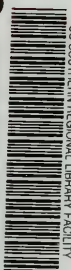


BIOGRAPHICAL HISTORY OF
GUY'S HOSPITAL

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A BIOGRAPHICAL HISTORY
OF
GUY'S HOSPITAL



THOMAS GUY.

See page 62.

A BIOGRAPHICAL
HISTORY
OF
GUY'S HOSPITAL

BY
SAMUEL WILKS, M.D., LL.D., F.R.S.
AND
G. T. BETTANY, M.A., B.Sc.



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PREFACE.

AN apology is due to the subscribers of this work for the long delay in its issue. This has unavoidably arisen from the protracted illness and ultimate death of my late colleague Mr. Bettany, who left the portion of the book assigned to him unfinished. It is but fair to his memory, however, to state that we are indebted to him for the part requiring the greatest labour. I refer to the life of Thomas Guy, which now appears almost in the light of a revelation. Before Mr. Bettany commenced his investigations little more was known of Thomas Guy than was contained in a few stories enveloped in fable; such, for instance, as that he was a bookseller, of not over-scrupulous honesty, who to appease his conscience built a hospital. The falsity of this belief is here shown, and Guy will henceforth stand out in history, as might have been expected, as a man of great intelligence, industry, and piety; and, above all, as the greatest philanthropist of his day.

The amount of arduous research which this biography entailed I know must have been great, judging by the numerous visits paid by Mr. Bettany to the

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British Museum and to the City Guilds, and from his correspondence with Mr. A. A. Clarson, of Tamworth, which town Guy represented in Parliament. He was indebted to this gentleman for much information concerning Guy's almshouses there.

Beside this life of Thomas Guy, Mr. Bettany wrote nearly all the biographies of the early physicians and surgeons to Guy's Hospital. He had promised also the lives of some of the most eminent members of the medical staff at the beginning of the present century. But as these had not been written, I had no hesitation in making use of several of the biographical accounts contained in his "Eminent Doctors."

The principal value of the later biographies from my own hand lies in the fact that the subjects of them were personally known to me, and therefore all the chief points in their history still remain in my memory.

My best thanks are due to Mr. Targett, who has assisted me in revising the proof-sheets, and has contributed largely to the concluding section of the work. The photographs from which the illustrations have been made were kindly taken by Mr. Hacquoil; and for help in various ways while the book has been passing through the press I am indebted to Mr. C. H. Wells, of the School Department.

S. W.

November 1892.

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BIOGRAPHICAL HISTORY
OF
GUY'S HOSPITAL.

BOOK I.

LIFE OF THOMAS GUY.

CHAPTER I.

GUY'S EARLY LIFE.

IT seems very natural that a great hospital, like a great collegiate or religious foundation, should frequently originate with a single founder. It is given to many to have broad sympathies, keen intelligence, or elevated conceptions; and these are combined in more cases than is generally believed. But the union of these with sound, practical judgment and business capacity, and with the powerful will which can carry out a great enterprise, is rare; and that it should have been found in full vigour in Thomas Guy, at a period of life when most men's grip of practical affairs is weakening, is a strong testimony to his character, and a reason for holding him in high regard, and for endeavouring to trace his life in some detail.

The materials, however, for such treatment have hitherto been very scanty. Beyond the details given in Maitland's "London" (1739), evidently supplied by the

Hospital authorities, and in Guy's own will, few authentic facts have been known, the stories given by Nichols in his "Literary Anecdotes" and "Literary Illustrations" not being traceable back to contemporary authorities. Diligent search has, however, revealed a number of interesting facts regarding the founder of Guy's Hospital, which we now proceed to relate.

