 1931; MC, 2 December 1931.
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- 75 AGM, 15 March 1929.
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- 90 Appeal Committee, 25 October 1934; Appeal Committee, 13 June 1935; CM, 15 January 1935.
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- 108 CM, 21 January 1941; CM, 18 February 1941; CM, 22 April 1941; CM, 20 May 1941.
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- 110 CM, 20 January 1942; CM, 17 February 1942; CM, 26 March 1942; CM, 21 April 1942; CM, 19 May 1942; CM, 16 June 1942; CM, 21 July 1942; CM, 18 August 1942.
- 111 CM, 21 December 1943.
- 112 CM, 19 October 1943.
- 113 CM, 16 November 1943; CM, 15 February 1944; CM, 30 March 1944.
- 114 CM, 20 June 1944; CM, 15 August 1944.
- 115 CM, 19 September 1944; CM, 17 October 1944.
- 116 CM, 17 October 1944.
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CHAPTER XII

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- 45 CM, 21 October 1919.
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CHAPTER XIII

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CHAPTER XV

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CHAPTER XVI

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- 16 HC, 20 November 1906.
- 17 CM, 16 May 1911.
- 18 CM, 18 July 1916.
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- 21 CM, 18 June 1918; CM, 19 November 1918.
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- 47 AGM, 17 March 1932.
- 48 AGM, 22 March 1933.
- 49 CM, 20 April 1920; CM, 19 March 1936.
- 50 CM, 17 May 1932.
- 51 CM, 18 October 1932.
- 52 CM, 17 September 1929; CM, 21 October 1930.
- 53 CM, 21 June 1938.
- 54 CM, 20 December 1938; CM, 17 January 1939.
- 55 CM, 20 June 1939.
- 56 AGM, 23 March 1939.
- 57 AGM, 20 March 1941.
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- 60 HC, 5 June 1951.
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CHAPTER XVII

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APPENDIX I

Details of staff and patients from census data

From 1801, and every ten years thereafter, the government took a census of the British population. Reproduced here are the census returns for the hospital on the single nights in 1841, 1861 and 1881 on which the censuses were taken. The information sketches in the number of resident staff, and also the social groups from which the patients came. The censuses record the place of birth (not residence) of each person, which indicate the proportion who were original Londoners and those who came from outside. Probably most of these had moved to London, rather than coming specifically to the hospital. The census in 1841 gave approximate ages only, to the nearest five years. The later censuses give more details on place of origin, and the marital status of those recorded (U = unmarried, M = married, W = widowed).

1841 CENSUS

Fistula Infirmary, Charterhouse Square

<i>Name</i>	<i>Age</i>	<i>Occupation</i>	<i>Whether born in Middlesex</i>
<i>Staff</i>			
John Wilson	25	medical	No
Edward Wilson	20	independent	No
Peggy Marshall	55	matron	No
Anne Price	40	nurse	Yes
Happy Maytins	40	female servant	No
<i>Patients</i>			
John Raymond	30	french polisher	Yes
John Mackley	45	cabinet maker	Yes
John Cole	40	plumber	Yes
Peter Parker	25	brass founder	No
John Colbourne	25	brazier	No
Stephen Harding	30	labourer	No
William Baines	30	boot maker	No
Elizabeth Marjoram	30	governess	No
Mary Manning	25	servant	Yes
Margaret Evans	35	servant	Ireland

APPENDIX I

1861 CENSUS

St Mark's Hospital, City Road

<i>Name</i>	<i>Age</i>	<i>Occupation</i>	<i>Place of birth</i>	<i>Marital Status</i>
<i>Staff</i>				
Thomas M Butler	29	house surgeon	Guildford	U
William Barker	26	nurse	Hertfordshire	U
Richard Payne	21	porter	London	U
Elizabeth Wilson	55	matron	Yorkshire	W
Rebecca Roker	50	nurse	Kentish Town	M
Ann Brown	29	housemaid	Brentford	U
Kate Hurley	25	scrubber	Ireland	U
Sophy Hassell	29	cook	Longacre, Middlesex	U
Frances Grey	22	kitchenmaid	Yorkshire	U
<i>Patients</i>				
Richard Ball	45	hairdresser	Greenwich	M
Henry Blomfield	38	sailor	Chelmsford	M
Edward Raspasin	35	gatekeeper at ironworks	Gravesend	M
Henry Read	44	corn dealer's assistant	Bethnal Green	M
John Harrod	42	warder at gaol	Norfolk	M
James Crouch	54	porter at glove warehouse	St Mary Axe, Middlesex	M
William Bushby	30	carman	Hanton, Suffolk	W
Stephen Willard	40	millwright	Brighton	M
John Jeffries	39	pyrotechnist	Rochester, Kent	M
James Chipfield	58	hawker	Shoreditch	M
William Mealing	18	carman	Warwickshire	U
John Coles	32	lithographic printer	Manchester	M
Alfred Earl	35	blacksmith	Bristol	M
Thomas Teagle	42	plasterer	Wootton Bassett, Wiltshire	M
Ellen Day	34	housekeeper	St George's East Middlesex	U
Sarah Edmonds	57	milliner	Guildford	M
Jane Homewood	47	housekeeper	Bermondsey	U
Sarah Newman	31	servant	Bradwell, Essex	M
Sarah Eveleigh	49	servant	Exeter	M
Sophia Rice	53	chair woman	Middlesex	U
Eliza Lovelock	20	milliner	Reading	U
Emma Pope	26	servant	Suffolk	M
Esther Cowles	30	box maker	Spitalfields	U

ST MARK'S HOSPITAL, LONDON

1881 CENSUS

St Mark's Hospital, City Road

<i>Name</i>	<i>Age</i>	<i>Occupation</i>	<i>Place of birth</i>	<i>Marital status</i>
<i>Staff</i>				
Charles John Ogle	25	house surgeon, MRCS	St Pancras	U
John Christopher Upton	39	porter	Ireland	U
Mary Ann Palmer	39	matron	Ireland	W
Hannah Gamble	34	servant	Stepney	U
Rachel Edwards	29	nurse	Pembrokeshire	U
Dinah Marshall	50	nurse	Thorpe, Suffolk	W
Elizabeth Leaver	48	cook	Southwark	U
Fanny Hope	25	kitchenmaid	Woodcot, Oxfordshire	U
Ruth Hartnell	22	housemaid	Warwickshire	U
Elizabeth Stroud	24	ward maid	Aldermaston, Berkshire	U
Emma Cross	23	ward maid	Westminster	U
<i>Patients</i>				
Benjamin Abrahams	54	commercial traveller	London, Middlesex	M
John Jones	28	draper	Herefordshire	U
Joseph Redgrove	38	portmanteau maker	Ipswich	U
Philip Niblett Bird	26	woollen cloth worker	Gloucester	M
William Samuel Winchester	37	gardener	Chipstead, Surrey	M
William Henry Crick	49	pianoforte maker	New Buckingham, Norfolk	M
Jabez Chambers	39	bookseller	Huntingdonshire	U
William St Vincent Allen	36	confectioner	St Vincent, West Indies	U
James Woolgar	34	sailor	Newhaven	W
John Simel	31	sailor	Jersey	U
Edward Chater	45	general labourer	Warwick	U
John Engledow	58	boot maker	Norwich	M
Thomas Edward Wood	40	hosier	London, Middlesex	M
John Edward Galliford	35	commercial traveller	Barnstaple, Devon	U
Frederick Egbert Roberts	33	professional vocalist	Monmouth	M
William Berwick	35	hosier	Cringleford, Norfolk	M
Matthew Newbold	42	engineer	Nottingham	M

APPENDIX I

<i>Name</i>	<i>Age</i>	<i>Occupation</i>	<i>Place of birth</i>	<i>Marital Status</i>
<i>Staff</i>				
Henry Cooke	37	railway servant	Sudbury, Essex	U
Frederick Lewis	57	commission agent	Wolverhampton	M
Edwin Knott	23		Portsmouth	U
John Phillips	36	boot maker	Bermuda	M
William Churchill	36	brass finisher	London,	U
			Middlesex	
Henry Wood	31	pianoforte maker	London,	U
			Middlesex	
Susan Drymond	41	cook	Coleridge, Devon	U
Eliza Head	25	no occupation	Camden Town	M
Catherine Turner	23	no occupation	Kentish Town	M
Sarah Reid	26	school mistress	St Luke's,	U
			Middlesex	
Ellen Rose Dakin	27	no occupation	Diss, Norfolk	U
Susan Hubbard	30	no occupation	Australia	M
Fanny Montague	43	no occupation	Watford,	M
			Hertfordshire	
Susan Jane Lee	44	no occupation	London,	M
			Middlesex	
Mary Ann Mullett	48	no occupation	Worcester	M
Eliza Jeffreys	24	biscuit packer	Bermondsey	U
Elizabeth Wall	25	barmaid	Cripplegate,	U
			London	

APPENDIX II

Hospital Staff, 1835–1985

Surgeons

Frederick Salmon	1835–59
Peter Yeames Gowlland	1857–85
James Robert Lane	1857–68
William Allingham	1864–88
Sir Alfred Cooper	1864–98
David Henry Goodsall	1871–1904
Frederick Swinford Edwards	1885–1913
Herbert William Allingham	1888–95
Sir Frederick Charles Wallis	1896–1912
Percy Furnivall	1898–1908
John Percy Lockhart-Mummery	1904–35
Sir Charles Gordon-Watson	1908–31
Aslett Baldwin	1908–20
H Graeme Anderson	1912–25
Lionel E C Norbury	1912–46
William B Gabriel	1920–58
Edward T Campbell Milligan	1925–51
Sir Clifford Naunton Morgan	1932–67
Oswald V Lloyd-Davies	1935–70
Henry R Thompson	1947–74
John C Goligher	1947–54
Sir Hugh Evelyn Lockhart-Mummery	1951–78
Ian P Todd	1954–
Sir Alan G Parks	1959–82
Charles V Mann	1967–
Peter R Hawley	1970–
James P S Thomson	1974–
R John Nicholls	1978–
John M A Northover	1984–

Physicians

John James Furnivall	1844–52
John Bampfylde Daniell	1852–6
John Spurgin	1856–66
Arthur Leared	1866–80
Francis de Havilland Hall	1880–1900
Sir Richard Douglas Powell (consulting)	1901–24

F G Crookshank	1919–22
J Browning Alexander	1922–52
N Courtenay Evans	1948–69
Sir Francis Avery Jones	1949–77
John E Lennard-Jones	1965–
C W H Havard	1969–71
J Q Matthias	1971–
Christopher B Williams	1974–

Pathologists

H Q D Spitta	1908–11
H G Anderson	1911–2
Stanley Wyard	1914–20
Cuthbert E Dukes	1922–56
Basil C Morson	1956–
Jeremy R Jass	1984–

Bacteriologist

H Q D Spitta (honorary)	1911–31

Chemical pathologists

Barry Lewis	1967–70
J Landon (honorary)	1970–

Research microbiologist

M J Hill (honorary)	1977–

Radiologists

S Cochrane Shanks	1922–25
B J Leggett	1926–27
Claude Goulesborough	1927–29
Norman P Henderson	1930–61
Allan C Young	1961–73
Malcolm Chapman	1966–70
Brian M Thomas	1970–
Clive I Bartram	1974–

Anaesthetists

Joseph Mills	1891–93
Rickard W Lloyd	1893–1931
H Bellamy Gardner	1905–8
G A Jones	1908–23

APPENDIX II

G Ramsay Phillips	1913-4	<i>Urological surgeon</i>	
Howard Jones	1914-20	H N Whitfield (honorary)	1984-
H A Richards	1920-5		
J H Chaldicott	1923-31	<i>Clinical geneticist</i>	
J K Hasler	1925-50	Joan Slack (honorary)	1985-
W Alexander Low	1931-46		
Frankis T Evans	1934-65		
W Kirk Rae	1947-62	<i>Deans of postgraduate studies</i>	
F E Clynick	1950-69	Cuthbert E Dukes	1946-59
Donald V Bateman	1952-80	Basil C Morson	1959-65
Ian R Verner	1962-	Allan C Young	1965-9
R N G Atherstone	1964-82	Charles V Mann	1969-74
Leon Kaufman	1965-	Peter R Hawley	1974-8
John V I Young	1970-	James P S Thomson	1979-85
Bruce Q Varley	1983-	Clive I Bartram	1985-
Michael Jordan	1983-		
James M G Foster	1985-		
<i>Dental surgeons</i>		<i>Matrons (1835-1969), senior nursing officers (1969-1982), assistant director of nursing services (from 1982)</i>	
G G Packe	1909-16	Mrs Watson	1837-9
G G Jack	1916-48	Mrs Peggy Marshall	1839-46
John D Cambrook		Mrs Elizabeth Wilson	1846-73
(honorary)	1952-73	Miss Hastings	1873-9
B D Markwell (honorary)	1977-	Miss Brice	1879-81
<i>Anatomist</i>		Mrs Mary Ann Palmer	1881-92
Eldred W Walls (honorary)	1956-65	Miss E L Curtis	1892-4
<i>Physiologist</i>		Miss E H Owen	1894-6
E N Rowlands (honorary consulting)	1965-76	Mrs Hepper	1896-1908
<i>Neurologist</i>		Miss Appleyard	1908-12
Michael Swash (honorary)	1978-	Miss Hardwicke	1912-5
<i>Anorectal physiologist</i>		Miss Emily Hall	1915-38
Michael M Henry (honorary)	1982-	Miss Dora Willoughby	1938-46
<i>Director of research records department</i>		Miss E J Cable	1946-64
Jean K Ritchie	1974-	Miss J M Jell	1964-8
<i>Consulting research fellow (polyposis register)</i>		Miss C H Liddiard	1968-79
H J R Bussey	1975-	Miss R A Spencer	1979-81
<i>Dermatologist</i>		Mr Edward Foll	1981-3
Suzanne L Alexander (honorary)	1975-	Miss Trudy Wood	1983-
		<i>Hospital secretaries (1853-1974), hospital administrators (from 1974)</i>	
		James Fuller Whiskin	1853-65
		Mr Rigg	1867-71
		Mr Pike	1871-9
		Arthur Leared, jr	1879-96
		Edgar Penman	1896-1902
		A W Sowden	1902-22
		Raymond Bull	1922-58
		L B Coppin	1958-9

ST MARK'S HOSPITAL, LONDON

E Newbery	1959-61	Elizabeth Storey	1974-6
M W Lindsay-Smith	1961-5	Pauline Walker	1976-8
B J Miller	1965-7	Gillian Greenhalgh	1978-82
J C Stevens	1967-72	Heather Kent	1983-4
Keith Carter	1972-4	Lennox Premdas	1984-

House surgeons and resident surgical officers

<i>Establishment: one house surgeon</i>		<i>Later position</i>
1837	Thomas Hayes	General practitioner, Pentonville, London
1840	George Frederick Giles	General practitioner, Hackney, London
1841	John Wilson	
1844	Henry Roberts	
1846-53	Henry R Burton	
1854	James Rouse	Surgeon, Royal Ophthalmic Hospital, London
1855-8	W Noble	
1861-2	Thomas Mapleson Butler	Honorary medical officer, Royal Surrey County Hospital, Guildford, Surrey
1862-4	Edward Hunt Carter	Surgeon, Chelmsford Prison, surgeon, Chelmsford Infirmary and Dispensary, Medical Officer of Health, Chelmsford, Essex
1864-6	John New Moore	Surgeon, Moreton Cottage Hospital, Moreton-in-the-Marsh, Gloucestershire
1869	Sydenham J Knott	Surgeon accoucheur, Western General Dispensary, surgeon accoucheur, St Pancras and Northern Dispensary, chloroformist, St Peter's Hospital for Stone
1870-1	David Henry Goodsall	ST MARK'S HOSPITAL, and surgeon, Metropolitan Hospital, London
1871	Herbert Goode	
1874	William Baly	Private practice, Exeter, Devon
1875	Ernest Carr Jackson	Private practice, Harley Street, London
1876-8	Frederick Swinford Edwards	ST MARK'S HOSPITAL, and surgeon, St Peter's Hospital for Stone, London
1879	Percy H White	Private practice, Cadogan Square, Berkeley Square, surgeon, National Dental Hospital

APPENDIX II

1880-1	Charles John Ogle	Surgeon, Gordon Hospital, London
1882-3	Thomas Hillier Chittenden	Private practice, Wheathampstead, Hertfordshire
1884	Stephen Townesend	Private practice, Portland Place, then Inner Temple, London
1885-6	Frank Postlethwaite	Private practice, Perranporth, Cornwall, and surgeon, Odd Fellows and Explosives Company
1887-8	Arthur Edward Chilcott	Medical superintendent, St Pancras Infirmary, London
1888	W J Midelton	Private practice, Harston, Cambridge
1889-90	Percy J Kingston	Surgeon, Yeovil and District Infirmary, various railway companies
1890-1	Henry William Gordon Green	Private practice, Clapham, London
1891-2	W Phayre Ryall	Surgeon to Army Medical Service, Woolwich Hospital, London
1892-5	E Canny Ryall	Founder and surgeon, All Saint's Hospital for genito- urinary diseases, London
1896	W E Miles	Surgeon, Cancer and Gordon Hospitals
1896	John Edward Barrett (Melbourne)	
1897-9	Arthur Murray Cudmore (Adelaide)	Surgeon, Adelaide Hospital and University of Adelaide, Australia
1899	Allan J Campbell (Adelaide)	
1899-1900	Herbert Frankling	Surgeon, Harrogate Infirmary, Yorkshire
1900-1	Frank Mayo Morris	Emigrated to South Africa, medical officer, Cape Town Free Dispensary
1901	Robert Langley Porter	
1901-2	Francis Goding Bowen	Emigrated to Rhodesia, acting principal medical officer and district surgeon, Fort Jameson
1902	Charles Leonard Traylen	Anaesthetist, Willesden General Hospital, London
1902-3	Benjamin Charles Broomhall	Surgeon, Mission Hospital, Shansi, China
1903	Herbert Stanley Jenkins	Private practice, Bristol, Somerset
1903-5	Frederick Arthur Johns	Surgeon, Royal Bathing Hospital and Rawson Convalescent Home, Harrogate, Yorkshire

ST MARK'S HOSPITAL, LONDON

1905-6	David Ellis	Surgeon, Aberystwyth Infirmary and Cardiganshire General Hospital, Wales
1906	John Valentine Rees	Private practice, Carmarthen, Wales
1906-7	John Avery	Surgeon, East Ham Hospital, London
1907	Joseph Bernard Dawson	General practitioner, York, then general practitioner, Swansea, then emigrated to Glenelg, Australia. Gynaecologist, Royal Adelaide Hospital, then professor of obstetrics and gynaecology, University of Otago, New Zealand
1907-9	H Graeme Anderson	ST MARK'S HOSPITAL
1909	Hamilton Drummond	Surgeon, Victoria Infirmary, Newcastle, Northumberland
1909-10	Washington Everitt Wilks	General practitioner, Brockenhurst, Hampshire. Then emigrated to British Columbia, Canada
1910	Archibald Campbell Magarey (Adelaide)	Surgeon, Children's Hospital, Adelaide, Australia
1911	Andrew Samuel Moorhead (Toronto)	Surgeon, Toronto General Hospital, and University of Toronto, Canada
1912	James Wilmot Adams	Surgeon, Penang, Malaya
1913	Mr Kennedy	
1913-4	Shamrao Ramrao Moolgavkar (Bombay)	Surgeon, Jamsetji Hospital, professor of surgery, Grant Medical College, Bombay, India
1914-5	Manishanker Khushaldas Joshi (Bombay)	Private practice, Bayswater, London
1915	Dr Spence	
1915	H Child	
1916	Jules Bussens (Brussels)	Private practice, Hampstead, London
1916-7	Thomas Jacob Cobbe (Dublin)	Surgeon, Royal Victoria Hospital and Dover Venereal Clinic, Dover, Kent
1917	Patrick Kennedy Murphy (Dublin)	Royal Army Medical Corps, medical officer, Guards Barracks, Chelsea, London
1917-8	W Turner Warwick	Surgeon, The Middlesex Hospital, London
1918	Anna Keilin	Honorary anaesthetist, Addenbrooke's Hospital, Cambridge
1919-20	William B Gabriel	ST MARK'S HOSPITAL, and Royal Northern Hospital, London
1920	R A Kern	
1921-2	Clement Lorne Chapman (Sydney)	Gynaecological surgeon, Royal Prince Alfred Hospital, Sydney, Australia

APPENDIX II

1922-3	J M Hyde	New Zealand
1923-4	John Grieve Whitaker (Melbourne)	Surgeon, Children's Hospital, Melbourne, Australia
1924-5	James Christie Anderson	Surgeon, Royal Hospital, and Children's Hospital, Sheffield, Yorkshire
1925-6	J Lee Warner	General practitioner, Sheffield, Yorkshire