The family of Guy is said by Burke ("Founder's Kin") to have belonged to Egham, in Surrey. Our records begin with Thomas Guy the elder, who in Charles I.'s reign was a lighterman and coalmonger in Southwark. His position was more well-to-do than his designation might at first sight indicate. At that time sea-borne coal alone reached London, and the trade was in the hands of lightermen, who transferred coal from the colliers to the wharves, and also vended it to consumers. Considerable capital was involved in the business; and inasmuch as lightermen must have barges, involving a connection with carpentry and boat-building, we find that Thomas Guy the elder was enrolled as a citizen and carpenter, or member of the Carpenters' Company of the City of London, enjoying its franchise in the troublous times of the later part of Charles I.'s reign (Maitland).* We may picture him as having both a yard for selling coal and a wharf for landing it, unless perchance he combined the two, for his abode was not far from the river bank as it then existed. Fair Street, Horselydown, was then, as it is now, in an outlying part of Southwark, at the east of Tooley Street. We may imagine how many of the merchants and tradesfolk of Southwark dissented from the Established Church from the number of their meeting-houses, which were thickly scattered about Southwark. Of one of these Guy

* The existing records of the Carpenters' Company do not contain Thomas Guy's name; but for the period of the Civil War they are less full and regular than at later dates.

was no doubt a member, for it is distinctly recorded of him that he was "an anabaptist," and it is worth noting that there was a meeting-house of the Baptists in Dipping Alley, Fair Street, Horselydown, which went by the name of "The Dipping Place," on account of a baptistery there, which was used by several congregations in common for purposes of adult baptism. This baptistery, which is said to have been in the shape of a horse-pond, was situated in a burial-ground behind the meeting-house. We can only conjecture that Thomas Guy attended this place (which was only a little south-east of Pritchard's Alley, to be presently mentioned), while his young children would not be baptised there, nor in the Established Church from which their father dissented (see Wilson's "Dissenting Churches," iv., 253). This, no doubt, accounts for our being unable to discover the precise date of Guy's birth.

Thomas Guy, the future founder of the Hospital, was thus born less than a mile from the site on which he was destined to build it, in the north-east corner house of Pritchard's Alley in Fair Street, directly adjoining the main street, and two doors only east of the churchyard of St. John, Horselydown, which still exists, though no trace of Pritchard's Alley' is to be seen. The houses have doubtless been rebuilt since Guy's time, and the north side of the street is flanked by model dwellings of great height. We must not lose sight of the fact, however, that Guy's birthplace was then on the very outskirts of London, and that fields were near and pure air was no stranger, as it is now, to the denizens of Fair Street, which, more than once in 1889 and 1890 when we passed through it, reeked with offensive odours, and was the reverse of "fair," owing to the quantities of garbage with which it, as well as the courts of the "model" dwellings, was strewed.

It was in this locality that Thomas Guy, the eldest

child of his parents, was born in 1644 or 1645. His mother, whose maiden name was Anne Vaughton or Voughton, the daughter of William Vaughton, belonged to a very respectable and influential family in Tamworth, which had for generations furnished bailiffs (answering to mayors), capital burgesses, and churchwardens to that ancient borough. How her husband became acquainted with her we cannot gather; whether he had relations at or was a native of Tamworth, or whether she met him during a visit to London. But it argues well for his established position and respectability that he should have married such a woman; and it showed the strength of her attachment to her old home that she should have returned thither when she became a widow. Her early married life did not extend beyond nine years probably, her husband having died young in 1652 or 1653, when her eldest child was but eight years old, the younger ones being a son, John, and a daughter, Anne. Thus closed the first portion of Guy's London life, at an age when he had probably progressed no further in education than to attend a dame school, and could know little of London except in the immediate neighbourhood of his home, where fields and trees were still numerous, together with low-lying marshy ground, open ditches, and murky streams.

To Tamworth, then, Mrs. Anne Guy returned, no doubt with a fair sum realised from her husband's business and effects, judging from the amount which was later forthcoming to apprentice her son and to start him in life. Where she lived in Tamworth we do not know; but in all probability her son Thomas was educated at the Tamworth Free Grammar School, which he afterwards remembered in his benefactions. George Antrobus, M.A., was master of this school from November 7th, 1659, previous to which a certain Mr. Ellis was master. During Guy's youth the connection of the Tamworth

School with the Church of England would probably be influenced by the Independent principles in vogue, especially at Tamworth, which had been a notable parliamentary and Independent centre; and at any rate we do not find any special trace of churchmanship of the straiter kind in his subsequent life, though he appears to have been equally devoid of bigoted dissent. Possibly, from his subsequent connections and entry into parliament, he conformed to the Church of England, though retaining strong Protestant and liberal principles. At any rate, if he went to school at all, which he must have done to be a fit apprentice to a bookseller, he learned Latin, and possibly some Greek; and this is all that can be said as to his education. In some way or other he acquired a keen practical intelligence well fitted for large undertakings; he had been "carefully educated," as Maitland records.

Shortly after the Restoration, on September 3rd, 1660, young Thomas Guy, being between fifteen and sixteen years of age, was apprenticed for eight years to John Clarke the younger, bookseller and bookbinder, in Mercers' Hall Porch, Cheapside, London.* In the next year, on June 18th, 1661, the register of the Collegiate Church of Tamworth records the marriage of "Mr. Joseph Seeley, of Coventry, and Mrs. Anne Guy, of Tamworth;" but it can scarcely be presumed that she went to live at Coventry, although we hear no more of her at Tamworth; for on November 6th, 1667, the marriage

* The following is a copy of the entry relating to Guy's apprenticeship in the Apprentices' Register of the Stationers' Company:—

3 *Septemb.* 1660

Mr. John Clarke
junr.

Thomas Guy sonne of Thomas Guy Citizen
and Carpenter of London deſed hath put
himſelfe an appr unto John Clarke the
younger for eight yeares from Midsomer
day laſt

of John Varnam and Anne Guy is recorded at Tamworth, and the balance of probability appears in favour of Anne Guy's mother being then still resident at Tamworth.

Thomas Guy then, as bookseller's apprentice, lived, no doubt, over or behind his master's shop, in the heart of London, during the gay early days of the Restoration; but they did not inspire him with a similar disposition, if we may interpret his early days by his later history. He became a clear-headed, sharp-witted business man, and the excitements and gloomy events of the Plague year and the Great Fire probably intensified his habits of reflection. We ought not to forget, too, that towards the close of his apprenticeship Milton's great epic first issued from the press. But we will not expand our conjectures further, having no data. We only know that, having duly completed his apprenticeship on October 7th, 1668, Guy was admitted a freeman of the Stationers' Company, and on October 14th of the same year was admitted a freeman of the City of London; and further, that on October 6th, 1673, having been five years a freeman, he was received into the livery of the Stationers' Company.*

Guy's active career began immediately after his apprenticeship closed. Being provided with means, he at once established himself in business, selecting a most advantageous position in a little corner house at the junction of Cornhill and Lombard Street, opposite the Mansion House, where he continued to do business and to reside throughout his life. A well-known spot in the last century, the site became absorbed into the street about 1834. This house was said to be one of the first built after the Great Fire. It received the

* The Livery Fine (*i.e.* the customary payment on admission) was £20, and there was also a payment of twenty shillings more to the Renter-Warden, who gave a costly entertainment to the Company once a year.

large stock, for that time, of about two hundred pounds' worth of books; and beyond this we know nothing of the means with which Guy started. From various contemporary accounts, however, we learn that any bookseller at that time might publish books on his own account, and that the lines were by no means distinctly marked between publishers and booksellers, wholesale and retail. The wholesale trade was in its infancy, and a great portion of a bookseller's trade was retail, or was transacted with individual private customers. One favourite mode of trading was for booksellers to exchange with one another the sheets of the books they severally published, according to their respective values and needs. One man printed a saleable book, and, by exchanging the sheets with various other booksellers for their publications, obtained a varied and assorted stock, which he bound up as his own sales progressed, in styles suitable. Frequently books bore on their imprint, "Printed by So-and-so for So-and-so (mentioning one or more booksellers), and sold by the booksellers of London and Westminster;" or it might be printed for and sold by a considerable number of booksellers, each having taken a share in the venture. But genuine booksellers and publishers, with a knowledge of books and interested in their production, were perhaps more numerous in proportion to the population then than now.