Establishment increased to two residents (one house surgeon (HS) and one resident surgical officer (RSO)) in 1927

Later positions: surgeon, unless otherwise specified

1926-7	HS	} Clifford Naunton Morgan	ST MARK'S HOSPITAL and St Bartholomew's Hospital, London
1927	RSO		
1927	HS	} W Cooper Gissane (Sydney)	Accident Hospital, professor of surgery, University of Birmingham
1928	RSO		
1928-9	RSO	Leslie E Le Souëf (Melbourne)	Royal Perth Hospital, Princess Margaret Hospital for Children, Perth, Australia
1928	HS	G J Griffiths	Bedford County Hospital, Bedfordshire
1928-9	HS	} T B Seed (Melbourne)	
1929	RSO		
1929	HS, RSO	Harry Teesdale Simmons	Christie Hospital, Manchester
1929	HS	} Thomas Osler Sayle (Melbourne)	Prince Henry's Hospital, Melbourne, Australia
1929-30	RSO		
1929-30	HS	Max Roslyn Ernst	Victoria and Rush Green Hospitals, Romford, Essex
1930-1	RSO	John G Sandrey (Sydney)	St Peter's Hospital for Stone, London
1930-1	HS	S N Lytle (Belfast)	Southampton General Hospital, Royal South Hampshire Hospital, Southampton, Hampshire
1931	HS, RSO	H A Body (Melbourne)	Geelong, Australia
1931	HS	} B W Nairn (Melbourne)	Royal Perth Hospital, Princess Margaret Hospital for Children, Perth, Australia
1931-2	RSO		
1931-2	RSO	W K Welsh (Toronto)	St Michael's Hospital, Toronto, professor of surgery, University of Toronto, Canada
1932	HS, RSO	F H Bentley	

Establishment reverted to one resident in 1932

1933	Oswald V Lloyd-Davies	ST MARK'S HOSPITAL and The Middlesex Hospital, London
1934	Keith B Bridge (New Zealand)	Wellington Hospital, Wellington, New Zealand
1934-5	Kenneth L James	Gordon Hospital, London
1936	Lionel Evan Jones	Coventry and Nuneaton Hospitals, Warwickshire

ST MARK'S HOSPITAL, LONDON

Establishment increased to two residents in 1936

1936	HS	{	Robert Officer (Melbourne)	Alfred Hospital, Melbourne, Australia
1937	RSO			
1937	HS		James Cumming Stewart (Melbourne)	Alfred Hospital, Melbourne, Australia
1937-8	HS		Thomas H Ackland (Melbourne)	Royal Melbourne Hospital, Melbourne, Australia
1938	RSO		Robert Wallace Nevin	St Thomas's Hospital, London
1938	HS		Cecil John Charles Siggers	Devizes and District Hospitals, Wiltshire
1938	HS		Robert A Hall	Private practice, Leeds, then York
1938-9	HS		Eric W McMechan (Belfast)	Belfast City Hospital, Royal Victoria Hospital, Belfast, Northern Ireland
1939	RSO		Henry R Thompson	ST MARK'S HOSPITAL
1939	HS		Stephen Eisenhammer (South Africa)	Johannesburg, South Africa
1940	RSO		George Kent Harrison (Toronto)	Thoracic surgeon, Addenbrooke's Hospital and Papworth, Cambridge, then chest surgeon, St Thomas's Hospital, London
1940	HS	{	John C Goligher	ST MARK'S HOSPITAL, and St Mary's Hospital, London, then professor of surgery, University of Leeds
1940-1	RSO			
1940	HS		John Scorgie (Aberdeen)	Private practice, Birmingham
1941	HS	{	Frederick W Connaughton (Melbourne)	St Vincent's Hospital, Melbourne, Australia
1941-2	RSO			
1941	HS		Bryan Luker	
1941-2	HS	{	Andrew Wendover Stewart	Emigrated to Cape Province, South Africa
1942	RSO			
1942	HS		H M Lewis	
1942-3	HS		H M J Ross (South Africa)	South Africa
1943-4	RSO		John H C Phillips	Kettering General Hospital, Northamptonshire
1943-5	HS		William C Good	Emigrated to Kuala Lumpur, Malaysia, then Canada
1944	HS		Charles Clark	Barrister, Middle Temple, London, coroner, County of Essex
1944	HS		J F Barwell-Clarke	New Westminster, British Columbia, Canada
1945	RSO		Osler Briggs Dickinson (Ontario)	Private practice, Ontario, Canada
1945	HS		Stewart W R Hutton	General practitioner, Walsall, Staffordshire

APPENDIX II

1945-6	HS	I R S Robertson (Canada)	
1946	RSO	Walter Irving Cawkwell (New Zealand)	Green Lane Hospital, Auckland, New Zealand
1946-7	HS	Leslie Le Quesne	Professor of surgery, The Middlesex Hospital Medical School, London
1946-7	RSO	Kenneth E Bond	European Hospital Trust, Bombay Hospital and Masina Hospital, Bombay, India, then Hampstead General Hospital, London
1947	RSO	T Edward Wilson (Melbourne)	St George Hospital and Sydney Hospital, Sydney, Australia
1947-8	HS	} Philip C Watson	Boston Hospital Group,
1948	RSO		Lincolnshire

Both appointments designated resident surgical officers from 1 November 1947

1948	Thomas Neurig Williams	West Suffolk General Hospital, Bury St Edmonds, Suffolk
1948	Alexander A Brown (South Africa)	Groote Schuur Hospital, Cape Town, South Africa
1948	C T Robertson	Department of surgery, Monash Medical School, Alfred Hospital, Victoria, Australia
1949	Edward S R Hughes (Melbourne)	Royal Melbourne Hospital, professor, Alfred Hospital, Melbourne, Australia
1949	Graeme Lindsay Grove (Melbourne)	Alfred Hospital, Melbourne, Australia
1949	Alan V Pollock	Scarborough Hospital, Yorkshire
1950	James S Guest (Melbourne)	Alfred Hospital, Melbourne, University of Melbourne, Australia
1949-50	Tom Rowntree	Southampton General Hospital, Hampshire
1950-1	Paul Brian Counsell	King Edward VII Memorial Hospital, Bermuda, West Indies
1950-1	Hugh E Lockhart-Mummery	ST MARK'S HOSPITAL, and St Thomas' Hospital, London. Serjeant Surgeon to The Queen
1951	John J Shipman	Lister Hospital, Stevenage, Hertfordshire
1951-2	James C Angell	Urological surgeon, Ashford Hospital, Middlesex
1951-2	Robert C Fuller	Acton and Wembley Hospitals, London
1952-3	John Wilks	Bolton Hospital Group, Bolton, Lancashire
1952-3	J W Graham (Sydney)	St Vincent's Hospital and St George Hospital, Sydney, Australia

ST MARK'S HOSPITAL, LONDON

Establishment increased to three resident surgical officers in 1953

1953	D H Jenkins	United Cardiff Hospitals and Welsh Regional Hospital Board
1953-4	John F R Bentley	Children's Hospital, Glasgow
1954	A G Leacock	Barbados General Hospital, West Indies
1954	Ian P Todd	ST MARK'S HOSPITAL, and St Bartholomew's Hospital, London
1954-5	Colm Galvin	Regional Hospital, Galway, Ireland
1954-5	Robert E B Tagart	Newmarket General, West Suffolk and Saffron Walden Hospitals, Suffolk
1955	Richard Pelham Warren	St Margaret's Hospital, Epping, Princess Alexandra Hospital, Harlow, and Waltham Abbey War Memorial Hospital, Essex
1955	Peter F Boreham	Urological surgeon, Cheltenham General Hospital, Cheltenham, Gloucestershire
1955-6	Robert H Thorlakson	Winnipeg Clinic, Winnipeg, Manitoba, Canada
1956	William W Slack	The Middlesex Hospital, London.
1956-7	Robert Ian Mitchell (Sydney)	Serjeant Surgeon to The Queen Wellesley Hospital and professor of surgery, University of Toronto, Toronto, Canada
1956-7	A F Gordon Anderson (New Zealand)	Wellington Hospital, Wellington, New Zealand
1956-7	Solomon Levitt (Adelaide)	Royal Perth Hospital, Queen Elizabeth II Medical Centre, Perth, Australia
1957	James Oldfield	North Ormesby Hospital, Middlesborough, Cleveland
1957	John M Davis	Whittington Hospital, London
1957	Adam N Smith	Reader in surgery, University of Edinburgh, Scotland
1958	Bernard H Hand	Ipswich and East Suffolk Hospital Group, Suffolk
1958	Desmond L B Farley	Royal Northern Hospital, London
1958-9	A B Vivian (Adelaide)	Reader in surgery, University of Western Australia, Perth, Australia
1958-9	T D McLarty	Wellington Hospital, Wellington, New Zealand
1958-9	Edward Cameron Watson (New Zealand)	Royal United Hospitals, Bath Health District, Avon
1959-60	William Frederick Walter Southwood	Lahey Clinic, Boston, USA
1959	Richard Francis Power	Cheltenham General Hospital, Gloucestershire
1959-60	John Fairgrieve	Clwyd and Deeside Hospital Group, Wales
1960	Owen Morris Jonathan	

APPENDIX II

1960	Malcolm E E White	Coventry and Warwick Hospitals Group, Warwickshire
1960	Raymond Moulton Hollings (Sydney)	Royal North Shore Hospital, Sydney, Australia
1960-1	Mark Killingback (Sydney)	Sydney Hospital, Sydney, Australia
1960-1	John G Smith (Sydney)	Hornsby Hospital, Sydney, Australia
1961	Colin S Kirkham	Royal Berkshire Hospital, Reading and Newbury District Hospital, Berkshire
1961-2	John E H Pendower	Charing Cross Hospital, London
1961-2	Bernard L Whitaker	Hertford County Hospital and Herts and Essex Hospital, Bishop's Stortford, Hertfordshire
1962-3	Nigel H Porter	Brighton and Lewes Group Hospitals, Sussex
1962-3	Mervyn W F Dunning	Royal Shrewsbury Hospital, Shropshire
1962	Bruce Fox (Melbourne)	Alfred Hospital, Melbourne, Australia
1962-3	John Candy	Greenwich District and Dreadnought Seamen's Hospitals, London
1963	Anthony B G Carden (Melbourne)	Queen Victoria Hospital, Melbourne, Australia
1963	Basil K Gray	Bradford Royal Infirmary, Yorkshire
1963	William Raynham (Cape Town)	Groote Schuur Hospital, Cape Town, South Africa
1963-4	Michael R Madigan	Hertford County Hospital and Herts and Essex Hospital, Bishop's Stortford, Hertfordshire
1963-4	H Reginald Magee (Brisbane)	Princess Alexandra Hospital, Brisbane, Australia
1964	Manuchehr Sabetian	Private practice, Harley Street, London
1964-5	Alan J Davies	St Stephen's Hospital, London
1964-5	John Stubbs	Wellesley Hospital, Toronto, Canada
1964-5	John T Rankin	St Vincent's Hospital, Melbourne, Australia
1965-6	Brian T Collopy (Melbourne)	Lurgan and Portadown Hospital and Banbridge Hospital, Portadown, Armagh, Northern Ireland then emigrated to Chatham, Ontario
1966-7	Mitchell J Notaras (Sydney)	Barnet General Hospital, Barnet, Hertfordshire
1966-7	Peter J Jennings	St Bartholomew's Hospital, Rochester, Medway Hospital, Gillingham, Kent
1966-7	Peter R Hawley	ST MARK'S HOSPITAL
1966-7	Douglas M Millar	Essex County Hospital, Colchester, Essex

ST MARK'S HOSPITAL, LONDON

1967-8	John C F Mountain	Southend-on-Sea Group Hospitals, Essex
1967-8	J F Carter	Green Lane Hospital, Auckland, New Zealand
1967-8	T George Parks	Professor of surgical science, the Queen's University, Belfast, Northern Ireland
1968	Jack D Hardcastle	Professor of surgery, University Hospital, Nottingham
1968-9	W Nigel W Baker	Ashford Hospital, Middlesex
1968-9	Julian C F Townsend	St Albans City Hospital, Hertfordshire and Queen Elizabeth II Hospital, Welwyn Garden City, Hertfordshire
1968-9	Maurice J N Frohn	Bethnal Green Hospital and Mildmay Mission Hospital, London
1969	Edwin C Ashby	St Richard's Hospital, Chichester, Sussex
1969	James L Grogono	Wycombe and Amersham Group Hospitals
1969-70	R L Fink (Melbourne)	St Vincent's Hospital, Melbourne, Australia
1969-70	Kerry Larkin (Queensland)	Rockhampton Hospital, Rockhampton, Australia
1969-70	David W Herring	Dryburn Hospital, Durham
1970-1	Brian J Stoodley	District General Hospital, Eastbourne, and Uckfield Hospital, Sussex
1970-1	James P S Thomson	ST MARK'S HOSPITAL, Hackney Hospital and St Mary's Hospital (honorary), London
1970-1	John McLellan Singleton	Queen Mary's Hospital, Roehampton and Putney Hospital, London
1971	William R G Thomas	West Wales General Hospital, Carmarthen, Wales
1971	David W Cairns	Wycombe and Amersham Group Hospitals
1971-2	J Campbell B Penfold (Melbourne)	Royal Melbourne Hospital, Melbourne, Australia
1971-2	Brian W Smith (Melbourne)	Alfred Hospital, Melbourne, Australia
1971-2	Roger H Grace	Royal Hospital and New Cross Hospital, Wolverhampton
1972	David G Jagelman	Cleveland Clinic, Ohio, USA
1972-3	Peter V Delaney	Regional Hospital, Limerick, Ireland
1972-3	William S Shand	St Bartholomew's Hospital, London
1972-3	Samuel Sakker (Sydney)	Sydney Hospital, Sydney, Australia
1973	Alastair Gunn	Ashington Hospital, Northumberland

APPENDIX II

1973-4	William Miller	Kilmarnock Infirmary, Ayrshire, Scotland
1973-4	Christopher G Marks	Royal Surrey County Hospital, Guildford, Surrey
1973-4	Ian R Fielding (Sydney)	Royal North Shore Hospital, Sydney, Australia
1974-5	Brian D Hancock	Wythenshawe Hospital, Manchester
1974-5	John T Williams	The Guest Hospital, Dudley, West Midlands
1974-5	David C Britton	Royal United Hospitals, Bath, Avon
1975-6	M Russell Lock	Whittington Hospital, London
1975-6	Russell W Stitz (Brisbane)	Royal Brisbane Hospital, Brisbane, Australia
1975-6	Peter Roberts	Royal Army Medical Corps
1976	John A McLeish	Prince Henry's Hospital, Melbourne, Australia
1976-7	Martin J Hudson (Otago)	Portlaoise General Hospital, Portlaoise, Ireland
1976-7	David W Hamer-Hodges	Western General Infirmary, Edinburgh, Scotland
1976-7	John G Payne	Queen Mary's Hospital, Sidcup, Kent
1977	Alexander Munro	Raigmore Hospital, Inverness, Scotland
1977-8	R John Nicholls	ST MARK'S HOSPITAL and St Thomas' Hospital, London
1977-8	Adrian L Polglase	Alfred Hospital, Melbourne, Australia
1977-8	Peter W R Lee	Hull Royal Infirmary, Hull and Beverley Health District, Humberside
1978-9	John A Rennie	King's College Hospital, London
1978-9	Gavin G P Browning	
1978-9	Timothy Wilson (Sydney)	Sydney Hospital, Sydney, Australia
1979-80	John M Gollock	Peel Hospital, Galashiels, Selkirkshire, Scotland
1979-80	Michael S Elliot	Groote Schuur Hospital, Cape Town, South Africa
1979	Anthony A Eyers (Sydney)	Clinical superintendent, Royal Prince Alfred Hospital, Sydney, Australia
1979-80	John A Lyttle	Hastings Health Authority, Sussex
1980	Michael R Thompson	Queen Alexandra and St Mary's Hospitals, Portsmouth, Hampshire
1980-1	Paul B Boulos	University College Hospital, London
1980-1	Andrew J Shorthouse	
1980-1	David Valerio	Grantham and Kesteven General Hospital, Lincolnshire
1981	Michael J Kelly	Leicester General Hospital and Loughborough General Hospital, Leicestershire

ST MARK'S HOSPITAL, LONDON

1981	Timothy H Walsh	Isle of Wight
1981-2	John Cumming	
1981-2	J Marion Thomas	Westminster Hospital, London
1981-2	David J Hay	Llandudno General Hospital, Gwynedd, Wales
1982-3	Ian D Fraser	Warwick and Stratford-on-Avon Hospitals, Warwickshire
1982-3	John M A Northover	ST MARK'S HOSPITAL and the Medical College of St Bartholomew's Hospital, London
1982-3	Neil J McC Mortensen	Bristol Royal Infirmary, Avon
1983-4	Richard E Glass	
1983-4	Andrew C V Montgomery	
1983-4	Michael W N Ward	Chase Farm Hospital, Enfield, Middlesex
1984-5	A Hugh McL Ross	
1984-5	Jay N L Simson	
1984-5	Michael Burke	
1985-	David C C Bartolo	
1985-	Roger G Springall	
1985-	Patrick Gallagher	
<i>Medical registrars</i>		
1965-8	John M Hinton	St Richard's Hospital, Chichester, Sussex
1967-70	John Hywel Jones	Singleton and Llanelly Hospitals, Swansea, Wales
1970-3	Christopher B Williams	ST MARK'S HOSPITAL, St Bartholomew's Hospital and The Hospitals for Sick Children, London
1972-4	Edwin T Swarbrick	The Royal Hospital and New Cross Hospital, Wolverhampton
1974-6	Jeremy Powell-Tuck	
1976-7	William R Burnham	Oldchurch and Rush Green Hospitals, Romford, Essex
1978-9	John M Laidlow	Royal Hampshire Hospital, Winchester, Hampshire (radiology)
1979-80	David M Preston	
1980-2	Peter B McIntyre	
1982-3	Gary P N Kendall	
1983-4	Christopher A Rodrigues	
1985-	Roland Valori	

Index

- Abdomino-anal excision, 339, 341, 342, 344
 Abdomino-perineal excision, 250, 251, 253-5, 259-61, 264-6, 341
 Abdomino-sacral excision, 341, 344
 Abel, Lawrence, 246, 255, 343, 364
 Abernethy, John, 9, 10, 11, 12, 15
 Abscess, 108, 130, 131, 271: (1900-1948), 228-34; (1948-1985), 322-26; anal glands and, 322-3; fistula and, 132, 228-34, 322-6; rectal ulceration and, 156; tuberculosis and, 230
 Academic board, 299
 Adams, James Wilmot, 152, 494
 Addison, Christopher, 390
 Adenoma, 145, 146, 257, 259, 265, 270, 348, 349, 350, 351: fulguration, 345, 346, 347, 348; *see also* Polyps and Polyposis
 Adenoma-carcinoma sequence, 259, 349, 351, 352; *see also* Dysplasia-carcinoma sequence
 Admission letters, 22, 42, 57, 58-9, 67-8, 79, 80
 Air raids, 183, 202, 203, 204, 206
 Albert, Prince, 41
 Albright, Jacob D, 238
 Aldersgate School of Anatomy, 10, 16, 21
 Aldersgate Street Dispensary, 17, 21, 23, 117, 429: income of, 24-5; Salmon at, 10-12, 13-15
 Alexander, James Browning, 186-7, 490
 Alexander, Suzanne L, 337, 491
 All Saints' Genito-Urinary Hospital, London, 75, 279
 Allingham, Herbert, 76, 170, 227, 285, 490: appointed, biog details, 74; instruments, 127, 128, 139; leader in field, 124, 159, 431; publications, 72, 75, 124, 125, 129-30, 227; resignation, 75, 161
 Work on: cancer, 125, 130, 147, 149-51, 155-6, 251, 260; constipation, 125, 144; fistula, 125, 135, 136-7, 230; haemorrhoids, 125, 127, 131, 138, 139, 140, 234, 237; incontinence, 125, 130, 247; pruritus ani, 143; rectal prolapse, 125, 143
 Allingham, William, 58, 60, 62, 75, 80, 283, 285, 430, 490: appointed, biog details, 51-2; differentiation of rectal diseases, 130, 131: instruments, 125, 127; leading rectal specialist, 124, 128, 137, 159, 170, 431; patients, 90, 91; practical emphasis, 128-9, 130; private practice, 180; publications, 72, 124, 125, 129-30, 227; resignation, 74
 Work on: cancer, 147, 148, 149, 151-2, 153, 155, 250, 251; constipation and impaction, 144; fissure, 141, 142; fistula, 122, 131-2, 133, 134, 135-6, 230; haemorrhoids, 121, 131, 137-9, 140, 237, 430; incontinence, 247; pruritus ani, 143; rectal polyps, 145, 146; rectal prolapse, 142, 143; ulceration of the rectum, 156, 157, 158
 Allingham, Mrs William, 88, 89
 Allingham ward, 283, 298, 382, 410
 Almoner, 225, 413-15, 416, 421, 424, 425-6: *continued as* Medical social worker
 Almoners' Association, 414
 Amalgamated Society of Carpenters and Joiners, 417
 American Cystoscope Makers Inc, 317
 American Proctologic Society, 72, 180, 282: *continued as* American Society of Colon and Rectal Surgeons
 American Society of Colon and Rectal Surgeons, 180
 Amussat, J Z, 148, 149
 Amussat lumbar colotomy, 149
 Anal glands, 229-30, 322-3
 Anaesthesia, 133, 139, 150, 226, 235, 277: and development of surgery, 108, 124, 146, 151, 250, 267, 277, 313; development of, 107, 108, 138, 142; effect on anal anatomy, 318, 327; established discipline, as, 193, 218; later changes in, 220-1, 315; local, 244, 327, 328; opposition to, 120, 134, 137; pre-anaesthesia, 33, 118, 154; spinal, 220-1, 254-5, 315
 Anaesthetists, 161, 171, 178, 182, 226, 295, 490
 Anastomosis, 154, 155, 251, 266, 268, 314, 339, 341, 344: ileoanal, 348, 372, 373; ileorectal *see* Colectomy and ileorectal anastomosis
 Anatomy, anorectal, 112, 128, 228, 314, 318-19, 320; anal canal, 113, 229,