CHAPTER II.

GUY AS A LONDON PUBLISHER.

WE have seen Guy established in business, and made free of the Stationers' Company and a liveryman of the City of London. How did he proceed to show his business capacity?

Details are largely lacking, and we can only gather partial light. No doubt Maitland's account is to be taken as authentic evidence derived from those who knew. He says that at that time "the English Bibles printed in this kingdom being very bad, both in the Letter and Paper, occasion'd divers of the Booksellers of this City to encourage the Printing thereof in Holland, with curious Types and fine Paper; and imported vast Numbers of the same to their no small advantage. Mr. Guy soon coming acquainted with this profitable Commerce, became a large Dealer therein. But this trade proving not only very detrimental to the Publick Revenue, but likewise to the King's Printer, all Ways and Means were devis'd to quash the same; which being vigorously put in Execution, the Booksellers by frequent Seizures and Prosecutions became so great Sufferers that they judg'd a farther Pursuit thereof inconsistent with their Interest."

A large dealer in foreign-printed Bibles—probably also Prayer-books and Psalms; that is all that we learn positively about Guy's early career as a publisher; and after some years he began to find the constant warfare

with the king's printers too harassing and risky. But we must not judge him and his fellow-booksellers by present standards as to piracy. They lived in a time when everything was claimed by the king as his special possession, and such privileges as the grant of a license for printing were regarded as opportunities for making as much as possible out of the persons privileged—whether for the king's privy purse or for that of his courtiers and officials. It was not to be expected that men who had for many years lived in the beliefs expressed in the "Areopagitica" should tamely abandon them, or consider the privileges claimed by the king and his printers as other than an unrighteous usurpation. Such regulations as the limitation of printing to London, York, Oxford, and Cambridge, and of the number of master printers to twenty, and the stern exercise of the censorship in all new works, were certain to provoke discontent, and secret or even open resistance. The fact that the king's printers and the Stationers' Company were in trouble at various times as to how they should proceed, shows that they were not on altogether safe ground legally. We find that those who invaded the privilege were often members of the Stationers' Company, which called them up before it to question and admonish them. Evidently the value accruing from the privilege was not distributed to every member of the Company; in fact we believe it was shared by a privileged few, the holders of what was called the English Stock of the Company. On October 6th, 1678, we find that the court of the Company ordered that several members, including Guy, should be summoned to answer why they had invaded the property of Messrs. Newcomb, Hill, Bellingier, and others by printing their "copy" entitled "The affidavit and certificate for burying in woollen according to the late Act of Parliament," without their leave. We do not know the result of this summons, but

a further stage of proceedings in the general question is marked by the opinion of counsel, Sir W. Jones, on November 1st, 1679, that seizing foreign-printed books was not safe, and that proceeding by action was the right course against any who should print or sell any books printed contrary to the king's patent.

As to the actual publications of Guy, we have little light before 1677 and 1678, by which time the young bookseller had become pretty well established in business. But the fourth edition of Howell's "Familiar Letters, Domestic and Forren," bears Guy's imprint, 1673; and he published an edition (the third) of John Ogilby's translation of Virgil, in 1675, in conjunction with Peter Parker.

The next book is a copy of John Bond's edition of Horace, with variorum notes, "printed for John Seymour, Esq., and are to be sold by Peter Parker . . . and Thomas Guy . . . 1678." This edition contains a valuable "find" in the shape of a catalogue of "School-Books printed at the Theatre in Oxford; and are to be sold by Peter Parker and Thomas Guy, in Cornhill, against the Royal Exchange." It includes the following:—

- Plinii Epistolæ et Panegyricus. 8.
- Homer's Iliads with Didymus's notes in Greek.
- Theocritus in Greek, with large notes. 8.
- Herodian's History, Greek and Latin; with large notes. 8.
- Thomæ Lydiat Canones Chronologici, nec non Series Summorum Magistratum, et Triumphorum Romanorum. 8.
- Justini Historiarum ex Trogo Pompeio Libri 44 plus 100 Manuscript. Cod. Collatione recogniti. 12.
- Cornelii Nepotis Vitæ Excellentium Imperatorum. 12.
- Salustii opera, with large notes. 12.
- Quintilian's Declamations. 8.
- Maximus Tyrius, Greek and Latin.