ST MARK'S HOSPITAL, LONDON

- 233-4, 240, 242, 243, 319, 320,
322; anal cushions, 322; anal glands,
229, 323; anal valves, 319; anorectal
angle, 330; anorectal ring, 234; anus,
113, 117; arteries, rectal, 114, 323;
colon, 113, 115, 319; Hilton's white line,
230; ischio-rectal fossae, 230, 231;
levator ani, 113, 230, 231, 233, 319,
332; pecten band, 242-3; puborectalis,
233, 234, 319; rectum, 113-14, 231,
234, 240, 319, 320; sphincters, 113, 135,
230-1, 232, 233-4, 240, 242, 319, 320,
327
- Anatomists, 233, 318-19, 491
- Anderson, A F Gordon, 371, 498
- Anderson, H Graeme, 177, 179, 182, 186,
187, 490, 494: appointed, biog details,
178; death, 192, 193
Work on: cancer, 259-60;
haemorrhoids, 236-7, 237-8, 239
- Anderson, Lucy *see* Sutcliffe, Lucy
- Andrews, Edmund, 140, 237
- Annual General Meetings, 24: (1872), 64;
(1877), 65; (1895), 76; (1920), 187-8;
(1922), 191; (1924), 192; (1926), 193,
417; (1927), 417; (1929), 197; (1931),
418; (1933), 198; (1934), 418; (1937),
208; (1940), 208; (1944), 210
- Annual Reports*, 20, 26, 42, 53, 55, 282,
298: (1870s), 61, 65, 70, 84, 85; (1873)
poor patients only, 91; (1948), 217;
(1951), 315; (1955), 365; (1964), 298;
(1966), 299; (1971), 303; (1975), 305-
6; financial statement omitted, 59;
surgical section, 227; teaching and
research stressed, 283
- Anorectal angle, 330, 331, 336, 358
- Anorectal ring, 234, 240, 247, 319, 324,
329
- Anterior resection, 339, 342, 343-4
- Antibiotics, 314, 360, 378
- Antisepsis, 124, 154, 159, 245, 277;
antiseptics, use of, 133-4, 252, 314;
asepsis and, 218, 219, 220; cancer
operations and, 146, 149-50, 151, 152,
153; development of, 107, 108-9; nurses
and, 398, 400
- Aperients, 111, 357
- Apothecaries Act (1815), 7, 8, 13
- Appeals for funds *see* Fund raising
- Appendicostomy, 271, 272, 273, 275, 276,
361: nursing of, 399
- Appleyard, Miss, 387, 491
- Architects, 64-5, 75, 76, 198-9, 296
- Architecture, hospital, 39-40, 63, 85
- Area Health Authorities (AHA), 304
- Army Nursing Service, 205
- Artificial anus, 154, 155, 156, 251, 252,
253, 254: *see also* Colostomy and
Colotomy
- Asche, Oscar, 168
- Asepsis, 168, 220, 239, 245, 251, 255, 277,
398: development of aseptic practices,
218-19
- Assistant surgeons, 45, 46, 50, 51, 58, 60,
161, 171, 177, 196, 236: *see also*
individual surgeons
- Association of Special Hospitals, 208, 210
- Athenaeum Club, 32
- Athlone Committee, 394, 396
- Australian surgeons, and St Mark's, 75,
191, 192, 299
- Auxiliary Society (Patients'), 34, 42, 53, 91
- Avery Jones, F *see* Jones, Francis Avery
- 'A' ward, 194, 283, 393
- Babcock, W W, 339
- Back, Ivor, 182
- Bacon, H E, 339
- Bacteriology, 108, 223, 272, 273, 352, 375
- Bacteriologists, 171-2, 177, 491
- Baker, W Nigel W, 380, 500
- Baldwin, Aslett, 172, 173, 176, 178, 179,
182, 187, 490
- Ball, C B, 241, 245
- Ball, Sir W Girling, 176, 201
- Ball's operation, 244
- Banding of haemorrhoids, 320, 321, 322
- Banov, Leon, 141
- Banting, C, 187
- Barber, Anthony, 296
- Barclay, David, 19
- Bargen, J A, 362, 374
- Barium enema, 222, 316, 317, 370: *see also*
Radiology
- Barnes, P R H, 358, 359
- Baron, J H, 366, 367
- Barrington, Rutland, 168
- Barron, J, 321
- Bartram, Clive I, 382, 490, 491
- Bat, L, 359
- Bates, Constance, 400
- Bath, City of, 1, 7, 8, 10, 11, 428
- Beattie, Miss Stewart, 61
- Bedford, Duke of, 165
- Beit, Sir Otto, 195
- Belgrave Hospital for Children, London,
162, 163
- Belliveau, P, 349
- Benefactors, hospital, 3-4, 6: distinctions
between, 41-2; E N, 60; of Fistula
Infirmity, 16-21, 26-27, 31-34; of St
Mark's, 61, 68-70, 161, 279, 429; social
shift, 160, 165; *see also* Governors

INDEX

- Benevolent Dispensary for the Relief of the Poor Afflicted with Fistula, Piles and Other Diseases of the Rectum and Lower Intestines, 1, 21: *continued as Infirmary* for the Relief of ...
- Benign tumours, 145, 146, 349, 350, 351: *see also* Adenoma
- Bensaude, Alfred, 257
- Benton, Samuel, 70
- Berger, Paul, 219
- Bethlem Hospital, London, 17, 280, 291
- Bevan, Aneurin, 212, 214, 279, 281
- Beveridge Report, on social insurance, 209
- Beverley, Earl of, 32
- Bevin, Ernest, 205
- Bignall, J R, 295
- Billroth, Theodor, 154
- Bingley, Lady Juliet, 426
- Biochemistry, 300, 315, 360
- Biopsy, 257, 262, 318, 336, 358, 388: forceps, 226; for Crohn's disease, 375, 376, 380; for pre-cancer, 349-51; for ulcerative colitis, 367, 368, 369, 372
- Birkbeck, George, 15
- Black Diamonds of Louisiana, 59, 82
- Blaisdell, P C, 243
- Blaisdell's bar, 243
- Blanchard, C E, 238
- Bland Sutton, Sir John *see* Sutton, Sir John Bland
- Bleeding and cupping, 25, 110, 112
- Blizard, William, 87
- Bloch, O, 155, 267
- Blood: groups, 224; transfusion, 218, 224, 250, 266, 267, 277, 314-15, 339, 400
- Blundell, Thomas, 20
- Bobbins (anastomotic), 154, 268
- Boer War, 172, 181
- Bolton, William G, 21, 31
- Bougies, 30, 116, 117, 118, 125, 126, 129, 144, 157
- Bowlby, Anthony, 163
- Boyer, Alexis, 242
- Boyer's method, 242
- Breese, Clara (later Salmon), 21, 439
- Breese, Emma, 21, 69, 439
- Breese, James, 439
- Brewin, Arthur (grandfather), 160
- Brewin, Arthur (grandson), 200, 283, 404
- Brewin, Julius A, 160, 200
- Brice, Miss, 99, 100, 491
- Bridewell Hospital, London, 17
- Briggs, Henry R, 51
- Bright's disease, 272
- British Broadcasting Corporation (BBC), 193, 199, 303, 308
- British Empire Cancer Campaign (BECC), 188, 189, 194, 196, 223, 224, 226, 249, 283, 311, 316, 433: *continued as* Cancer Research Campaign
- British Hospital for Diseases of the Skin, London, 58
- British Hospitals Association, 205, 206, 213, 215, 394
- British Medical Association (BMA), 180, 284: opposition to special hospitals, 56-7; WW2 appointments, 201, 202; nursing and, 396; and NHS, 209, 210, 213, 214
- British Medical Journal*, 44, 73: condemned special hospitals, 55-6, 57, 60; Hospital Saturday Fund, 68; Pickering Report, 294; Salmon obituary, 55
- British Orphan Asylum, London, 161
- British Postgraduate Medical Federation, 213, 216, 281, 288, 289, 290, 294, 300, 301, 302, 303
- British Postgraduate Medical School, 213: *continued as* Royal Postgraduate Medical School
- British Proctological Society, 179-80
- British Society of Gastroenterology, 288
- Broadbridge, Sir George, 208
- Broadwoods, Messrs, 42
- Broders, Albert C, 257
- Broders' grading, 257, 262
- Brodie, Sir Benjamin, 121, 141
- Brodie's sentinel pile, 141
- Brompton Hospital for Consumption and Diseases of the Chest, London, 4, 6, 280, 288, 291, 295, 434
- Brooke, Bryan, 362, 363, 364, 373, 374, 380, 423, 425
- Brooke ileostomy, 362, 363, 373, 423-4
- Brossy, J-J, 327
- Brough, surgical instrument makers, 30, 117
- Brown, H Langdon, 164
- Brown, Isaac Baker, 141
- Brown, Ron, 309
- Brown-Séguard, C E, 57, 430
- Browning, Gavin G P, 331, 333, 501
- Browning Alexander, James, *see* Alexander, James Browning
- Bruce, Ironside, 273
- Buccleuch, Duke of, 32
- Building Funds, 42-3, 67, 193
- Bull, Raymond, 205-6, 208, 223, 282, 283, 416, 417, 491
- Burdett, Henry, 70-1, 76
- Burkitt, D P, 355-6
- Burman, William, 20
- Bussey, H J R, 223-4, 491: cancer 350, 351; polyposis, 270, 316, 348

ST MARK'S HOSPITAL, LONDON

- Butlin, Sir Henry, 162, 163
 Buttons (anastomotic), 154, 251, 268
 'B' ward, 194, 283, 393
- Cabbell, Benjamin Bond, 32, 35, 36, 37
 Cable, Miss E J 401, 402, 403, 404, 405, 491
 Caecostomy, 268, 272, 361
 Caernarvon, Earl of, 165
 Callisen, Heinrich, 148
 Campbell Milligan, E T, *see* Milligan, E T C
 Cancer, 28, 125, 129, 159, 292, 313, 314, 375, 383, 433: (1870-1900), 146-56; (1900-1948), 247-68; (1948-1985), 337-52; abdomino-perineal excision, 250, 251, 253-5, 259-61, 264-6, 341; aetiology, 247-50, 337-8, 352; Crohn's disease and, 379, 380; diverticular disease and, 276, 277; Dukes' staging, 255-8, 278; nursing, 285, 388, 398; pathology: prevention and follow up (1948-1985), 349-351; perineal excision, 151-3, 250, 251, 252, 253, 255, 257, 259, 260, 264-6, 267, 339, 413; perineo-abdominal excision, 260, 265, 267, 339, 343, 345; radium, 195, 250, 256, 261-4; restorative procedures, 314, 339, 340-5, 347, 349; Salmon on, 115, 116, 117; sigmoidoscope, colonoscope and, 222, 317-8; synchronous combined excision, 266, 267, 339; ulceration, malignant, 271; ulcerative colitis and, 274, 351, 362, 363, 365, 368-9, 370, 372-3; WHO classification centre, 316; *see also* Colostomy, Fund raising *and* Patients, cancer
 Cancer Act (1939), 338
 Cancer Hospital, The (Royal), London, 6, 163, 189, 201, 430: *continued* as Royal Marsden Hospital
 Cancer Research Campaign, *formerly* British Empire Cancer Campaign, 311, 316
 Cancer Research Committee, St Mark's Hospital, 223
 Cancer Research Department, 194, 197: *continued* as Research Department
 Cancer Research Scheme, 188: *continued* as Imperial Cancer Research Fund (ICRF)
 Cancer Ward, 174
 Canny Ryall, Edward, *see* Ryall, Edward Canny
 Canterbury, Archbishop of, hospital fund of, 32, 35
 Capper, Jasper, 18
 Carbolic acid: as antiseptic, 108, 149, 158; injection of haemorrhoids, 140, 235, 237-8; spray, 108, 218, 219; treatment of pruritus, 244; treatment of ulceration, 271; *see also* Antisepsis *and* Haemorrhoids
 Carcinogens, 249, 352
 Carden, Anthony B G, 350, 499
 Carter, Edward Hunt, 51, 492
 Cash limits (1976), 306, 310
 Casualty Hospital, Bath, 8
 Cataphoresis, 273
 Catering department, 420-1
 Cattell, Richard, 363
 Cauterization: for prolapsed rectum, 143; for haemorrhoids, *see* Clamp and cautery
 Cave Committee Report (1921), 190
 Celsus, 136
 Census data, 78, 91, 486-9
 Central Eye Hospital, London, 280
 Central London Ophthalmic Hospital, 174
 Central Middlesex Hospital, 288, 293, 298, 360, 365, 375
 Central Midwives Board, 386
 Chagas' disease, 357
 Chapel, 287, 295
 Chaplains, 34, 35, 82-5, 418, 420
 Chapman, D B, 32
 Charing Cross Hospital, London, 4, 161, 177, 190
 Charity *matinée* (1902), 166-8, 433
 Charity Organisation Society, 89
 Charles, R Havelock, 174
 Charterhouse Square, 1, 9, 10, 29, 35
 Charterhouse Square Infirmary, *see* Fistula Infirmary
 Chelsea Hospital for Women, London, 280, 291, 296, 298
Chelsea News, 297, 298
 Chelsea Scheme, 289-92, 293, 294, 296-8, 300, 301
 Chester Beatty Research Institute, 280
 Chifflet, A, 354
 Chilcott, Arthur Edward, 150, 493
 Child, H, 181, 494
 Child patients, 93, 94, 122, 143
 Childbirth and incontinence, 331, 332, 333-4
 Christie Hospital, Manchester, 189
 Churchill, Sarah, 103
 City and East London Area Health Authority (teaching), 304
 City and Hackney Health District, 304, 306, 410
 City Companies and Guilds, 61, 65, 67, 305: Dyers' Company, 38-9, 60, 160, 200; Hon Artillery Company, 46; Merchant Taylors' Company, 88; Worshipful Companies of Clothworkers, Drapers and Grocers, 32, 165
 City Infirmary and Dispensary, Bath, 8
 City of London, 2, 6, 16, 17, 18, 19-20, 28, 41, 50, 165, 429

INDEX

- City of London Brewery Company employees, 69
- City of London Club, 16, 17, 18, 32, 429
- City Press*, 59
- City Provident Dispensary for Diseases of the Skin, London, 58
- City Road site, 1, 2, 38, 39, 66, 67, 75–6
- Civil Nursing Reserve (CNR), 204, 205
- Clamp and cautery of haemorrhoids, 138, 139, 140, 236, 237, 239
- Clarke, Sir Basil, 193
- Clarke, Miss Florence, 195
- Clarke, W Bruce, 163
- Clay, John, 148
- Cleanliness, 108, 121, 149–50, 218; cleaning and disinfecting hospital, 64, 66–7, 85, 183
- Clifford, Sir Miles, 295
- Clinical assistants, 176, 201, 202, 298
- Clinical staff meetings, 284
- Clore, Sir Charles, 289, 305
- Clutterbuck, Henry, 14
- Coffin, Hayden, 168
- Colectomy and ileorectal anastomosis: for constipation, 248, 359; for Crohn's disease, 378, 380; for polyposis, 346, 347, 348; for ulcerative colitis, 275, 363, 364, 371, 373
- Colitis, *see* Ulcerative colitis
- Collard, Edmund and William, 33
- Collecting boxes and cards, 174
- Collector of subscriptions, 24, 31, 51, 53
- College of Nursing, 205, 389–90, 391: *continued as* Royal College of Nursing
- Colonoscopy, 304, 305, 317–18, 351, 369, 370, 372
- Colopexy, 245: *see also* Rectopexy and Prolapse
- Colostomy, 219, 252, 254, 255, 260, 263, 270, 277, 378: avoidance of, 341, 343, 345; formerly termed colotomy, 148, 251–2; nursing, 398, 399, 406; patients, 89, 339–40, 364, 413, 415, 418, 421–3, 424; preliminary, 261, 262, 268, 326, 341; stoma care, 409; *see also* Cancer and Colotomy
- Colotomy, 109, 125, 130, 148–51, 152, 153, 154, 155, 156, 157, 158, 159; change of term to colostomy, 148, 251–2; twentieth century usage, 350; *see also* Artificial Anus and Colostomy
- Committee of Management, 23, 24, 30, 31, 34, 35, 40, 41, 54, 61–2, 76, 186, 201: almoner and, 414, 415, 416; appeal for funds, 37, 69–70; medical staff and, 58, 60, 74–5, 179, 195, 203, 210–11; membership, 51, 160, 179, 200, 211, 215; monthly meetings, 44; mounting debts (1930s), 196; nursing and, 393, 395, 397; plan for hospital (1877–8), 64, 65, 66; plan for private wards, 206; rebuked Gordon-Watson, 177; Salmon's retirement, 45, 46; within NHS, 283
- Community Health Council, 310
- Condyloma ani, 81, 130
- Congregational Chapel Site, 175, 183
- Connaught, Duke of, 160, 165
- Connell, A M, 366, 367
- Constipation, 118, 125, 131, 144, 248, 356–9: and diverticulitis, 277
- Continence, 324–5, 342; anatomy and physiology of, 319, 329–34; anorectal ring and, 234: *see also* Incontinence
- Convalescence, 65, 87, 88, 89, 136
- Convalescent Homes, 88, 89, 205, 413, 426: colostomy patients, 205, 415, 418; ileostomy patients, 424–5
- Cooper, Lady Agnes (*formerly* Lady Agnes Duff), 73, 88, 89
- Cooper, Sir Alfred, 51, 58, 72, 74, 80, 128, 129, 164, 178, 221, 490: appointed, biog details, 52; aristocratic connections, 52, 73, 165–6; 'cancer' in title of hospital, 171, 175; private practice, 180; publications, 125, 227; retired, 161–2
- Work on: cancer, 147, 150, 152, 153, 257; fistula, 132, 136; haemorrhoids, 138, 140; impaction, 138; multiple polyps, 268; polypus recti, 145, 146; prolapse, 143; pruritus ani, 143; rectal ulceration, 157, 158; syphilis, 157
- Cooper, Sir Astley, 121
- Cooper, Lady Diana, 73
- Cooper, G W, 367
- Cope, Sir Zachary, 287
- Copeland, Thomas, 109, 114, 115, 119
- Copeland, William Taylor, 17–18, 23, 31, 42
- Copeland ward, 42
- Copley, Miss H, 394
- Corbett, Rupert S, 276, 361, 363
- Cork and Orrery, Earl of, 160, 165
- Corporation of the City of London, 32, 37, 65, 67, 198, 199
- Corticosteroids, 298, 378, 381: for ulcerative colitis, 361, 365, 366, 367, 368, 373
- Corticotrophin, 365, 378
- Coulson, Walter, 57
- Counsell, P Brian, 362, 364, 424–5, 497
- Counting patients, 31, 58–9, 70
- Courses of clinical instruction (1889), 74–5
- Coward, Noël, 194
- Coward, William, 20

ST MARK'S HOSPITAL, LONDON

- Cox, A G, 352
 Cox, William Henry, 20
 Crawford, John, 61, 62
 Crickitt, J G, 32
 Crile, G, 363
 Crile, George Washington, 220
 Crimean War, 44, 96
 Cripplegate Foundation, London, 305
 Cripps, Harrison, 146, 251, 268
 Crohn, B B, 373, 374, 377
 Crohn's disease, 316, 322, 373-83: anal lesions, 375, 376, 377, 378, 380, 383; differentiated from tuberculosis, 374, 375; differentiated from ulcerative colitis, 369, 373, 374-7, 379, 383; medical treatment, 377-8, 380, 381; surgical treatment, 378, 380, 381; NACC, 426; natural history, 378-9, 381; nomenclature, 374, 376
 Crookshank, Francis G, 186
 Croydon General Hospital, 192
 Cruveilhier, Jean, 276
 Cryosurgery, 321
 Cudmore, Sir Arthur Murray, 75, 493
 Cunningham, George, 307, 308, 309, 310
 Curling, Thomas Blizard, 121, 135
 Curtis, Miss Elizabeth Leach, 100, 491
 Cusack, James William, 138
 Cutait, Daher, 344
 Czerny, Vincenz, 252
- DHSS, *see* Health and Social Security, Department of
Daily Telegraph, 192, 291
 Dangerous Drugs Act, 400
 Darke, S G, 380
 Davey, W W, 241, 460
 Dawson, Lord, of Penn, 190
 Dawson, A M, 359, 480
 Dawson Report (1920), 190
 Daynes, Judge J Norman, 199, 200, 201, 208, 211, 216-17, 283, 286, 419
 De Dombal, F T, 369
 De la Rue, Messrs Thomas, 69
 De Tessier, Baron, 165
 Deacon, John, 19
 Deans of Postgraduate Studies, 213, 285, 295, 491
 Débridement, 192, 220
 Delorme, Edmond, 245
 Denman, Thomas, Lord, 18, 19
 Dent, Clinton, 163
 Depression (1930s), 196
 Dermatology, 337, 432
 Descending perineum syndrome, 330-1, 333, 334, 337
 'Deserving poor', 1, 3, 22, 49, 70
- Desfosses, L, 229
 Desmoid tumours, 348
 Devereux, Rev N J, 83
 Devine, H B, 266, 349, 363
 Devine's operation, 363-4
 Devonshire, Duke of, 73
 Dewar, Lord, 198
 Dickens, Charles, 33-4, 53, 95, 112
 Dickinson, Thomas, 42
 Diet, of patients, 86, 110, 111, 413, 419
 421: 19th cent, 79; Allingham snr on, 128, 137; cancer and, 248; diverticular disease and, 355-6; pruritus ani and, 143-4; Salmon on, 111; ulcerative colitis and, 274-5; *see also* Nutrition
 Digby, Lord (2nd Earl), 18, 19
 Dilatation: anal, for fissure, 141, 241, 242, 328, 329; for fistula, 233; for haemorrhoids, 118, 139
Diseases of the Colon and Rectum (formerly The Proctologist), 180
 Dispensary for Scrofula and Diseases of the Chest, London, 4
 Dispensaries, 3, 4, 6, 47, 56, 58
 Dispenser, 44, 80, 81, 215
 Disseminated polyps, 146, 268, 270; *see also* Polyposis
 District Management Team (DMT), 304, 306-7, 308, 311
 Dittel, Leopold, 136
 Diverticular disease (*formerly* Diverticulitis and Diverticulosis), 316, 318, 352-6
 Diverticulitis, 276-7, 278, 314, 352, 353-4, 355, 381: *continued as* Diverticular disease
 Diverticulosis, 276, 277, 352, 353, 354, 355: *continued as* Diverticular disease
 Dixon, C F, 339
 Dixon-Spain, J E, 198, 199
 Dobree, Bonamy, 32
 Docker, Sir Bernard, 213
 Dockerty, M B, 374
 Dodd, Harold, 196
 Domestic staff, 26, 206, 282: 19th cent servants, 97, 98, 101, 103, 104-5; 20th cent staff, 204, 205, 394, 407, 420-1; back pay, 215-16
 Donaldson, Malcolm, 263
 Double-contrast barium enema, 222, 316: *see also* Radiology
 Dove, Rev F J, 287, 420
 Dowling, B L, 371
 Drapers, Worshipful Company of, 32, 165
 Drasar, B S, 352
 Driscoll, A M, 329
 Drovers' Benevolent Institution, 69
 Drug trials, 360, 365, 366, 368, 373, 378, 380

INDEX

- Drummond, Hamilton, 180, 353, 494
 Duckworth, Sir Dyce, 162-3
 Duff, Lady Agnes, *see* Cooper, Lady Agnes
 Dukes, Cuthbert E, 194, 202, 223, 224, 315, 316, 421, 490, 491: appointed, biog details, 189; colostomy patients, 340, 364, 421-3; dean, 213; nurse training, 393, 398; research department, 283, 289; retired, 285
 Work on: cancer, 249, 260, 265, 342-3, 349-50, 352, staging, 255-9, 264, 278; diverticulitis, 277; familial polyposis, 268, 270, 345, 346-8; fissure, 278; fistula and anal glands, 229; injection of haemorrhoids, 238; ulcerative colitis, 362, 364-5, 368
 Dukes' staging (rectal cancer), 255-9, 264
 Duncan, Miriam, 141
 Dunwoody, Gwyneth, 311
 Dyers, Worshipful Company of, 38-9, 60, 160, 200
 Dysentery, 131, 157, 272, 274, 276
 Dysplasia-carcinoma sequence (*formerly* Adenoma-carcinoma sequence), 351
 E N, anonymous donor, 60
 'E N' ward, 60, 388
 Eade, William, 52
 Earle, S T, 235
 East London Association for Promoting Life Governorships of Hospitals, 68
 Eastman Dental Clinic (*later* Hospital), London, 280, 291
 Edinburgh, Duke of, 73
 Edward VII, 73, 75, 166, 168
 Edwards, D A W, 330
 Edwards, F C, 369
 Edwards, Frederick Swinford, 72, 75, 76, 164, 179, 191, 387, 490, 492: appointed, biog details, 73-4; President, British Proctological Society, 179; publications, 125, 227; recalled during First World War, 182, 183, 203; retired, 178; support for Furnivall, 162; use of sigmoidoscope, 221-2
 Work on: cancer, 152, 153, 251, 257, 422; fissure, 242; fistula, 135, 231-2; haemorrhoids, 137, 140, 235, 236, 237, 388; incontinence, 246; multiple polyps, 146, 268; polyps and benign tumours, 145-6; prolapse, 143, 245, 246; pruritus ani, 143, 244; stricture of the rectum, 158-9
 Edwards, Mrs Frederick Swinford, 173
 Edwards, H C, 353
 Eisenhammer, Stephen, 320, 322-3, 324, 327, 328, 496
 Electrical treatment for incontinence, 247
 Electrolysis treatment of stricture, 158-9
 Electromyography, 329, 330, 331, 332, 358
 Elkan, Nurse, 203
 Ellerby, Mr, 11, 15
 Ellison, R Kitching, 198, 199
 Emergency Medical Service, WW2, 201, 202, 205, 314
 Emergency Surgical Aid Committee, WW1, 182
 Endoscopy, 379, 380: *see also* Colonoscopy and Sigmoidoscope
 Endowment Fund, 44, 49, 284, 424
 Enemas, 116, 129, 222, 316-17: barium, 222, 286, 316, 317, 368, 370; retention, 366, 367: *see also* Radiology
 Enterocolitis, 376: *see also* Crohn's disease
 Enterocutaneous fistula, 382-3
 Enteroplasty, 155
 Enterotome, 266
 Epps, John, 15
 Erichsen, John, 135, 148
 Erysipelas, 67, 76, 108, 219: *see also* Hospital diseases
 Eugenics, 250: journal, 346
 Euston, Earl of, 165, 166
 Evans, Frankis T, 226, 491
Evening Standard, 307
 Ewart, W B, 365-6
 Examinations, rectal, *see* Rectum, examinations
 External haemorrhoids, 120, 137, 234, 238
 Extirpation of rectum, 151, 152, 251
 Eyers, Anthony A, 348, 501
 Faget, Jean, 151
 Fairbanks, Douglas jr, 199
 Fairland, Col E, 168
 Familial polyposis, *see* Polyposis, familial
 Farringdon General Dispensary, London, 52
 Fees, patient, 168-9, 170, 173-4, 413, 414, 416
 Festival dinners, 44, 52-3, 193
 Fibre, in diet, 355-6
 Fibrescope, 317
 Fibroma, 145, 146: multiple, 348
 Fibrous polyps, 145
 Fife, Duke of, 73
 Finance committee, 44, 52-4, 59, 62, 86, 98, 160
 Finances of hospital, 29, 30, 49, 52, 53, 59, 185, 187-8
 Finsbury Borough Council, 204
 Finsbury Square, as medical centre, 46, 52, 60, 180

ST MARK'S HOSPITAL, LONDON

- Finzi, Neville Samuel, 261
 Fischer, A W, 222
 Fisher, James and John, 33
 Fissure, 81, 108, 122, 125, 129, 130, 131, 159, 237: (1870-1900), 141-2; (1900-1948), 241-3; (1948-1985), 326-9; Brodie's sentinel pile, 141; dilatation, 142, 242, 328, 329; other diseases and, 144, 228, 271, 323, 375, 377; pecten band, 242-3, 278, 327, 328; sphincterotomy, 141, 242, 333, 338, 400, posterior, 327-8, lateral, 328-9
 Fistula, 109, 125, 129, 162, 383, 388, 412: (1760-1860), 122, 124; (1870-1900), 131-7; (1900-1948), 228-34; (1948-1985), 322-6; anal glands and, 229-30, 278, 322-3; anatomy and, 230-4, 319, 322; classifications, 132, 234, 324-6; Crohn's disease and, 322, 375, 377, 380; other diseases and, 115, 156, 237, 243, 271; patient numbers, 80, 81, 130, 131, 225; radium and, 262; tuberculosis and, 135-7, 228-9, 322
 Fistula Infirmary (*formerly* Infirmary for the Relief of the Poor Afflicted with Fistula and Other Diseases of the Rectum), 1, 2, 4, 12, 22, 25: Charterhouse Square, 29-38; City Road site, 38-9; expansion (1838-58), 29-48; governors, 22-3; officers, 23; St Andrew's Hospital, 35-7; *continued as* St Mark's Hospital for Fistula and Other Diseases of the Rectum
 Fletcher, Sir Walter Morley, 188
 Fliedner, Theodor, 96
 Flower, Cyril, 61
 Floyd, W F, 329
 Following-up patients, 349-51: cancer, 224, 227, 255, 257, 264, 266, 278, 283; Crohn's disease, 375; polyposis families, 270, 346-9; ulcerative colitis, 368-70, 372
 Forbes-Ross, F W, 170
 Ford, Rev F, 84
 Foster, George Holgate, 33, 42-3, 44, 60
 Foster, James, 33
 Foster, John, 33
 Foundling Hospital, London, 100
 Fournier ward, 194, 307-11, 393
 Fox, Freddie, 199
 Fox, J A, 317
 Fraser, Sir Francis, 213, 216, 289
 Fraser Gamble, Miss, 407
 Freemasons/freemasonry, 46, 52, 73-4, 161, 162, 173, 197, 199, 216
 Fuller, H W, 136
 Functional bowel disorders, 356-9
 Fund raising, 26-7, 30, 38, 49, 61, 62, 67, 69, 76, 85, 164-8, 174-5, 433: (1868-70), 59-60; re-building (1877), 65-6; appeal (1897), 160; (1920s), 192-3, 194; (1930s), 197, 199-200; (1950s), 288-9; (1970s), 305; advertising, 44, 50, 59, 69-70, 160, 193; appeals organiser, 199; building fund, 42-3, 67, 193; charity matinée, 166-8, 433; endowment fund, 44, 49, 424; festival dinners, 50, 59, 160, 164, 193; for chapel site, 183; from old patients, 417; Greyhound Balls, 194, 433; importance of 'cancer', 168, 174, 184, 185, 188, 189, 192, 193-4; legacies, 30, 42, 67, 69, 165, 184; Lockhart-Mummery proposals, 171; *see also* Fees, Paying patients *and* Private patients
 Furnivall, Frederick J, 162
 Furnivall, George Frederick, 162
 Furnivall, John James, 34, 490
 Furnivall, Percy, 164, 169, 170, 178, 179, 181, 490: appointed, biog details, 162-3; resignation, 172
 Furnivall, Mrs Percy, 169, 172
 Gabriel, William B, 208, 222, 283, 285, 288, 416, 490, 494: appointed, biog details, 187; publications, 227-8; retired, 285
 Work on: abscess, 228; cancer, 257, 264, 266, 267, 340, 343, and follow-up, 224, 225, 257, 278, and perineo-abdominal excision, 264-5, 339; colitis and proctitis, 275, 363-4; fissure, 243; fistula, 228-9, 234; haemorrhoids, 238, 239, 240, 241, 398; incontinence, 247; polyposis coli, 345-6; prolapse, 246, 334; pruritus ani, 244, 245; tuberculosis of the anus, 226
 Gangrene, 108, 220: *see also* Hospital diseases
 Gant, S G, 72
 Gardiner, R H, 357
 Gardner, C, 363, 481
 Gardner, E J, 348
 Gardner, H Bellamy, 171, 490
 Gardner's syndrome, 348
 Garton, Sir Richard, 188
 Gastro-camera, 317
 Gastroenterology, 288, 289, 292, 293, 295, 298, 301, 303, 314, 360, 384, 434
 Gastroenterologists, 288, 298, 304, 317, 359-60, 434
 Gastroenterostomy, 155
 Gastroscope, 317, 360
 General hospitals, 4, 24, 25, 28; nursing at, 97, 105; patients at, 85-6, 87; special hospitals and, 35, 43, 56, 90, 97, 430; specialism and, 47, 60, 294

INDEX

- General Nursing Council, 390, 393, 394, 396, 403, 405, 406, 408, 409: nursing process, 410
- General practitioners, 3, 8, 128, 190: opposition to hospital patient fees, 92, 169, 170, 414; opposition to special hospitals, 56–7, 90, 428, 430; referral system, 92, 185, 313
- Generic drugs, 196
- George V, 75
- George, David Lloyd, *see* Lloyd George, David
- Germ theory, 66, 107–8, 228, 248, 249
- Gibb, T Jones, 61
- Ginzburg, L, 373
- Girling Ball, Sir W, *see* Ball, Sir W Girling
- Gladstone, Steuart, 174, 175
- Golbacher, L, 244
- Goligher, John C, 425, 490, 496: appointed 215; resigned, 285
Work on: cancer, 267, 340, 342, 343; fissure, 327, 328; fistula, 324, 326; haemorrhoids, 321; incontinence, 329; ulcerative colitis, 363, 369, 370
- Goodsall, David Henry, 59–60, 74, 76, 89, 124, 164, 178, 490, 492: appointed, biog details, 60; instruments, 125; nurse training, 105; paying patients, 168, 169; private practice, 180; publications, 72, 125, 163, 227; retired, 170; support for Miles, 75, 162, 163
Work on: abscess, 228; anal anatomy, 230, 231; cancer, 155, 251, 252; fissure, 125, 142, 241–2; fistula, 125, 132, 135, 230, 231; haemorrhoids, 138, 235, 236; incontinence, 246; polyps, 125; prolapse, 245; pruritus ani, 243; stricture, 125; ulceration, 271
- Goodsall's rule, 132, 133, 135
- Gordon, P, 323, 324–6
- Gordon Hospital (*formerly* Western Hospital for Fistula, Piles ...), 70, 71, 90, 193, 204, 210, 212: appeal (1934), 198; development of specialty and, 187, 313, 431, 432; King's Fund and, 175; linked with Westminster, 216, 279; proposed amalgamation with St Mark's, 209, 211, 216, 281; rebuilt (1930s), 197, 198; rivalry with St Mark's, 197–8, 278, 383, 401; surgeons at, 163, 255, 343, 364
- Gordon-Watson, Sir Charles, 170, 174, 176, 177, 178, 191, 197, 220, 226, 490: appointed, biog details, 172–3; British Empire Cancer Campaign, 188, 189; British Proctological Society, 179; colostomy nurses, 340; colostomy patients, 413; operating clothing, 219; private practice, 181; publications, 200; resignation, 196; specialisation, 185–6; state control, 279; WW1, 181–2, 185–6, 219–20
Work on: cancer, 255, 260, 268, 277, 339, and radium, 261–4; diverticulitis, 277; fistula, 229, 233, 322; haemorrhoids, 239; polyposis coli, 268; prolapse, 246
- Governors of hospital, 41, 52, 53–4, 86, 108: class and behaviour of patients and, 82, 90, 92; family and business links, 32–3; lay control, 13, 14, 22; rights and privileges, 11, 22–4, 25, 46, 47, 51; St Andrew's Hospital and, 35–7; vice-presidents of hospital, 18, 23, 24, 25; *see also* Benefactors and Officers of Fistula Infirmary
- Gowlland, Peter Yeames, 52, 58, 59, 60, 62, 64, 70, 71, 120, 124, 490: appointed, biog details, 46, 47, 48; infection and ventilation, 64, 66; instruments, 125; private practice, 50, 180; publications, 125; retired, 73, 89; Samaritan Fund, 87
Work on: haemorrhoids, 138; 'prolapse', 144–5; rectal polyps, 145
- Gowlland, Rose, 87, 88, 89
- Graser, E, 276
- Gray, Basil K, 378, 499
- Great Northern Hospital, London, 52, 74
- Greene, W H Clayton, 176
- Grey Turner, George, *see* Turner, George Grey
- Greyhound Balls, 194, 433
- Grogono, J L, 380, 500
- Grosvenor Hospital for Officers, London, 161
- Grosvenor Place School of Medicine, 46
- Guardian*, on publicity campaign, 310
- Gull, Sir William, 72
- Gurney family, 19
- Gussenbauer, Carl, 154
- Guy's Hospital, London, 4: nurses training at, 389
- Habershon, Samuel Osborne, 276
- Hackney Hospital, London, 304, 307, 409
- Haemorrhage, 117: in pile operations, 118, 121, 238–9; methods of stemming, 119, 122, 124, 139, 151
- Haemorrhoids, 142, 159, 319, 388, 412, 430: (1800–1860), 118–19, 120–2; (1870–1900), 137–40; (1900–1948), 234–41; (1948–85), 320–2; banding, 321, 322; clamp and cautery, 138, 139, 140, 236, 237, 239; crushing, 138–9,

ST MARK'S HOSPITAL, LONDON

- 140, 236; cryosurgery, 321; dilatation, 118, 139; injection, 137, 139-40, 235, 237-8, 278, 320, 321, 322, 399-400; ligature, 118, 119, 121; ligature and excision, 120-2, 137-8, 140, 234, 235, 237, 239, 240-1, 320-1, 322; other diseases and, 115, 144, 145, 146, 147, 228, 243; patient numbers, 80, 81, 130, 131, 225; simple excision, 118, 119, 139, 140; Whitehead's procedure, 139, 236, 237, 239
- Haenisch, F, 222
- Haigh, Mrs Constance L, 89
- Hale White, William, *see* White, W Hale
- Hall, Miss Emily, 387, 390, 394, 398, 491
- Hall, Francis de Havilland, 72, 162, 164, 490
- Halsted, William, 218, 219, 268
- Hamilton, Duke of, 52, 73
- Hamilton, Miss (almoner), 415, 416
- Hammersmith Hospital, London, 280, 281, 286: St Mark's linked with, 212, 213, 214, 216; under NHS, 281, 282, 283, 284, 287-8, 290, 292, 300, 421, 434; link relinquished, 301, 303, 408; nurses from, 403, 405, 406; Postgraduate Medical School, 209, 294, 302
- Hampstead General Hospital, London, 205
- Hampstead site (1879), 63, 66
- Handley, Sampson, 262
- Hanes, Granville Scott, 244
- Harben, W H, 31
- Hardcastle, Jack D, 323, 324-6, 330-1, 500
- Hardwicke, Miss, 387, 491
- Harewood, Earl of, 199, 200
- Harewood, Second Earl of, *see* Lascelles, Henry
- Harley Street area, as medical centre, 180-1
- Harman, Edward, H and Jeremiah, 33
- Hartmann's operation, 260, 266
- Harvey, John Martin, 168
- Hasler, J K, 193, 220-1, 491
- Hastings, Miss, 99, 100, 491
- Hastings, Somerville, 281, 287
- Hawley, Peter R, 299, 326, 328, 335, 358, 359, 371, 382-3, 469, 490, 491, 499
- Hayes, Thomas, 30, 492
- Heald, R J, 344
- Health and Social Security, Department of (*formerly* Ministry of Health), 303, 304, 307
- Hegarty, J E, 359
- Henderson, Norman P, 190, 203, 222, 223, 286, 316, 353, 490
- Henry, Michael M, 319-20, 333, 334, 491
- Hepper, Mrs, 105-6, 387, 491
- Hermann, G, 229
- Hetherington Committee, 205
- Hilder, W, 370
- Hill, M J, 352, 490
- Hill, M R, 322
- Hinton, John M, 358, 368, 502
- Hirschowitz, Basil, 317
- Hirschsprung's disease, 357, 358
- Histopathology, 223, 315, 316; *see also* Pathology
- Hoare family, 19
- Hoare's Bank, 19
- Holgate Foster, George, *see* Foster, George
- Holgate
- Holgate Foster ward, 60, 64, 194, 393, 417
- Holism, 16, 107, 110-12
- Holmes, Timothy, 136, 151
- Home sister, 391, 393, 396
- Hook, Miss Helen, 397, 404
- Hooper, Alderman J K, 36
- Hope, Charles W M, 176
- Hopkins, H H, 317
- Horder, P Morley, 198
- Horder, Sir Thomas (later Lord), 188, 189, 273
- Horder Committee (1940s), 408
- Hospital administrators, 491-2: *see also* Secretaries, hospital
- Hospital Building Programme* (1966 White Paper), 297
- Hospital diseases, 63-4, 66, 67, 76, 108, 138, 140, 219, 220
- Hospital for Consumptives, London, 34
- Hospital for Cure of Deformities, London, 4
- Hospitals for Diseases of the Chest, *see* Brompton Hospital *and* London Chest Hospital
- Hospital for Nervous Diseases, Maida Vale, London, 280
- Hospital for Sick Children, London, 280, 290, 430
- Hospital for Tropical Diseases, London, 197
- Hospital Saturday Fund, 67, 68
- Hospital Savings Association, 191, 433
- Hospital Sunday Fund, 61, 67, 68
- Hospital visitors, 61, 64, 84, 94
- House Committee, 62, 84, 98, 100, 105-6, 171: in NHS, 281-2, 283, 284, 297, 402-3
- House surgeons (*formerly* Surgeon's assistant), 6, 30, 46, 59, 86, 120, 161, 196, 493-501: 1890s, 75; becoming assistant surgeon, 60, 73, 187; female,