This list gives us an idea of the books in favour with Oxford University in Charles II.'s reign. It is by no means a narrow or uninteresting one. These books

were the undertaking of the University through its delegates, with whom we shall make acquaintance later. They have not been found bearing any special imprint of Guy or Parker, but the copy of Sallust in the British Museum has affixed on the title a separate imperfect label of Will (Leake) in Fleet Street; indicating probably a habit of the London booksellers who sold Oxford schoolbooks.

The list of books "printed at London" which follows the above is even more interesting. It runs thus:—

A Dictionary, English-Latin and Latin-English, containing all things necessary for translating either language into the other. Together with an addition of Idioms, Particles, and Phrases, more than are in any other Dictionary extant. By Elisha Coles. 8. Price 7*s*.

Erasmi Colloquia Familiaria. 12

Scholæ Wintoniensis Phrases, the Latin phrases of Winchester School, etc. By H. Robinson. 8.

Godwin's Antiquities, complete — viz., Roman, Greek, and Jewish. 4.

Martialis Epigrammata. 12.

Quintus Curtius, in Latin. 8.

The same in English. 8.

Lucius Florus, in Latin. 24.

The same in English. 8.

Valerius Maximus, in Latin. 24.

The same in English. 8.

Cæsar's Commentaries, Latin. 24.

Mantuan's Eclogues, translated into English. 8.

Sleidan de 4 Imperiis, translated into English. 12.

Juvenal's Sixteen Satyrs, translated into English by Sir Robert Stapleton. 8.

Lucan's Pharsalia, translated into English by Thomas May, Esq. 8.

Virgil's Works, translated into English by John Ogilby, Esq. 8.

An English Dictionary; explaining the difficult Terms that are used in Divinity, Husbandry, Physick, Philosophy, Law, Navigation, Mathematicks, and Other Arts and Sciences. Containing many thousands of hard Words (and Proper Names of Places) more than are in any other English Dictionary or Expositor whatsoever. Together

with the Etymological Derivation of them from their proper Fountains; whether Hebrew, Greek, Latin, French, or any other Language. In a method more comprehensive than any that is extant: by Elisha Coles. 8. Price 3s.

Epistolæ Ho-Elianæ. Familiar Letters, Domestick and Forreign. By James Howel, Esq.

We have seen a number of these books bearing the imprint of Peter Parker alone; some are "sold by the booksellers of London and Westminster." Copies of Coles's English Dictionary, 1676-7, in the Bodleian bear, one, the imprint of Parker, the other that of S. Crouch, but this one contains Parker's catalogue. There are several details of interest about Parker's books, but we must not give them here.

To complete here the notes of books published by Guy, we have found on going over R. Clavell's "Catalogue of Books Printed in England 1666-95," the following additional titles:—

Divinity in Folio: Roberts's Key of the Bible. P. Parker and T. Guy.

Divinity in 8vo: Ellis's Catechism. T. Guy.

Divinity in 8vo: Goodwill towards Men, a Treatise of the Covenants New and Old. T. Guy.

Divinity in Twelves, etc.: Ellis's Christianity in Short, or the Way to be a Good Christian. T. Guy.

History in Folio: Cleopatra, the most famed Romance, in twelve parts. P. Parker and T. Guy.

History in Folio: Ibrahim, or the Illustrious Bassa. P. Parker and T. Guy.

History in Folio: Ligon's History of the Barbadoes. P. Parker and T. Guy.