INDEX

- 181; 'only European candidate', 181;
operations performed by, 177; *see also*
individual surgeons
- Housekeeping, 26, 396, 407: *see also*
Domestic staff *and* Matrons
- Howell, John, 21, 23, 30, 34
- Hughes, Sir Edward S R, 329, 334, 342,
497
- Humoralism, 107, 110, 112
- Hurst, Sir Arthur, 272, 275
- Hyde, Eva, 392, 400
- Idiopathic proctitis, 365, 367, 370: *see also*
Ulcerative Colitis
- Ileitis and Colitis Foundation (USA), 426
- Ileoanal anastomosis, 348, 372, 373
- Ileocolitis, 376: *see also* Crohn's disease
- Ileorectal anastomosis: *see* Colectomy and
ileorectal anastomosis
- Ileostomy, 275, 276, 363, 365, 378, 380:
'anal', 348; appliances, 361, 362, 364,
423-4; Brooke, 362, 363, 373, 423-4;
continent, 349, 372; patients and, 346,
347, 364, 371, 423-5; stoma care,
409
- Ileostomy Association, 371, 425, 426
- Illustrated London News*, 39, 59, 85
- Immunosuppressive drugs, 380, 381
- Impaction of faeces, 131, 144
- Imperforate anus, 94, 148
- Imperial Cancer Research Fund (ICRF),
188, 189, 311: colo-rectal cancer unit,
311-12, 316
- Incontinence, 125, 130, 383:
(1900-1948), 246-7; (1948-1985),
329-34; anatomy and physiology of, 247,
329-34; avoidance of, 135, 142, 230,
242; childbirth and, 331, 332, 333-4;
iatrogenic, 139, 152, 247, 260, 328, 329,
331, 333, 334, *see also* fistula; postanal
repair, 331, 332, 333; prolapse and, 332,
335, 336
- Independent Television (ITV), 308
- Industrial Revolution, 1, 19, 428
- Infants' Hospital, London, 279
- Infection, 40, 63, 64, 66, 67
- Infirmery for Haemorrhoids, Fistula and
Other Diseases of the Rectum, New
York, 72: *continued as* St Paul's Infirmery
- Infirmery for the Relief of the Poor
Afflicted with Fistula and Other Diseases
of the Rectum (*formerly* Benevolent
Dispensary for the . . .), 15, 22; *continued*
as Fistula Infirmery
- Inflammatory bowel disease, 313, 316-17,
318, 338, 359-84, 420: Crohn's disease,
373-83; ulcerative colitis, 360-73
- Infra-red coagulation of haemorrhoids, 321
- Injection: of anaesthetics, 220-1; of
haemorrhoids, 137, 139-40, 235, 237,
278, 320, 321, 322, 399-400
- Inpatients: *see* Patients
- Inquest of Broad Street, The, 20
- Institute of Basic Medical Sciences, 280
- Institute of Cancer Research, 280, 292,
434
- Institute of Cardiology, 280, 291, 292
- Institute of Child Health, 280
- Institute of Dental Surgery, 280
- Institute of Dermatology, 280
- Institute of Diseases of the Chest, 280, 292,
295
- Institute of Laryngology and Otology, 280
- Institute of Neurology, 280
- Institute of Obstetrics and Gynaecology,
280
- Institute of Ophthalmology, 280, 291
- Institute of Orthopaedics, 280, 291
- Institute of Psychiatry, 280
- Institute of Urology, 280, 292, 301
- Instrument makers, 10, 16, 20, 21, 30
- Instruments, 125, 126-7, 129, 130, 219,
221-2, 226, 266-7: sterilisation, 108,
218; *see also under individual instruments*
- Insurance, 190, 191, 420, 429: Beveridge
Report, 209
- Intercurrent mortality rate, 258
- Intersphincteric excision, 371
- Intersphincteric plane, 322-3, 324, 325,
326
- Intestinal stasis: *see* Constipation
- Irritable bowel syndrome, 359
- Islington Dispensary, London, 46
- Intussusception, 143, 144
- Ivalon sponge, 335
- Jackson, T Carr, 72
- James, Richard, 61
- James, Miss T, 397, 398, 399, 404
- Jass, Jeremy R, 312, 490
- Jeannel, D, 245
- Jell, Miss J M, 405, 406-7, 408, 491
- Jenkin, Patrick, 311
- John of Arderne, 122
- Joint Board of Clinical Nursing Studies,
409
- Joll, Cecil A, 201
- Jones, Edward, 32
- Jones, Rev Evan, 82
- Jones, Sir Francis Avery, 283, 286, 308,
490: appointed, 288; future of hospital,
305-6; gastroenterology at St Mark's,
293, 298, 360; institute of
gastroenterology, 292, 293, 301, 303;

- and sigmoidoscope, 317; *Times* correspondence, 310; and Todd Commission, 301
 Work on: diverticular disease, 355; ulcerative colitis, 364, 365, 366, 367, 368
- Jones, G A, 171, 182, 490
 Jones, J Howel, 367, 378
 Jones, John, 19
 Jones, Dame Katherine, 283
 Jones, Lionel Evan, 240-1, 496
 Jones, Loyd and Co, 19
 Joshi, M K, 181, 494
 Judd, E S, 374
- Keetley, Charles Robert Bell, 271
 Keilin, Anna, 181, 494
 Keith, Sir Arthur, 353
 Kelly, Howard, 221
 Kelly, Thomas, 47
 Kelsey, Charles Boyd, 72
 Kensington and Chelsea Borough Council, 296, 298
 King Edward VII Hospital for Officers, London, 170, 197
 King Edward's Hospital Fund for London, *see* King's Fund
 King's College Hospital, London, 4, 17, 96
 King's Fund, 76-7, 165, 194, 306, 419:
 almoners and, 415; Cave Committee and, 190; chapel site purchase and, 183; expansions, approval of, 191-2, 197; Gordon Hospital and, 175, 198; grants, 199, 225, 305; NHS and, 208, 209, 213; radium and, 195, 202; St Mark's name change and, 175-6; visitors, 174-5, 191, 196, 287; voluntary hospital campaign and, 193, 207; Voluntary Hospital Committee for London, 201
 Kingsley, Charles, 162
 Kingsmead Old People's Home, 291, 296, 297, 298
 Kirschner, Martin, 266
 Klein, Emanuel, 76, 108
 Klugman, J D, 335-6
 Knof, Nurse, 203
 Koch, Robert, 107, 218
 Kocher, Theodor, 153
 Kock, N G, 349, 372
 Kock's pouch, 349, 372
 Koenig-Rutzen bag, 362, 423
 Konishi, F, 351
 Kraske, P, 153, 176, 251
 Kraske's operation, 153, 176, 251, 260
- Ladies' Association, 424
 Ladies' Committee, 205, 413, 415, 416
 Ladies' Visiting Committee, 88, 89
- Lahey, Frank Howard, 343
 Laking, Francis, 70
 Lampson, Godfrey Locker, 188
Lancet, *The*, 12, 13, 15, 44, 73: Chelsea Scheme and, 291, 297; colostomy patients and, 422; fistula classification, 326; Pickering Report, 294; Salmon obituary, 9, 54-5
 Landois, Leonhard, 224
 Landsteiner, Karl, 224
 Lane, J Ernest, 176
 Lane, James Robert, 47, 48, 50, 51, 64, 80, 120, 176, 490: appointed, biog details, 46; publications, 125; resignation, 55, 57
 Work on: fissure and polypoid growths, 141; haemorrhoids, 137; polypus recti, 145; ulceration of the rectum, 157
 Lanc, R H S, 344
 Lane, Samuel Armstrong, 46
 Lane, William Arbuthnot, 189, 248, 255
 aseptic precautions, 219; constipation, 356, 359
 Lange, F, 245
 Langslow, Brian, 295, 296, 297
 Langtry, Lillie, 166-8
 Lariboisière Hospital, Paris, 63
 Lascelles, Henry (2nd Earl of Harewood), 18, 19
 Laurell, Hugo, 222
 Lawrence, William, 9
 Le Souëf, Leslie, 197, 495
 Leacock, A G, 327, 498
 Leared, Arthur, 72, 124, 490
 Lee, E C G, 371
 Lec, Henry, 138
 Leicester, R J, 321, 371
 Leiter's panelectroscope, 221
 Lembert, Antoine, 154
 Lembert's suture, 154, 156
 Lennard-Jones, John E, 301, 303, 469, 490: appointed, 298, 360; NACC and, 426; parenteral nutrition unit and, 382
 Work on: Crohn's disease, 378, 379, 380, 381, 382-3; functional bowel disorders, 358, 359; ulcerative colitis, 365, 366, 367, 370, 372, 373
 Lettsom, Joseph, 10
 Levator ani: *see* Anatomy, anorectal
 Lewis, Arthur, 309
 Lewis, Barry, 315, 490
 Library, patients', 84, 85
 Liddiard, Miss C H, 307, 407, 491
 Life expectancy, 19th century, 79
 Ligature of haemorrhoids, 118, 119, 121, 321: and excision, 120-2, 137-8, 140,

INDEX

- 234, 235, 237, 239, 240-1, 320-1, 322
- Lisfranc, Jacques, 151
- List of Subscribers, 20, 25, 26, 29, 30, 31:
continued as Annual Reports
- Lister, Joseph, 108, 109, 134, 152, 218-19,
249: removes Lockhart-Mummery's leg,
170
- Liston, Robin, 307
- Lithotomy-Trendelenburg position,
266-7, 339
- Littledale, Joseph, 19
- Littre, Alexis, 148
- Llewelyn-Davies Weeks, 296
- Lloyd, Lenobia, 398
- Lloyd, Rickard W, 161, 171, 490
- Lloyd-Davies, Oswald V, 205, 214, 215,
288, 490, 495: appointed, biog details,
201; Bevan as patient, 212; instruments,
226, 266, 317; and lithotomy-
Trendelenburg position, 266-7
Work on: cancer, 266-7, 339, 340-2;
diverticulitis, 353; prolapse, 334; solitary
ulcer syndrome, 336
- Lloyd-Davies' sigmoidoscope, 226, 266, 317
- Lloyd George, David, 190, 420
- Local Government Act (1929), 195, 196
- Lock, M Russell, 329, 501
- Lock Hospital, London, 4, 50, 52, 57, 157
- Locker Lampson, Godfrey, *see* Lampson,
Godfrey Locker
- Lockhart, William, 170
- Lockhart-Mummery, Sir Hugh Evelyn:
467, 490, 497; appointed, 285, 286;
ileostomy patients and, 364, 424-5;
retired, 311
Work on: cancer, 344, 350, 369;
Crohn's disease, 374, 375-6, 377-8,
379, 380; fissure, 328; ulcerative colitis,
364-5, 369, 374, 375, 376, 379
- Lockhart-Mummery, John Percy, 169, 171,
173, 178, 179, 181, 182, 186, 207, 223,
224, 285, 416, 490: antisepsis, asepsis
and, 76, 219; appointed, biog details,
170-1; British Empire Cancer Campaign,
188-9; British Proctological Society,
179; clinical assistants, 176, 177; fund
raising, 174, 183, 185, 188-9, 191, 194;
patients, 192, 193, 199, 422; pathology
department, 182, 189; private practice,
181, 192; publications, 200, 227;
retirement, 187, 200-1, 203;
sigmoidoscope and, 221, 222; x-rays and,
222
Work on: anal anatomy, 230, 232;
cancer, 249-50, 255, 256, 257, 263, 267,
268, 338, 339; perineal excision, 250,
252, 254-5, 259, 260, 261, 265, 267;
diverticulitis, 276, 277, 278; fissure, 242,
243; fistula, 228, 229-30, 322;
haemorrhoids, 235, 236, 239-40;
incontinence, 247; polyposis coli,
268-70; prolapse, 245-6; pruritus ani,
244, 337; ulcerative colitis, 272, 273,
274-5, 276, 361
- Lockhart-Mummery ward, 283, 286
- Lockwood, C B, 163
- Loeb, Jacques, 249
- London, 2, 3, 4, 6, 8, 12, 63, 78-9, 428: *see*
also City of London
- London, Bishop of, hospital fund of, 32,
35, 61
- London Chest Hospital, 401, 480
- London County Council, 296: ambulance
service, 207; hospitals, 195, 213, 281
- London Hospital, The, 4, 46, 50, 119, 135,
163, 215, 303: proposed link with St
Mark's, 301-2; Samaritan Society, 87
- London Jewish Hospital, 308
- London Post-Graduate Medical
Association, 176, 192
- London Tavern, 24, 35-6
- London Temperance Hospital, 393:
continued as National Temperance
Hospital
- Longmore, A J, 366
- Lord Mayor of London, 36, 39, 40, 53, 160,
179, 199, 206: first president, 17, 18, 23,
31; non-cooperative, 65; patron under
NHS, 216, 283; *see also* Annual General
Meetings and Copeland, William Taylor
- Loyd, Lewis, 19
- Lucas, Constance, 400
- Lymph glands and lymphatic spread of
cancer, 151, 152-3, 251, 254, 262-3,
339, 341, 362: Dukes' staging, 256-8,
265; Miles' zones of spread, 252, 253,
259, 260, 266, 343
- Lyttle, John A, 371, 501
- McDonald, P, 329
- McIntyre, Peter B, 382-3, 502
- Mackie, Norman, 316
- Macleay, Lt Gen Sir Henry, 19
- McMichael, Sir John, 300
- McPartlin, J F, 331
- Madigan, Michael R, 336-7, 499
- Magee, H Reginald, 328, 499
- Maingot, Rodney, 192
- Malmö method, 316, 317: *see also*
Radiology
- Management Committee, *see* Committee of
Management
- Mann, C V, 299, 301, 321, 336, 344, 379,
469, 490, 491

- Manvers, Earl of, 32
 Marks, Christopher G, 380, 501
 Marshall, Mrs Peggy, 98, 486, 491
 Martin, Mrs Mary F, 85, 89
 Martin, Sir Richard Biddulph, 82-3, 160, 168, 170, 183
 Mary, Princess Royal, 199, 200, 394
 Masterman, John, 18, 19, 34, 36
 Masterman, Peters, Mildred and Co (bank), 18
 Mathews, Joseph M, 72, 140, 180, 237
 Matrons, 26, 54, 82, 83, 86, 105, 205, 395, 419, 491: 19th cent, 97-101; 20th cent, 387, 394, 398, 399, 401, 405, 407; as housekeeper, 96, 97, 98, 100; NHS and, 282, 402-3; nurse training and registration, and, 106, 385, 390, 393, 396-7; salary, 98-9, 387; Samaritan Fund and, 89; *continued as* Senior Nursing Officer
 Maudsley Hospital, London, 280, 291
 Maunsell, H W, 339
 May, R E, 371
 Mayer, Joseph, 21
 Mayo, C W, 267, 343
 Mayo Clinic, 243, 353
 Mayo Robson, A W, *see* Robson, A W
 Mayo
 Mayo Robson's bobbin, 154, 156, 251
 Meade, T W, 352
 Medical Act (1858), 386
 Medical clinic, the, 288, 298, 359, 360, 367
 Medical Committee, 206: almoner recommended, 416; assistant surgeon recommended, 215; British Postgraduate Medical Federation and, 216; Dukes becomes member, 194; management committee and, 210-11, 215; NHS and, 282, 284; nursing and, 205, 393, 397, 401, 405; second RSO recommended, 194; Todd Commission, 301-2; urges boost to teaching, 213; urges enlargement, 209-10, 211; x-ray department recommended, 190
 Medical education: Todd Report, 300; *see also* Postgraduate teaching
 Medical (gastroenterological) research unit, 293, 300, 302
Medical Press and Circular, 144
 Medical profession, 3, 163, 168: opposition to NHS, 207; organisation, 7, 10, 13; professionalisation, 2, 13, 14, 22, 51, 386, 430; specialisation and, 6, 16, 31-2, 43, 47-8, 60, 75, 109, 159, 430; World Wars, effect of, 185-6, 201
 Medical registrars, 360, 502
 Medical Research Committee, 188: *continued as* Medical Research Council
 Medical Research Council (*formerly* Committee), 188, 189: drug trials, 365, 368; following-up patients, 224, 255, 283; radium from, 195
 Medical social worker, 426
 Medical Society of London, 10, 12, 13, 60, 136-7
Medical Times and Gazette, 44, 120-2
 Megabowel, 357, 358
 Melzak, J, 330, 335
 Merchant Taylors' Company, 88
 Merke, H, 218
 Merriman, Mrs Ellen C, 89, 415
 Merriman, Mark, 89, 160, 177, 200, 289, 414
 Merriman, Mrs Primrose, 289
 Merriman, Samuel B, 21, 34, 37, 38, 60, 72, 89, 160
 Merriman, Thomas, 160, 168, 169, 177
 Metropolitan Asylums Board, 68
 Metropolitan Dispensary, London, 72
 Metropolitan Hospital, London, 60, 161, 162, 173, 178, 219: closure, 308, 309, 310
 Metropolitan Institution for Diseases of the Ear, Throat and Vocal Organs, London, 4
 Metropolitan Regional Hospitals Boards, 290
 Miasmatic theory of disease, 64, 107
 Microscopy, 145, 146, 147, 256; *see also* Biopsy *and* Pathology
 Middlesex Hospital, The, 4, 119, 173, 187, 189, 201, 263, 319
 Midwives Act (1902), 386
 Mildmay Mission Hospital, London, 178
 Miles, W Ernest, 75, 180, 189, 432, 493: application to St Mark's, 162, 163, 170; publications, 125, 227
 Work on: abscess, 228; anal anatomy, 230, 231; cancer, 250, 251, 252-4, 255, 259, 260, 261, 265-6, 339, 340, 343; fissure, 241, 242, 243, 278, 327-8; fistula, 230, 231; haemorrhoids, 235, 236, 239-40, 321; incontinence, 246; prolapse, 245, 246; pruritus ani, 243; ulceration of the rectum, 271
 Miller, Miss Reay, 206, 214, 225, 421
 Miller, G G, 363
 Milligan, Edward Thomas Campbell, 187, 197, 201, 208, 211, 490: appointed, biog details, 192-3; appointment extended, 214; retired, 285
 Work on: anal anatomy, 233-4, 240-1, 247, 319, 327, 329; cancer, 340, 341; débridement, 192, 220; fissure, 243, 327; fistula, 233, 234, 324; haemorrhoids, 240-1, 320, 321; granular