Miscellanies. Quarto: Case of Interest; or Usury as to the Common Practice, stated and examined. T. Guy.

Poetry. Ogilby's Paraphrase on Virgil, with Sculptures also and Notes. P. Parker and T. Guy.

It should be noted that the names of publishers of sermons, discourses against popery, plays, music, and some other classes, are not given in Clavell's list.

Three other books published by Guy belong to later dates, viz. :—

Jacob's Ladder. By Jo. Hall, B.D., 1698; ninth edition. Printed by F. Collins for Thos. Guy at the Oxford Arms in Lumbar Street.

A small quarto: *Death's Vision*, represented in a Philosophical Sacred Poem. Printed for Thos. Guy, 1709.

At Canterbury is a copy of the following :—

Jesu Christi D. N. Novum Testamentum sine Novum Fœdus. Interprete Theodoro Beza. Lond.: Impensis Thomæ Guy ad Insignia Oxoniensia in vico vulgo dicto Lombard Street, 1705.

This is Beza's Latin Testament. Its publication indicates Guy's continued interest in Bible publishing, though he had long since discontinued his Oxford agency.

A further interesting detail about Guy's publishing career is made known—and, so far as we know, solely by this one incident—by the title-page of the copy of Coles's Latin Dictionary, 1677, at the Bodleian. It was printed "for Peter Parker . . . and Thomas and John Guy;" thus showing that Thomas Guy had his brother John (referred to in the chapter on Guy and Tamworth) in partnership with him at that date. How long this continued we do not know. No other imprint has been discovered bearing his name.

An entry in the Copyright Registry of the Stationers' Company, dated March 24th, 1710-11, records the whole copyright of "*Emmenologia*," as belonging to Thomas Guy; no doubt it was Dr. John Freind's well-known book, first published in 1703. It is of interest as being probably the only book Guy published relating to a medical subject.

Some bibliographical details respecting Guy's books may be found interesting to book-lovers.

The collection of various editions of "*Howell's Letters*" in the

Howley Library, Canterbury, is probably unequalled. On an added sheet of paper preceding the title of the First Edition, 1645, Archdeacon Harrison wrote: "This collection of successive editions of Howel's 'Familiar Letters' was made by my Father, who, as Treasurer (for more than fifty years) of Guy's Hospital, took an interest in books published by Thomas Guy, the sole Founder of the Hospital. The fourth edition of the 'Familiar Letters,' and two subsequent editions, were published by Thomas Guy.—B. H."

The fourth edition has the following title: "Epistolæ Ho-Eliañæ | Familiar | Letters | Domestic and Forren | Divided into four Books

| Partly { Historical
 { Political
 { Philosophical

| Upon Emergent Occasions |

By James Howell, Esq.; one of the Clerks of his late Ma^{ties} most Hon^{ble} Privy Councill.

The Fourth Edition.

London: Printed for Thomas Guy, at the corner shope of little Lumbard Street and Cornhill, near Woolchurch Market, 1673." It is a small octavo, 6½ in. × 4 in. × 1½ in. One copy has no plate, the other has an impression of the large good plate, badly printed or worn. Of the fifth edition, 1678, there are three copies at Canterbury, two in the British Museum, and one at the Bodleian. The sixth edition, 1688, has the imprint, "Printed for Thomas Guy, at the Oxford Arms near Pope's Head Alley in Lumbard Street, 1688." The seventh edition is "Printed for T. G. and sold by S. Crouch at the corner of Pope's Head Alley, and William Davis at the Black Bull, both in Cornhill." Both these editions are also in the British Museum. The eighth edition, 1713, has the imprint: "Printed and are to be sold by the Booksellers of London and Westminster." One copy has the same plate bearing the legend, "Sold by Thomas Guy." The ninth edition, 1726, very much corrected, was printed for a number of booksellers, including J. Osborn, his friend's successor, and with Guy's name deleted from the plate.