INDEX

- proctitis and ulcerative proctocolitis, 274
 Ministry of Health, 201, 202, 203, 204, 205, 206, 207, 216, 290, 302: Chelsea Scheme and, 290-8, 300, 303; establishment, 190; hospital survey, 211, 213; NHS and, 282, 284, 286; nursing and, 403; *continued as* Health and Social Security, Department of
 Ministry of Labour, 205, 206
 Misiewicz, J J, 367
 Mitchell, Arthur Brownlow, 235
 Mitchell, Milton, 140
 Mocatta, Mrs Edgar L de M, 194
 Montagu, Lord Charles, 165
 Montefiore, Sir Moses, 32
 Moolgavkar, S R, 181, 494
 Moore, Norman, 175
 Moorfields Hospital, London, 4, 280, 291: *see also* Royal London Ophthalmic Hospital
 Moral Rearmament Movement, 193
 Morbid anatomy, *see* Pathology
 Morgan, John, 140
 Morgan, Sir Clifford Naunton, 203, 224, 286, 288, 289, 360, 393, 490, 495: appointed, biog details, 196-7; retired, 299
 Work on: anal anatomy, 233-4, 240-1, 319, 327, 329; cancer, 257-8, 339, 340, 341, 343; diverticulitis, 353; fissure, 327-8; fistula, 233-4, 324; haemorrhoids, 240-1, 320, 321; incontinence, 247, 329; prolapse, 335-6; pruritus ani, 244-5
 Morley, A S, 182, 187, 238
 Morley Fletcher, Sir Walter, *see* Fletcher, Sir Walter Morley
 Morson, Basil C, 223, 289, 290, 302, 307, 308, 315, 490, 491: appointed, 285
 Work on: cancer, 350, 352, 372-3; Crohn's disease, 369, 375-7, 378, 379; diverticular disease, 354, 355, 356; fistula and abscess, 323; pre-cancer, 350-1, 368-9, 372-3; solitary ulcer syndrome, 336-7; ulcerative colitis, 368-9, 372-3
 Morton, Sir Desmond, 287, 290, 405
 Motson, R W, 331
 Moulouquet, 153
 Moxon, W, 271
 Moyle, Roland, 307, 310
 Multiple polyps, 146, 259, 268, 270; *see also* Polyposis
 Mummery, J Howard, 170
 Mummery, Percy Lockhart, *see* Lockhart-Mummery, J Percy
 Municipal Infirmarys, 195, 383, 395, 396, 420, 426
 Murphy's buttons, 154, 251
 Museum, pathology, 66
 Muto, Tetsuichiro, 318, 351
 National Association for Colitis and Crohn's Disease (NACC), 426
 National Blood Transfusion Service, 314
 National Health Service, 279-312, 313, 433-4; 'Appointed Day', 214, 217; Dawson Report (1920), 190; medical practice and, 314; nurses and, 401, 402; patients and, 412, 420-1; proposed, 207-14; reorganisation (1974), 304, 312; surgeons and, 279, 284-5
 National Health Service Act (1946), 281, 283
 National Heart Hospital, London, 280, 291
 National Hospital for Diseases of the Heart, London, 208; *continued as* National Heart Hospital
 National Hospitals for Nervous Diseases, *see* National Hospital for Paralysis and Epilepsy, Queen Square, *and* Hospital for Nervous Diseases, Maida Vale
 National Hospital for Paralysis and Epilepsy, Queen Square, London, 57, 208, 280, 288, 290, 430
 National Institution for Diseases of the Skin, London, 58
 National Insurance Act (1911), 420
 National Radium Commission, 225
 National Society for Cancer Relief, 421, 424
 National Spinal Injuries Centre, Stoke Mandeville, 335
 National Temperance Hospital, London (*formerly* London Temperance Hospital), 207, 403
 Naunton Morgan, Clifford, *see* Morgan, Clifford Naunton
 Neill, M E, 332, 336
 Neilson-Terry, Miss Phyllis, 199
 Netley Hospital, Hampshire, 63
 Neuman, H W, 374
 Newell, A C, 365, 367
 Nicholls, R John, 311, 321, 329, 344, 349, 372, 470, 490, 501
 Nichols, Beverley, 200
 Nightingale, Florence, 95, 96-7, 100, 103, 386, 391-2, 410
 Nightingale Training School, 96, 97, 102-3, 391, 393
 Norbury, Sir Henry, 178
 Norbury, Lionel, 173, 179, 182, 186, 192, 204-5, 239, 418, 490: appointed, biog details, 178; retired 206-7
 Work on: fistula, 233; prolapse, 246; ulcerative colitis, 274, 275

ST MARK'S HOSPITAL, LONDON

- Norfolk, Duke of, 165
 Norfolk and Norwich Hospital, 52, 172
 Norman, George, 8
 Norman, James, 8
 North East Hospital for Children, Hackney, London, 170
 North East Thames Regional Health Authority, 304
 North London Infirmary for Diseases of the Eye, 6
 North Staffordshire Infirmary, 17
 North Western Fever Hospital, London, 205
 Northover, John M A, 311, 470, 490, 502
 Northwick Park Hospital, London, 352
 Norton, Arthur Trehern, 51
 Nurses and Nursing, 76, 81, 82, 84, 94, 191, 198, 294: 19th cent, 95-106; 20th cent, 385-411; agency, 203, 395, 403, 406, 407-8; domestic tasks, 19th cent: 101, 103, 106, 20th cent: 388, 394, 396, 397, 398, 399, 400, 401, 406, 407, 411; foreign, 203, 403, 404; night, 98, 102, 103, 399; recruitment, 105, 385, 389, 391, 394, 395, 405; registration, 385, 386, 389, 390, 394; shortages in WW2, 203, 204, 205; sisters, 105; specialisation, 340, 382, 409-10; training, 19th cent: 96-7, 100, 102, 105-6, 20th cent: 207, 386, 389, 390, 391, 392-3, 395, 400, 401, 403, 405, 407, 408, 411; under and upper nurses, 26, 30, 101; uniforms, 97, 103, 106, 107; wages, 19th cent: 30, 95, 101-2, 103, 104, 105, 20th cent: 183, 204, 205, 385, 390, 394, 395, 397-8, 402, 403; Women's Voluntary Aid Detachment, 182-3; *see also* Probationers
 Nurses' Act (1943), 396
 Nurses' Cooperative Association, 395
 Nurses' home, 193, 226, 305, 393, 396, 401, 405, 408, 419: 1922 proposal, 192; 1933 proposals, 197; bomb damage, 206; opened (1938), 200, 394, 395; Pickard Street, 199
 Nurses' Registration Act (1919), 390
 Nursing committee, 282
 Nursing process, 410-11
 NUPE strike, 307
 Nutrition: in Crohn's disease, 360, 378, 379, 381-2, 383; in ulcerative colitis, 364; *see also* Parenteral nutrition
 Oakley, William, 64-5, 75
 O'Beirne, James, 15, 114, 116
 O'Connell, Daniel, 17
 Officer, Robert, 240-1, 399, 496
 Officers of Fistula Infirmary, 23, 34, 41; *see also* Presidents, Secretaries, and Treasurers
 Ogden, Mr, 34
 Old Patients' Association, 417
 Olive, Jeremiah, 42
 Ommanney, Sir Francis, 19, 32
 Operating theatre, 197, 198, 204, 206, 209, 218, 219, 225-6: clothing, 218-19; lighting, 183; nurses, 388, 393; positions, 121, 150, 266-7, 339; second, 200; table, 29; visitors, 191
 Oppenheimer, G D, 373
 Ord, William, 72
 Outpatients, 22, 52, 58-9, 79-80, 171, 414: attendances, 286, 287, 418, 419, 420; fees, 46, 168-9, 170, 173-4, 414; preached to, 83; seen by full surgeons, 164, 177
 Outpatients' Department, 90, 191, 196, 197, 200, 238, 317: in WW2, 202, 204; nurses in, 393, 397, 399-400
 Outram, Sir Benjamin, 44
 Ovariectomy, 109, 430
 Owden, Thomas, 65
 Owen, Miss E H, 99, 491
 Oxford, Rev Dr Arnold Rice, 161, 175-6, 196, 199, 200, 201, 417: BECC council member, 189; cancer research committee, 223; died, 216; fund-raising sub-committee, 174; resigned, 201
 Oxford Group, 192; *see also* Moral Rearmament Movement
 Paget, Sir James, 72
 Painter, N S, 355-6
 Palmer, Mrs Mary Ann, 99, 100, 102-4, 105, 488, 491
 Pang, L S C, 368-9
 Parenteral nutrition, 382, 383, 398, 409-10
 Parenteral nutrition unit, 305, 382, 409-10
 Park, David Roy Balfour, 200, 283
 Parker, Richard, 297
 Parks, Sir Alan Guyatt, 301, 467, 490: appointed, 286; Chelsea Scheme, 295, 296; death, 311; physiology department, 319; physiology unit, 320; surgical research unit, 293
 Work on: anorectal anatomy and physiology, 320, 323, 330, 332, 333, 335, 336, 337; cancer, 344; Crohn's disease, 380; familial polyposis, 349; fissure, 328; fistula and abscess, 323, 324-6; haemorrhoids, 320-1;

INDEX

- incontinence, 330–3, 335; prolapse, 335, 336; ulcerative colitis, 371, 372
- Parks, T George, 353, 500
- Parochial charities of St Giles, Cripplegate, 68
- Parr, Rev N C, 83
- Pasteur, Louis, 107, 249
- Patey, D H, 362
- Pathology, 107, 109, 112, 113, 130, 145, 173, 178, 313, 367
- Pathology department, 171–2, 177, 182, 189, 191, 194, 223–4, 226, 278, 315, 316, 405: *see also* Dukes, Cuthbert E *and* Morson, Basil C
- Patients, 25, 28, 186, 307, 388: 19th cent: 29, 31, 78–94; 20th cent: 412–27; admission procedure, 22, 81; age range, 93–4; at AGM, 417, 418, 419; cancer, 81, 88, 130, 261–2, 263, 420; census data, 486–9; colostomy, 89, 339–40, 364, 413, 415, 418, 421–3, 424; daily routine, 84, 104; diet, 79, 86, 413, 419, 421; difference between hospital and private patients, 131, 140, 157; discipline in hospital, 26, 82, 414; ileostomy, 364, 423–5; length of stay, 86–7; nursing other patients, 84, 124; nursing process and, 410; parenteral nutrition, 382; polyposis, 347–8; Salmon's, 119–20; sexual ratio, 92–3, 416; social origins, 19th cent: 26, 36, 78–9, 90–2, 94, 20th cent: 165, 185, 190, 289, 306, 412–14, 415–17, 418, 420, 422–3, 425, 426, 432; suicide among, 204; types of diseases, 80–1, 130; ulcerative colitis, 423–5; visitors to, 86, 414, 417; *see also* Outpatients, Paying patients *and* Private patients
- Pattison, Mr Justice, 19
- Paul, Frank T, 155, 267, 268
- Paul's operation, 267, 268, 277
- Paul's tube, 155
- Paying patients, 55, 59, 70–1, 92, 168–70, 173–4, 190, 433; *see also* Fees *and* Private patients
- Pecten band, 242, 243, 278, 327
- Pectenotomy, 243, 328
- Pelvic floor disorders (1948–1985), 318–37
- Penfold, J Campbell B, 335, 355, 500
- Percy, J P, 332
- Pericolicitis, 276, 277: *continued as* Diverticulitis
- Peridiverticulitis, 276: *continued as* Diverticulitis
- Perineal excision, 151–3, 250, 251, 252, 253, 255, 257, 259, 260, 264–6, 267, 339, 413
- Perineo-abdominal excision, 260, 265, 267, 339, 343, 345
- Perineorrhaphy, 335
- Peritonitis, danger of, 148, 152, 154, 155, 156
- Perry, Rev G H, 83
- Pharmaceutical Society of Great Britain, 215
- Pharmacist, 245, 382
- Pharmacology, 215, 313, 314, 315
- Phillips, S F, 330
- Photography, medical, 316
- Phthisis: *see* Tuberculosis
- Physicians to St Mark's, 34, 124, 164, 186, 490: *see also* Gastroenterologists
- Physiology, 109, 128, 314, 315, 319: anorectal, 128, 314, 318–20; of continence, 115, 234, 319, 324, 325, 329–30, 332; of defaecation, 113–15, 330, 358; of colon, 114, 360, 383; of rectum, 115; of small intestine, 114
- Pickering, Sir George, 293, 294
- Pickering Report, 294
- Pike, James R, 60
- Piles, *see* Haemorrhoids
- Pimlico Dispensary, London, 46
- Pirie, Sir John, 18
- Pirrie, William, 58
- Plumbe, Rowland, 75, 76
- Pollards Wood Research Station, 280
- Pollock, D J, 380
- Pollock, George, 138, 139
- Pollock, J E, 136
- Polyp-cancer sequence, 351: *see also* Adenoma-carcinoma sequence *and* Dysplasia-carcinoma sequence
- Polypoid growths, 141, 142, 145
- Polyposis, familial, 223, 318, 425: (1900–1948), 268–70; (1948–1985), 345–349; cancer and, 146, 259, 268–70, 345–9; disseminated polyps, 146, 268; heredity and, 146, 249, 268–70, 345, 346; register, 316, 345
- Polypus recti, *see* Polypoid growths *and* Polyps, rectal
- Polyps, rectal, 125, 129, 131: (1870–1900) 144–6; *see also* Adenoma *and* Polyposis
- Polyvinyl alcohol sponge, 335, 336
- Poor Law Reform Act (1834), 1
- Porter, Nigel H, 330, 334, 335–6, 499
- Postanal repair, 331, 332, 333, 336
- Postgraduate centre of gastroenterology, Charterhouse Square, proposed, 303
- Postgraduate Studies, Department of, 305
- Postgraduate institutes, 213, 214, 216, 279–81, 288, 300, 434: *see also* individual institutes

ST MARK'S HOSPITAL, LONDON

- Post Graduate Medical Association, *see*
London Post Graduate Medical
Association
- Postgraduate Medical School of London, *see*
Royal Postgraduate Medical School
- Postgraduate teaching, 433, 434: early 20th
cent, 171, 176; interwar, 184, 192;
postwar plans, 209, 211, 213, 214, 216;
under NHS, 283, 284, 285, 299, 302;
Chelsea Scheme, 292; *see also*
Postgraduate institutes
- Pott, Percivall, 109, 122
- Pouch operation, 349, 372, 373
- Powell, Enoch, 290, 291, 293, 294, 296
- Powell, Sir Richard Douglas, 136, 164,
186, 490
- Powell-Tuck, Jeremy, 370, 502
- Powney, Lt Col Cecil, 199, 200
- Pre-cancer, 316, 350-1, 368-9, 370
- Presidents, of hospital, 23, 24, 39
- Preston, David M, 358, 359, 502
- Prince of Wales' Hospital Fund for
London, 76-7; *continued as* King's
Fund
- Private patients: at St Mark's, 169, 191,
192, 203, 212, 414, 416, 417, 419, 420;
proposed block, 197, 198, 199, 200, 202,
206; of St Mark's surgeons, 180-1;
within NHS, 279, 284, 421
- Probationer nurses: 19th cent, 96-7, 100,
102, 103, 104, 106; 20th cent, 386, 387,
388-9, 390, 393, 394, 395, 397, 398,
400, 401, 403, 412; *continued as* Student
nurses
- Procidientia recti, 142-3, 145: *see also*
Prolapse
- Proctitis, 131, 270-6: idiopathic, 365, 367,
370; *see also* Ulcerative colitis
- Proctocolectomy, total: for Crohn's disease,
378, 380; for polyposis, 346-8, 349; for
ulcerative colitis, 275, 314, 361, 363,
365, 370-1, 373
- Proctocolitis, 270-6, 317, 367, 370, 379:
see also Ulcerative colitis
- Proctologist, The*, 180; *continued as* *Diseases of
the Colon and Rectum*
- Prolapse of the rectum, 80, 81, 125, 130,
131, 383: (1870-1900), 142-3; (1900-
1948), 245-6; (1948-1985), 334-6;
anatomy and physiology, 334, 335, 336;
cauterisation, 143; incontinence and,
332, 335, 336; injection, 246; postanal
repair, 336; rectal plugs, 143; rectopexy,
245-6, 334, 335-6;
rectosigmoidectomy, 245-6, 334, 336;
Salmon on, 110, 112, 117-18, 122;
Thiersch operation, 246, 334, 336
- Provident Institution of Broad Street, 20
- Prudential Assurance Company, 194
- Pruritus ani, 131, 143-4, 243-5, 271, 337
- Publications, 124-5, 227-8, 431
- Pulford, Mrs, 199
- Pull-through procedures, 339, 342, 344
- Pupil nurses, 409
- Purgatives, 110, 111, 115, 116
- Pyæmia, 63, 108, 138, 140: *see also*
Hospital diseases
- 'QT' Associations, 425
- 'QT' Great Britain (London Division), 425
- 'Quacks', 3, 13, 16, 27-8, 30, 109-10, 119,
134, 140, 386, 428
- Queen Charlotte's Hospital, London, 280,
291, 300
- Queen Mary's Hospital, Sidcup, 205
- Queen Mary's Hospital, Roehampton, 187
- Racial discrimination, 181
- Radcliffe Infirmary, Oxford, 163, 365
- Radiology, 218, 290, 302, 319, 370: air
insufflation, 222; colonoscope and, 318;
Crohn's disease and, 375, 376, 379, 380,
383; differentiating diseases and, 276,
278; distrust of x-rays, 222-3; double
contrast barium enema, 222; fistula and,
233; functional bowel disease and, 358;
Malmö method, 222, 316-17; pre-cancer
and, 351; ulcerative colitis and, 368; x-
rays of colon, 144
- Radiology Department, *see* x-ray
Department
- Radiologists, 190, 295, 384, 491
- Radium, 195, 202
- Radium Institute, Paris, 262
- Radium treatment, 195, 250, 256, 261-3:
proctitis resulting from, 274
- Raines, Joseph Robertson, 20
- Rankin, F W, 343
- Rebell, F G, 322
- Récamier, Joseph C-A, 141
- Récamier's procedure, 141, 241, 242
- Record-keeping, 26, 201, 224-5, 415, 416,
421
- Rectopexy, 245, 246, 334, 336, 337
- Rectoscope, 129
- Rectosigmoidectomy, 245, 246, 334, 336
- Rectotomy, 158
- Rectum/rectal, cancer, *see* Cancer;
examination, digital, 108, 128-9; plug,
143; polyps, *see* Polyps, rectal; prolapse
see Prolapse of the rectum; ulceration *see*
Ulceration
- Red Cross, 182, 186: blood donor register,
224

INDEX

- Referral system, 91, 92, 134, 185, 195, 313, 431, 433
- Reform Act (1832), 1, 13, 19
- Régaud, Claude, 262
- Regional colitis, 374, 376, 377; *see also* Crohn's disease
- Regional enteritis, 376, 377; *see also* Crohn's disease
- Regional ileitis, 373; *see also* Crohn's disease
- Regional specialty status, 311, 312
- Registration: of nurses, 385, 386, 390, 394
- Registry department, 214, 225, 415
- Religious Tract Society, 85
- Research Department (*formerly* Cancer Research Department), 225, 283, 285, 289, 293, 300, 302, 345, 375, 425
- Research Foundation, 289, 305
- Research Fund, 283-4
- Resident surgical officers, 194, 196, 201, 202, 282, 285, 286, 290, 299, 393, 493-501; *see also* House surgeons and individual surgeons
- Resource Allocation Working Party (RAWP), 306
- Restorative procedures, 314, 339, 340-5, 346, 347, 348, 349: Crohn's disease, 380; ulcerative colitis, 364, 371-2, 373
- Reybard, M, 154
- Rice mills, 38, 66, 75
- Richards, H A, 193, 491
- Richards, Thomas, 30
- Right-sided colitis, 374, 376; *see also* Crohn's disease
- Ritchie, J K, 344, 370, 371, 372-3, 380, 381, 382-3, 491
- Ritchie, S M, 348
- Rivers, Miss, 181, 215
- Robinson, Kenneth, 296, 297, 298
- Robson, A W Mayo, 154
- Rodgers, Harold, 255, 260, 264
- Roedel, Waldeman, 73
- Roentgen, Wilhelm Konrad, 222
- Rolleston, Sir Humphrey, 273, 274
- Ross, Sir James Paterson, 292, 293, 295
- Rossetti, Dante Gabriel, 162
- Rothschild family, 32
- Royal Australasian College of Surgeons, section of proctology, 299
- Royal British Nurses' Association, 389-90
- Royal Cancer Hospital, *see* Cancer Hospital
- Royal College of Nursing (*formerly* College of Nursing), 396, 397, 402, 409
- Royal College of Physicians of London, 3, 12-13, 22, 72, 389, 428, 432
- Royal College of Surgeons of England, 3, 8, 9, 12-13, 25, 30, 162, 216, 280, 286, 299, 389, 428: Allingham on council, 52; Cooper as vice-president, 73; Jacksonian prize, 162, 163; Wakley criticism in *Lancet*, 12
- Royal Commission on Health Service, 306
- Royal Free Hospital, London, 22, 178, 201, 291, 293, 301
- Royal Hospital for Diseases of the Chest: *see* Brompton Hospital
- Royal London Ophthalmic Hospital, 4, 162, 208, 430; *see also* Moorfields Hospital
- Royal Marsden Hospital, London (*formerly* Cancer Hospital), 280, 291, 295, 406, 434
- Royal Masonic Hospital, London, 173, 197
- Royal National Orthopaedic Hospital, London, 208, 280, 290-1
- Royal National Throat, Nose and Ear Hospital, London, 280, 290-1
- Royal Northern Hospital, London, 187
- Royal Postgraduate Medical School (*formerly* British Postgraduate Medical School), 280, 292, 294, 300; *see also* Hammersmith Hospital
- Royal Society of Medicine, 180, 272, 432: subsection of proctology, 229, 262, 263, 273; section of proctology, 210, 275, 299, 340, 346, 357, 362, 367
- Rushcliffe Committee Report, 395-6, 397-8
- Ruskin, John, 162
- Russell, Lord John, 32
- Rutter, K R P, 337
- Ryall, Charles, 180
- Ryall, Edward Canny, 75, 180, 493
- St Bartholomew's Hospital, London, 29, 119, 134, 173, 175, 198, 201, 202, 433: bacteriology at (1890s), 76, 108; link with St Mark's, 301-2, 303, 304, 305, 307, 309, 310, 311, 380, 408; nurses from, 100, 408, 409; Rahere Lodge, 74; St Mark's medical staff trained at, 51, 52, 60, 72, 73, 161, 162, 163, 172, 197, 288; St Mark's surgeons on staff of, 172, 196, 197; Salmon and, 9-10, 11-12, 21, 428; services transferred to, 315-16
- St George's Dispensary, London, 70
- St George's Hospital, London, 4, 70, 74, 75, 119, 135, 150, 163, 273
- St Giles, parochial charities of, 68
- St James' Hospital, Balham, London, 293
- St James' Philanthropic Society, 68
- St John's Hospital for Diseases of the Skin, London, 58, 280, 291, 430
- St John's House, 96
- St Luke's, District of, London, 2, 39, 78

- St Luke's Hospital (geriatrics), Chelsea, London, 291, 296
- St Luke's Hospital for lunatics, London, 39, 84
- St Luke's Hostel, 161
- St Mark's Association, 299
- St Mark's Hospital for Cancer, Fistula and Other Diseases of the Rectum (*formerly* St Mark's Hospital for Fistula and Other Diseases of the Rectum), 175–6: (1918–1948), 185–217; expansion plans (1922), 191–2, 193; expansion plans (1933), 198; centenary, 197; NHS plans and, 207–17; name change, 214; new wing (1927), 194; WW1, 181–3; WW2, 201–6; *continued as* St Mark's Hospital for Diseases of the Rectum and Colon
- St Mark's Hospital for Diseases of the Rectum and Colon (*formerly* St Mark's Hospital for Cancer, Fistula and Other Diseases of the Rectum), 214, 282: (1948–1985), 279–312; Chelsea Scheme, 290, 295–6, 298; link with Bart's, 301–2, 303, 304, 305; proposed 1985 closure, 311
- St Mark's Hospital for Fistula and Other Diseases of the Rectum (*formerly* Fistula Infirmary), 6, 72, 73, 166: practice (1857) 120–4; practice (1870–1900), 124–59; (1876–1896), 63–77; (1896–1918), 160–84; called St Mark's, 39; City Road site, 66, 67, 75–6; competing with Gordon Hospital, 71; financial constraints (1859–75), 49–62; Hampstead site (1879), 66; name change to include 'cancer', 171, 175–6; new building plans (1877), 65; opening, 40–1; organisational structure (1870s), 61–2; overseas reputation, 71, 72; professional opposition to, 60; rebuilding (1896), 160; Salmon's retirement, 44–7; *continued as* St Mark's Hospital for Cancer, Fistula and Other Diseases of the Rectum
- St Martin's Dispensary for Fistula and Other Diseases of the Rectum, 58, 60, 71
- St Mary's Hospital, London, 4, 46, 50, 51, 57, 215
- St Mildred, Bread Street, London, parish estates of, 68
- St Monica's home, London, 161
- St Paul's Hospital, London, 280, 291, 312, 434
- St Paul's Infirmary, New York, 72
- St Peter's Hospital for Stone, London, 56, 57, 73, 227, 231, 280, 291, 312, 430, 434
- St Philip's Hospital, London, 291, 434
- St Saviour's Hospital, London, 60
- St Thomas's Hospital, London, 4, 16, 18, 41, 51, 52, 58, 63, 134, 178, 311, 433: nurse training school, 96, 97, 102, 391, 393; Samaritan Fund, 87
- Salmon, Caroline, 7
- Salmon, Clara, 55, 69
- Salmon, Denne (Mother), 7, 21
- Salmon, Denne (Sister), 7
- Salmon, Edward, 7, 21
- Salmon, Frederick, 21, 63–4, 74, 102, 110–20, 166, 168, 227, 428, 429, 430, 431, 490: Aldersgate Street Dispensary and, 10–12, 13–15; biog details, 7–10; change in hospital's name, 36–8, 53; controversy with O'Beirne, 15, 114–15, 116; established hospital, 1, 15, 16–22; fostered hospital, 22–9, 34, 49, 50, 51, 54, 66; holism and humoralism, 110–12; instruments, 116, 125; medical outsider, 43–4, 72, 124, 128, 159; Medical Society of London, Oration to, 12–13; opposition to anaesthesia, 84, 108, 120, 134; patients of, 33–4, 92, 93, 119–20; physical examination, emphasis on, 111, 116, 128; private practice, 15, 33, 44, 180; publications, 12, 110; relatives, 7, 21, 69; retirement and death, 44–6, 47, 54–5, 62, 69, 124
- Work on: anatomy, pathology and physiology, 112, 113, 114, 115, 120, 128; cancer, 115, 116, 117, 146, 147, 268; fissure, 122; fistula, 112, 115, 122, 124, 326; haemorrhoids, 115, 118–19, 120–2, 137, 138, 235, 239, 240, 320; prolapse, 110, 117–18, 122, 142; stricture, 110, 112, 113, 115–17, 119, 120, 130; tuberculosis, 117; ulceration of rectum, 113, 115
- Salmon, Frederick Breese, 21, 439
- Salmon, Harriet, 7
- Salmon, Henry (Brother), 7
- Salmon, Henry (Father), 7, 8, 15
- Salmon, Louisa, 7
- Salmon, Percy Howell, 21, 55, 69, 439
- Salmon, Mrs Percy, 69
- Salmon, William Mayer, 21, 55, 69, 439
- Salmon Committee (1965), 407
- Salmon ward, 283
- Samaritan Fund (*formerly* Society), 88, 89, 413, 415
- Samaritan Hospital for Women, London, 430
- Samaritan Society, 83, 87, 88, 89, 94: *continued as* Samaritan Fund
- Sandeman, A G, 160, 183

INDEX

- Sandeman, George, 32
 Sanitaria, 65
 Sanitary: improvements, 64, 65, 84;
 reform, 107
 Saunders, Barbara, 409
 Schacht, George, 44
 Schede, Max, 153, 154
 Schmidt, G T, 379
 Schoenberg, P J, 359
 Schofield, Philip F, 335
 Schule, A, 222
 Sebright, Thomas Gage, 18
 Secretaries, hospital, 23, 34, 41, 44, 53-5,
 61, 68, 81, 82, 169, 282, 491-2: *see*
 also Whiskin, James Fuller and Bull,
 Raymond
 Segmental colitis, 374, 376: *see also*
 Crohn's disease
 Select Committee of the House of Lords
 on Metropolitan Hospitals (1892), 77
 Senior nursing officer (*formerly* Matron),
 407, 491
 Senn, Nicholas, 154
 Sepsis, 108, 147, 219, 260, 261, 265:
 danger of, 108, 148, 314; cancer
 operations and, 152, 153, 252;
 haemorrhoid operations and, 237, 239;
 prolapse operations and, 246: *see also*
 Hospital diseases
 Servants, *see* Domestic staff
 Setchell, M E, 333-4
 Sexual discrimination, 181
 Sexual dysfunction, 370-1
 Shaftesbury, Earl of, 69
 Shanks, S Cochrane, 190, 490
 Sharman, John, 51
 Shepherd, Sir Percy, 198, 199, 200
 Shepherd, William, 198
 Shepherd Trust, 199
 Sherlock, Sheila, 301
 Shock, operative, 218, 224, 255, 262, 265,
 277
 Short bowel syndrome, 382
 Shove, D C, 372
 Shryock, E H, 322
 Sigmoidoscope, 226, 227, 273, 274, 406:
 colonoscope and, 318; development of,
 221-2; disease differentiation and, 271,
 272, 278; Lloyd Davies', 226, 266, 317;
 polyposis and, 270, 345, 346; pre-cancer
 and, 351, 372; Strauss, 22
 Simpkins, K C, 379
 Simpson, J E P, 352
 Sims, J Marion, 72, 129
 Sinden, Miss Topsy, 168
 Sir Alan Parks Physiology Unit, 320
 Sister tutor, 393-4, 400
 Sizmur, Fanny, 69, 439
 Sizmur, William, 69, 439
 Skey, Frederick, 12
 Slack, William W, 354, 498
 Smith, B, 358
 Smith, Henry, 151
 Smith, Kate, 103, 104
 Smith, Sir Thomas, 163
 Snooks, Stephen J, 333-4
 Soames, Charles and H A, 33
 Socialist Medical Association, 281
 Society of Apothecaries, 3, 7, 9, 428
 Solitary ulcer syndrome, 336-7
 Special hospitals, 35, 81, 108, 195, 288,
 428-31: class of patient, 70, 90; growth
 in numbers, 4-6, 58, 77; medical control
 in, 24; medicalised, 90, 97; mergers and
 attrition, 174, 279; NHS and, 208, 279-
 81, 289-98; nursing and, 105, 385, 405;
 Pickering Report, 294; professional
 opposition to, 16, 47-8, 55-7, 60; Todd
 Report, 300
 Specialisation, 52, 107, 109, 110, 428-35:
 colo-proctology, 107, 124-6, 128-31,
 180, 185-6, 299, 313; debate over, 55-
 8; nursing and, 408, 409, 411; specialists,
 124, 134, 135, 171, 185, 247
 Special Trustees for St Bartholomew's and
 St Mark's Hospitals, 305
 Speculum, 125, 126, 127, 129, 147, 221,
 238
 Spencer Wells, Thomas, *see* Wells, Thomas
 Spencer
 Sphincterotomy, 242-3, 327-9, 400
 Sphincters, 113, 247, 319: fissure treatment
 and, 142, 327; fistula operations and,
 135, 230-1, 232, 233-4; haemorrhoid
 treatment and, 240, 241, 242, 243, 320
 Spicer, C C, 370
 Spilsbury, Sir Bernard, 189
 Spinal anaesthesia, 220-1, 315
 Spitalfield Bible Flower Mission, 61
 Spitta, H Q D, 172, 177, 490
 Spriggs, E I, 277
 Spry, Lt Arthur, 199
 Spry, Joseph, 8
 Spry, Joseph Hume, 8, 9, 10, 12, 29
 Spurgin, John, 46, 51, 490
 Stalder, G A, 378-9
 Stapling, 344
 State enrolled (assistant) nurses (SEN or
 SEAN), 396, 397-8, 402, 404, 405, 406,
 407, 409
 State registered nurses (SRN), 385, 390,
 394, 396, 397, 400, 401, 402, 403, 404,
 405, 407, 409
 Steltzner, F, 324

ST MARK'S HOSPITAL, LONDON

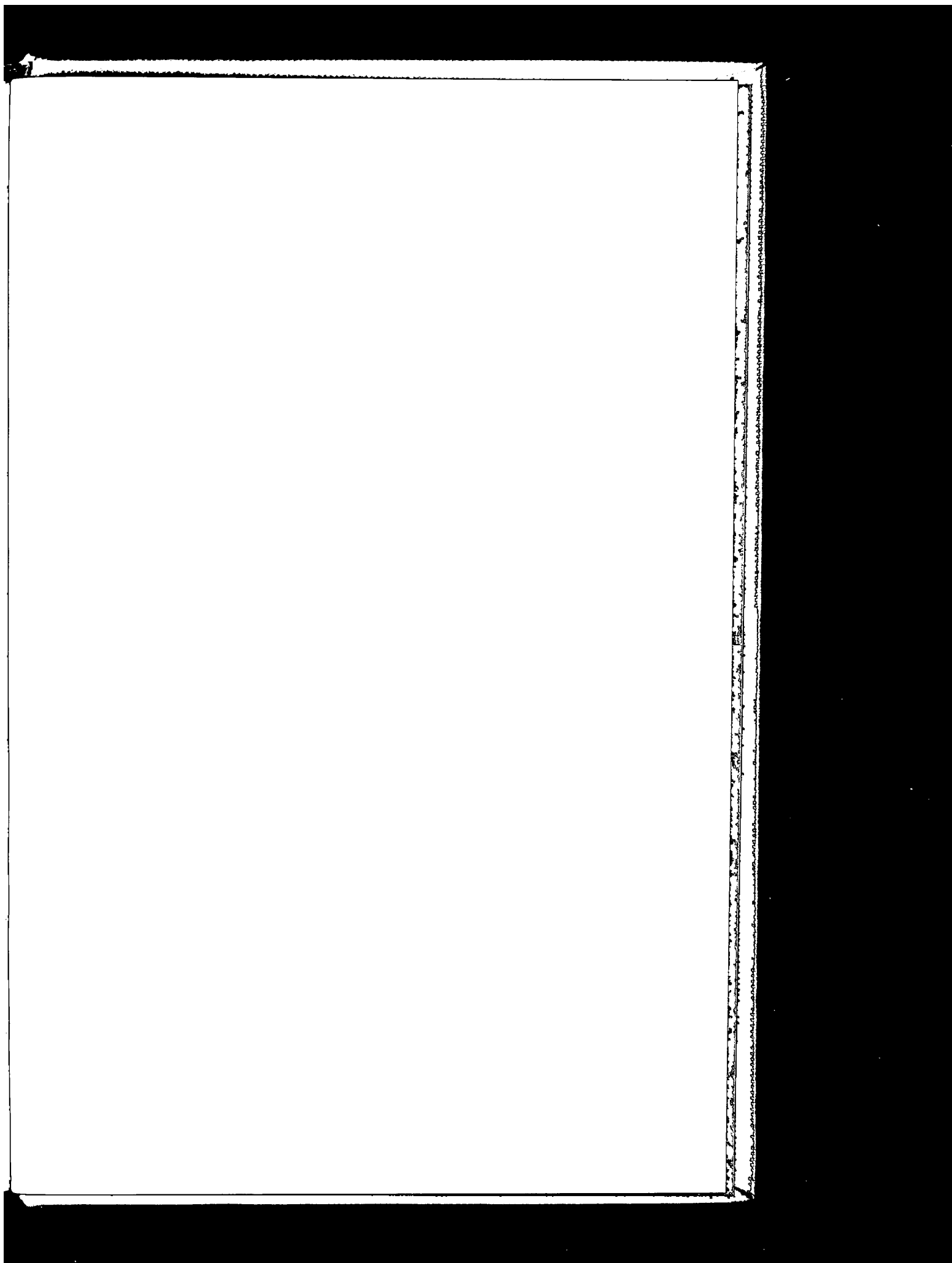
- Sterilisation of instruments and dressings, 218, 225-6
- Steroids, 314, 360, 365, 377-8, 381
- Stock Exchange crash (1929), 195, 196
- Stock Exchange Dramatic Society, 195
- Stoma, *see* Artificial anus, Colostomy, Colotomy and Ileostomy
- Stoma care clinic, 409
- Stoodley, Brian J, 379, 500
- Strange, William Heath, 58
- Stone, H B, 244
- Stone, Alderman Thomas, 83, 84, 85
- Stricture of the rectum, 80, 130:
 - (1870-1900), 125, 129, 144, 156-9;
 - Salmon on, 28, 110, 112, 113, 115-17, 119, 120
- Student nurses, 403, 405, 409
- Sturge, George, 89
- Submucosal haemorrhoidectomy, 320-1
- Sulfa drugs, 218, 227, 314, 339, 341, 360, 366, 368, 378, 381
- Sulphonamides, *see* Sulfa drugs
- Sunday Times*: Chelsea Scheme, 297
- Supporters, *see* Benefactors
- Surgeons, 25, 46, 161, 164, 177, 236, 490:
 - within NHS, 284-5, 288; *see also*
 - Assistant Surgeons and individual surgeons
- Surgeon's assistant, 25-6, 29, 30, 79:
 - continued as* House surgeons
- Surgical Aid Society, 52
- Surgical Research Unit, 293, 300, 302
- Sutcliffe, Lucy, 387-8, 412-13
- Sutton, Sir John Bland, 176, 187, 188
- Svartz, N, 366
- Swallow, James, 58
- Swarbrick, Edwin J, 359, 502
- Swash, Michael, 319, 332, 333, 334, 336, 491
- Swinford Edwards, Frederick, *see* Edwards, Frederick Swinford
- Syme, James, 121, 122
- Synchronous combined excision, 266, 267, 339
- Syphilis, 28, 131: diverticulitis and, 276; fissure and, 141, 142; patients with, 90, 388; rectal ulceration and, 149, 157, 271; stricture and, 115; Wasserman tests, 223
- Tattersall, J Fountain, 84, 85, 88
- Taylor, Rev C J F, 82
- Taylor, Rev G A, 35, 40, 82, 83
- Taylor, Seymour, 164
- Teaching hospitals: in NHS, 280, 281, 285, 300, 304, 383, 385, 433
- Terminal ileitis, 377: *see also* Crohn's disease
- Tetanus, 63, 64, 138, 219
- Text books, *see* Publications
- Thiersch, Carl, 228, 245, 246
- Thiersch's operation, 246, 334, 336
- Thomas, Brian M, 358-9, 490
- Thomas, C Y, 363
- Thompson, Henry R, 193, 202, 283, 425, 490, 496: appointed, biog details, 215; retired, 304
 - Work on: cancer, 340, 350; constipation, 356-7; diverticular disease, 354; fissure, 327-8; fistula, 324, 326; polyposis, 347, 348, 349; prolapse, 334-5; ulcerative colitis, 371-2
- Thompson, Peter, 233, 319
- Thomson, James P S, 304, 323, 328, 329, 337, 348, 371, 469, 490, 491, 500
- Thomson, W H F, 322
- Tilbury, Miss Zeffie, 168
- Times, The*, 95-6, 291, 310
- Todd, Ian P, 301, 311, 359, 467, 490, 498: appointed, 285, 286
 - Work on: diverticular disease, 353-4, 355; megabowel, 357-8; prolapse, 335; stoma care, 409
- Todd Commission on medical education (1966-8), 300, 301, 302, 306
- Tomson, D Vernon, 287
- Tonks, Irene, 400-1, 421
- Transport and General Workers Union (TGWU), 215-16
- Treasure and Sons, Messrs, 76
- Treasurers, hospital, 23, 29, 34, 49, 61, 199: *see also* Martin, Sir Richard
- Trec, Herbert Beerbohm, 168
- Trevelyan, Lady, 32
- Truelove, S C, 365, 369
- Tuberculosis, 28, 79, 109, 124, 229, 433: abscess and, 228, 230; Crohn's disease differentiated from, 374, 375; diverticulitis and, 276; fistula and, 132, 135-7, 228-9, 322; of anus, 226; rectal ulceration and, 149, 157, 271; stricture and, 115, 117
- Turnbull, Rupert B, 344
- Turner, H Clifford, 193
- Turner, George Grey, 260, 265
- Turner Warwick, W, *see* Warwick, W Turner
- Tuttle, James P, 221, 245, 251
- Typhoid, 64, 79: epidemics, 79
- Tyrrell, Frederick, 16
- Ulceration of the rectum, 81, 115, 129, 130, 131: (1870-1900), 156-9; (1900-1948), 270-6; syphilitic, 141, 157; with stricture, 157, 158
- Ulcerative colitis, 226, 284, 286, 298, 314, 317, 318, 352, 381, 382: (1900-1948), 270-6; (1948-1985), 360-73;

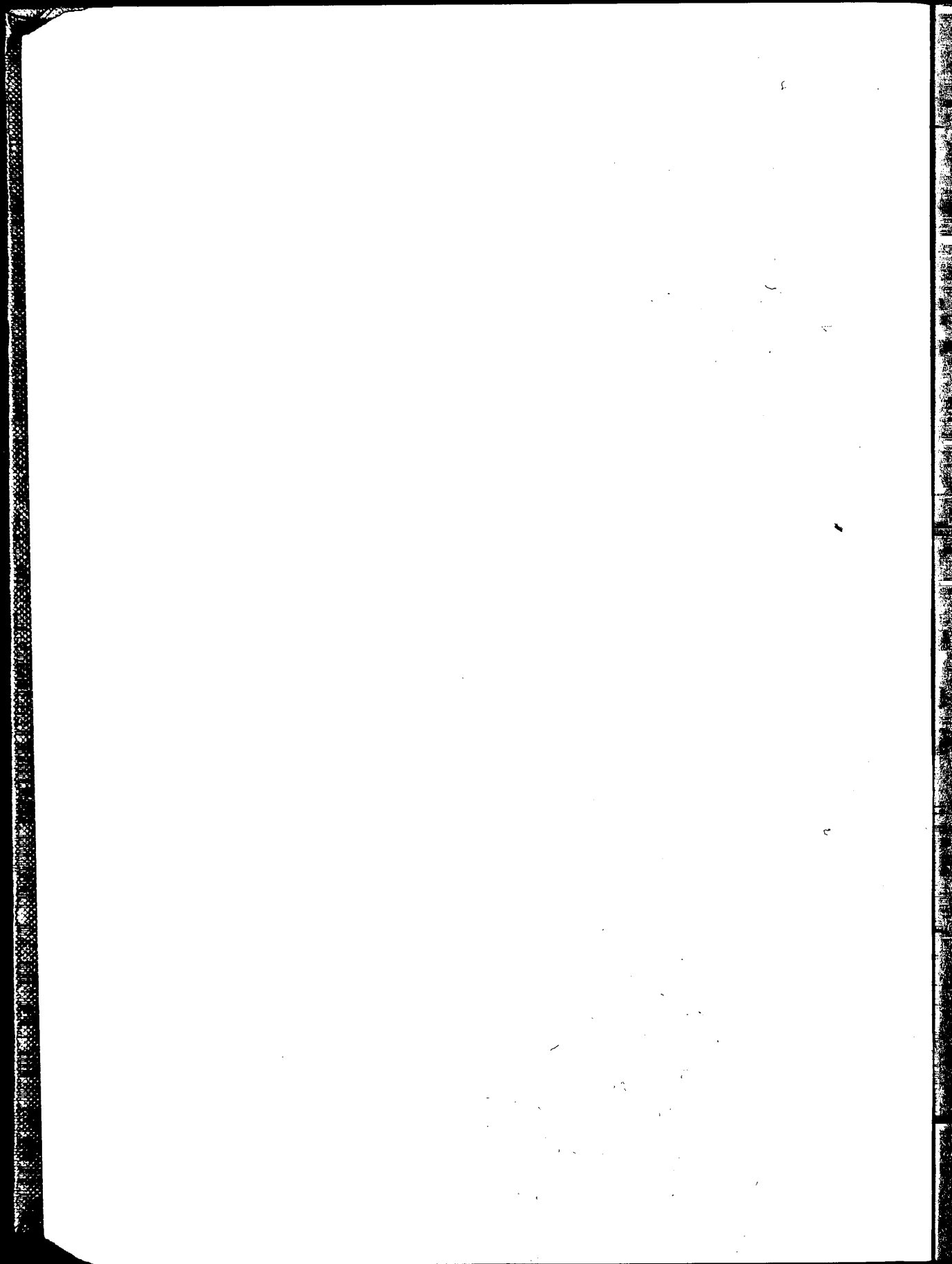
INDEX

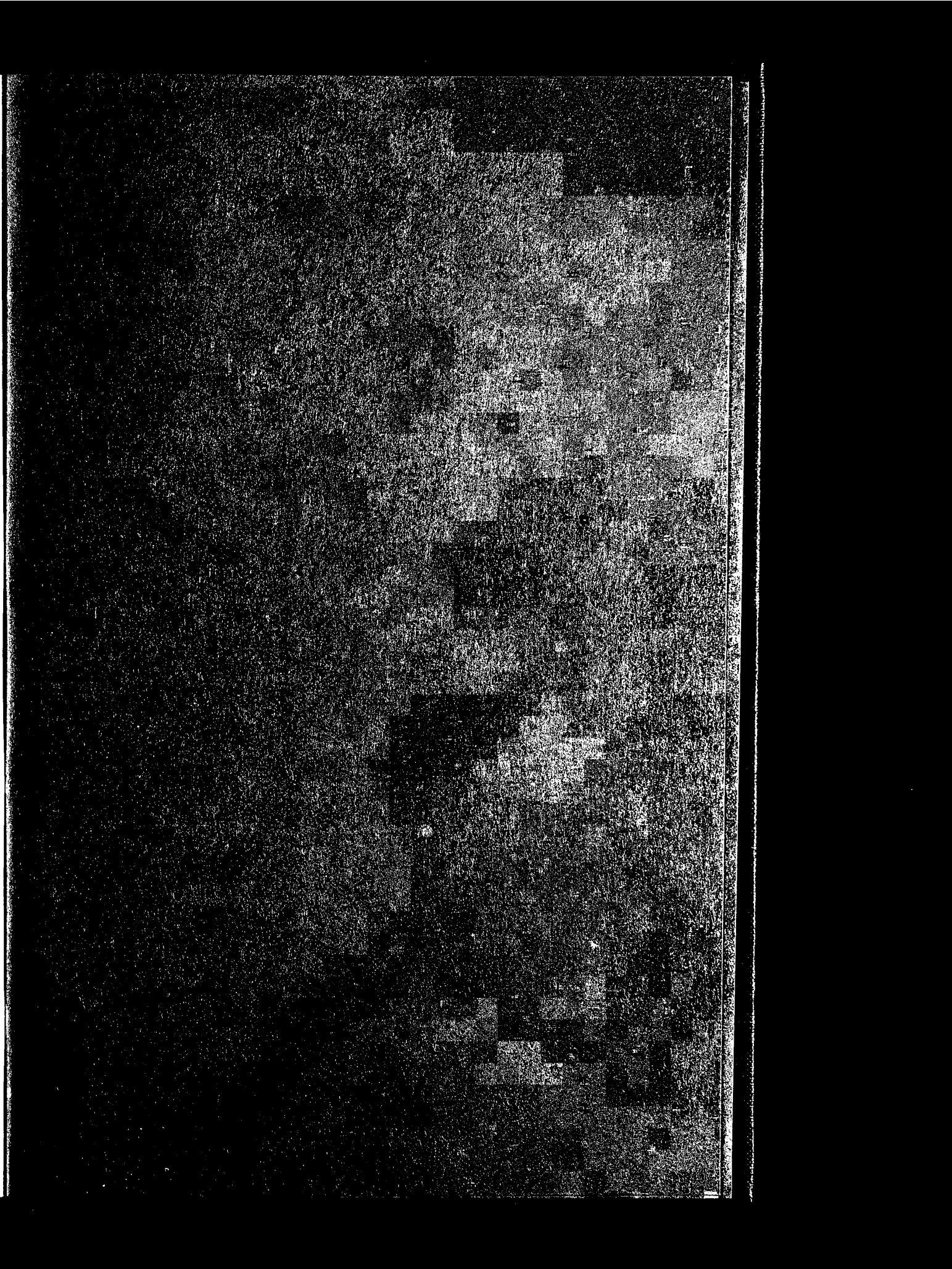
- appendicostomy, 271–2, 273, 275, 276, 361, 399; caecostomy, 268, 272, 361;
 - cancer and, 345, 351, 362, 363, 365, 368–9, 370, 372–3; colectomy and ileorectal anastomosis, 275, 363, 364, 371, 373; Crohn's disease and, 369, 373, 374–7, 379, 383; ileostomy alone, 275, 276, 361; ileostomy patients, 361, 362, 364, 371, 423–5; pouch, 372, 373; total proctocolectomy, 275, 361, 363, 365, 370–1, 373, 423
- United Charities of St Olave and St John, 68
- United Parishes of St Lawrence, Jewry and St Mary Magadalen, Milk Street, 68
- United States, surgeons from: development of colo-proctology and, 180; injection of haemorrhoids, 140, 237, 238; and St Mark's, 71, 159, 191, 214, 299
- University College Hospital, London, 4, 135, 223, 301: Samaritan Fund, 87
- University College, London, 52, 189
- University Grants Committee, 290, 294, 296, 302
- University of London, 211, 213, 280, 281, 286, 292, 299, 305, 405: Chelsea Scheme and, 290, 291, 296; institute of proctology/gastroenterology and, 289, 293, 301, 303; *see also* British Postgraduate Medical School
- Urich, Henry, 332
- Urinary diseases, 57: infection, 259
- Valves of Morgagni, 229, 233, 241
- Van Buren, William H, 143, 146
- Venereal disease, 57, 74, 79; *see also* Syphilis
- Ventilation, 40, 63, 64, 85
- Verneuil, A, 151, 158, 245
- Victoria, Queen, 1, 18, 76, 163
- Vigers, Leslie, 175
- Villous growths, 145, 146: adenomas, 351; papillomas, 350, 351
- Vivian, A B, 365, 498
- Vivisection, 223–4
- Volkman, Richard von, 152
- Volkman's spoon, 261
- Voluntary Aid Detachment, 182–3, 205, 389
- Voluntary hospitals, 1, 3, 4, 68, 108: Cave Committee and, 190; interwar crisis, 185, 196, 433; municipal hospitals and, 195–6; NHS and, 217, 279
- Voluntary Hospitals Committee for London (VHC), 201, 207
- Von Mikulicz-Radecki, J, 155, 218, 219, 245, 267
- Wade, Courtney, 296
- Wadsworth, J, 344, 371
- Wakley, Thomas, 12, 13
- Wales, Prince of, 73, 194
- Wallace, M H, 350
- Wallen, John, 33, 40
- Wallis, Sir Frederick, 164, 170, 175, 177, 225, 490: appointed, biog details, 161; death, 177–8, 179; operating clothing, 219; private practice, 180–1; publications, 227; support for Furnivall, 162
 - Work on: cancer, 251, 252; fissure, 242; fistula, 230; haemorrhoids, 140, 235, 236, 237, 239, 388; incontinence, 246; multiple polyps, 268; prolapse, 245; pruritus ani, 143–4, 243–4; rectal ulceration, 271–2, 273
- Walls, Eldred W, 319, 329, 491
- Wangensteen, O H, 339
- Ward, Nathaniel, 149
- Wards, 42, 283: closures, 76, 307–11; *see also under individual ward names*
- Warwick, W Turner, 187, 201, 494
- Waters, Elsie and Doris, 199
- Watkinson, G, 369
- Watson, Mrs, 98, 491
- Watson, Charles Gordon, *see* Gordon-Watson, Charles
- Watson, Rev Henry, 172
- Watson, Philip C, 370, 497
- Watts, J M, 369
- Webb, R, 349
- Weir, R F, 271, 339
- Welin, S, 316
- Wells, Charles, 335, 374
- Wells, Thomas Spencer, 430
- West End Hospital for Nervous Diseases, London, 208
- West London Hospital, 52, 73, 173, 271, 280, 281, 400: linked with Charing Cross, 287; linked with St Mark's, 216, 282, 283, 286, 403
- Western Hospital for Fistula, Piles and Other Diseases of the Rectum, London, 70–1, 90: *continued as* Gordon Hospital
- Westminster, Duchess of, 182
- Westminster Hospital, London, 4, 72, 119: Gordon Hospital link, 211, 216, 279
- Westminster Eye Hospital, London, 280
- Westminster Medical Society, 15
- Whiskin, James Fuller, 41, 53, 54, 491
- White, William, 8, 12, 114, 115, 429
- White, William Hale, 271
- White Papers: (1944), National Health

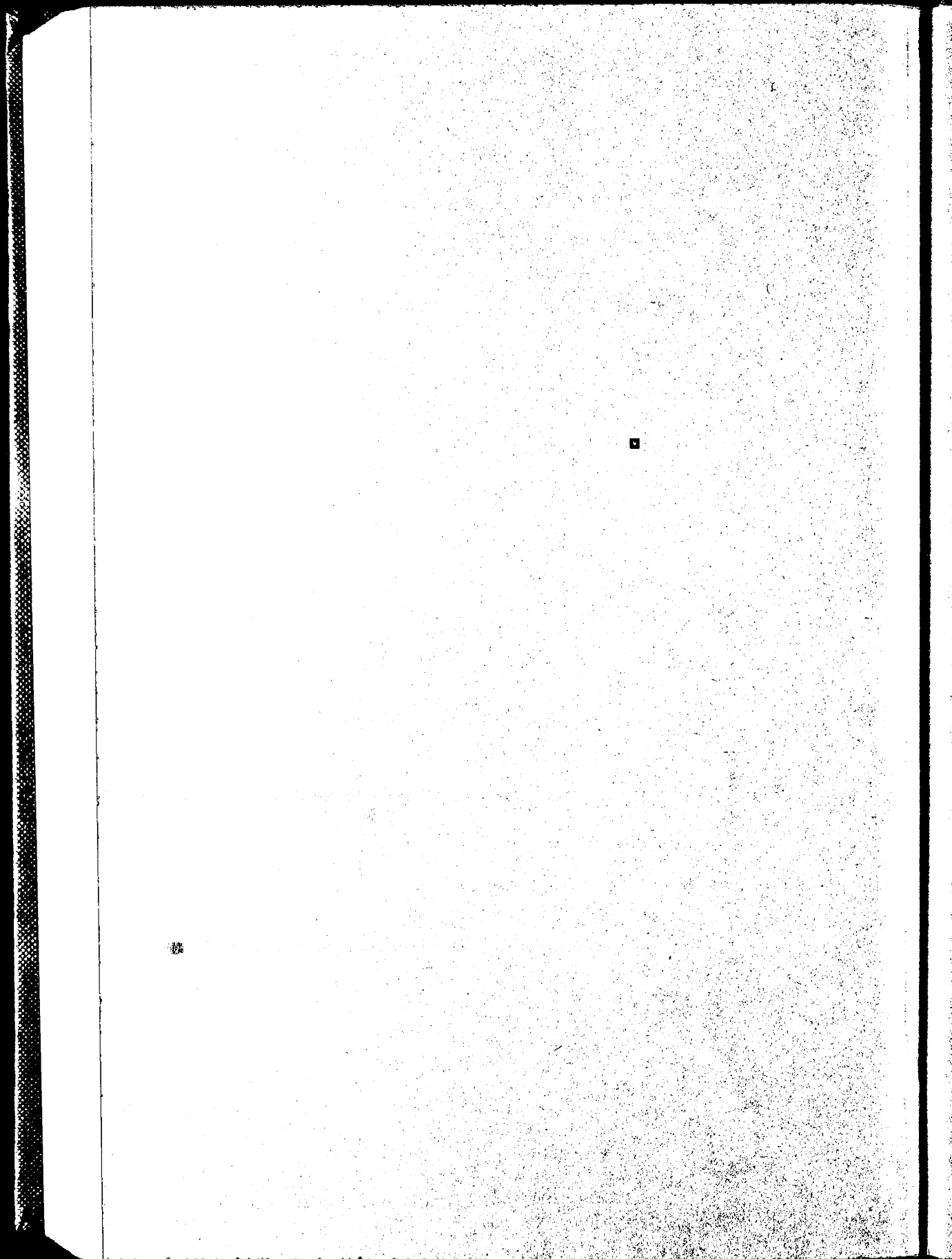
ST MARK'S HOSPITAL, LONDON

- Service, 210, 212; (1966), Hospital Building Programme, 297
- Whitehead, A H, 215
- Whitehead, Walter, 139
- Whitehead's procedure, 139, 236, 237, 239, 245
- Whiteway, Janet, 356
- Whitley Councils, 402, 403
- Whitmore, W T, 70
- Whittaker, Treacher, Arnot and Co, 20
- Wilks, S, 271
- Willesden Cottage Hospital, London, 161
- Williams, Christopher B, 304, 307, 318, 359, 370, 372, 469-70, 490, 502
- Williams, Deacon and Co (bank), 19
- Williams, R E O, 352
- Williams, Theodore, 137
- Willoughby, Miss Dora, 394, 395, 401, 404, 491
- Wilson, C W E, 367
- Wilson, Mrs Elizabeth, 99, 100, 487, 491
- Wilson, Harold, 311
- Wiseman, Richard, 109
- Witts, L J, 365
- Women's Voluntary Aid Detachment, *see* Voluntary Aid Detachment
- Wood, Susanne, 410
- Wood Committee, 401
- Woodman, W Bathurst, 145
- Woolwich War Memorial Hospital, London, 192
- Workhouse infirmaries, 1, 68, 432: *continued as* Municipal infirmaries
- World Health Organization (WHO): reference centre, 302, 316
- World War I, 181-3, 185, 201, 219-20
- World War II, 201-6
- Wyard, Stanley, 182, 189, 490
- X-ray department: established, 190, 191, 222; expanded, 194, 197, 200, 226, 397, 405; link with Bart's, 302; work in, 282, 286; *see also* Radiology
- Yeomans, F C, 247
- Young, Allan C, 316-17, 358, 368, 379, 490, 491
- Young, Hugo, 297









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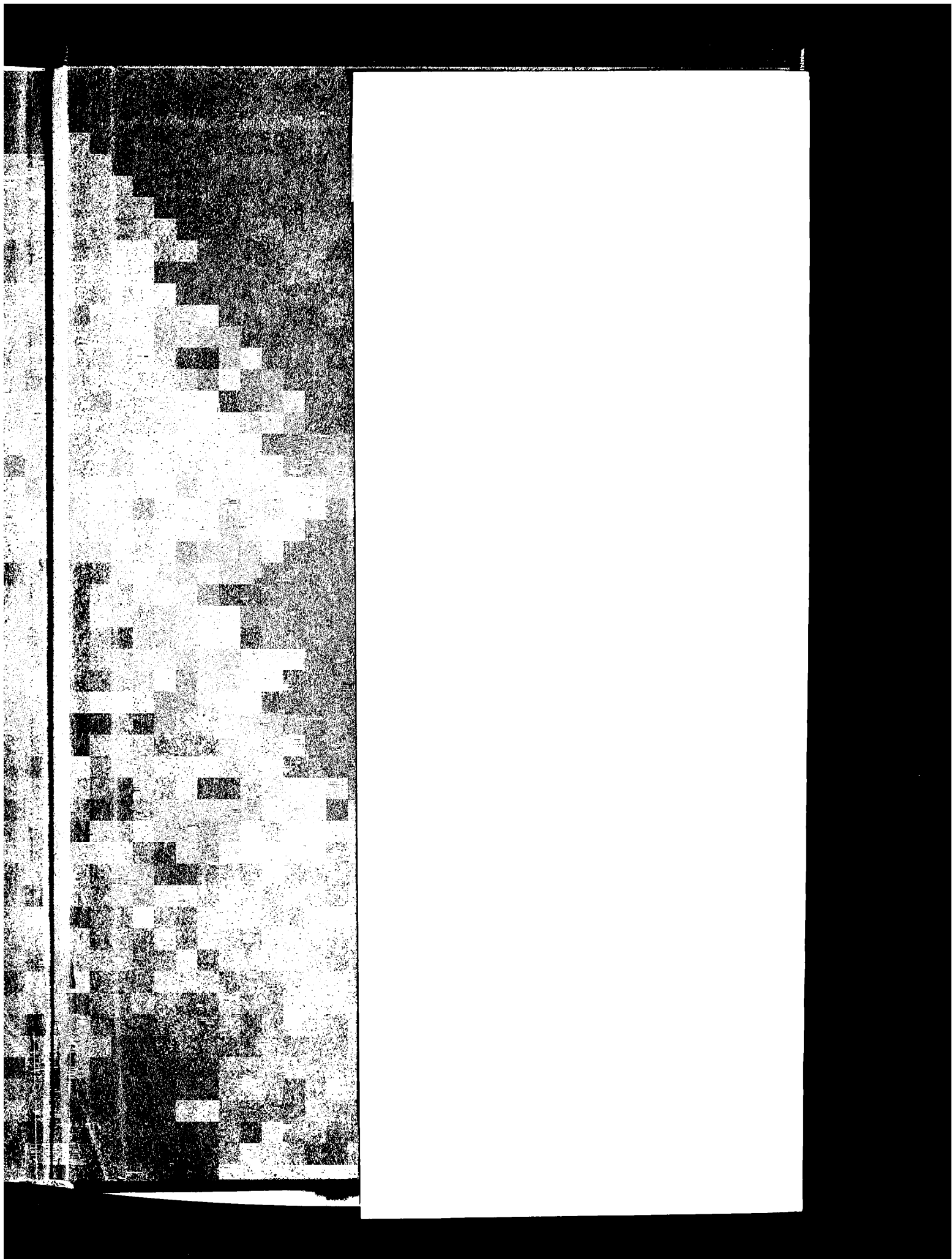
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