Ogilby's Virgil is a very rare book. The third edition has the title, "The | Works | of | Publius Virgilius | Maro: | Translated, | Adorned with Sculptures, and | Illustrated with Annotations:

By John Ogilby, Esq., His Majesties | Cosmographer, and | Geographique Printer |

London: Printed by the Author, for Peter Parker and Thomas | Guy, and are to be sold at their shops, at the Leg and | Star, over against the Royal Exchange, and at the Corner- | shop in Little Lombard Street and Cornhill, 1675."

This is an edition in large type, with the annotations following

each book or eclogue; and there are three sets of pagination, or three volumes in one, though not so styled.

The dedication is curious: "To the Illustrious and High-born Princess, the Lady Mary, Eldest Daughter to His Royal Highness James, Duke of York: This Elaborate Translation of the Prince of Latin Poets, Virgil, adorned with Sculpture, and Illustrated with Annotations; In all ages worthily esteemed the Equal Standard of Virtue and Honour: Is most humbly Presented, Dedicated, and Devoted, By Her Highness most Humble and Obedient Servant, John Ogilby."

There are two copies of this edition in the Bodleian, and one at Canterbury.

A somewhat more interesting edition is one without date, but probably later than the foregoing. It is a small octavo 7 in. \times $4\frac{1}{2}$ \times $1\frac{1}{4}$ in., with an engraved title-page, having in the centre a bust of Virgil crowned with laurel leaves. At the foot, in one line, is the imprint: "Sold by Tho: Guy at y^e Oxford Arms on y^e west side of the Royall Exchange."

The general design shows Jupiter crowned, with his eagle, in the centre; Juno on his left, and Venus (with Cupid) as mother of Æneas, on the right. Below we see the Straits of Messina, and Æneas's fleet, of which one ship has foundered. At the left a great battle is taking place.

In this edition, which has only 403 pages, there are copious marginal and foot notes to the verse translation, crowding the page inconveniently. There are thirty-two engraved plates, very crude and conventional, ten belonging to the *Bucolics*, ten to the *Georgics*, and twelve to the *Æneid*.

The sixth edition of Coles's English-Latin and Latin-English Dictionary (at Canterbury), 1707, printed by F. C. for Tho. Guy, has a very full and interesting title-page, and an address "by the Bookseller" at the end of the preface as follows: "This book hath sufficiently commended itself to the world by the sale of almost 4,000 in less than two years' time": and the following advertisement: "Lately published by the same author, and sold by Peter Parker, an English Dictionary (as above), *Nomenclatura Trilingua—Anglo-Latino-Græca*: or a short vocabulary, English, Latin, and Greek, with a collection of Proverbs, also Examples of the 5 Declensions, and for declining Greek nouns Latinized. To which is added in this 6th Edition, Terms used in Rhetorick. The like for young beginners never before Printed. Price 10*l*. Sold by T. Guy, P. Parker, A. Churchill, and G. Conyers.

Colloquia Trilingua—Eng., Lat., Gr. Being Familiar Forms fit to bind with the *Nomenclatura*."

The full imprint of the copy of Coles's English-Latin and Latin English Dictionary in the Bodleian, referred to above, is :

“Printed by John Richardson, for Peter Parker, at the Leg and Star, over against the Royal Exchange; and Thomas and John Guy, at the Corner Shop of Little Lumbard Street and Cornhill, 1677.”

The second edition of this book, in the British Museum (1679), has the same advertisement by the bookseller, which is still kept up in the sixth edition, “This book hath sufficiently commended itself,” etc., so that it applies to the sale of the first edition. It also has a commendation by “Dr. W.” to Parker for publishing so useful a book, dated September 10th, 1677. It has a royal license prefixed, granting the sole privilege of printing the book for fourteen years to E. Coles. February 27th, 1677.

CHAPTER III.

GUY AND TAMWORTH.

WHETHER Guy visited Tamworth during his apprenticeship or his early business life we do not know, but it is at least probable that he did so, from the circumstantial interest he is found taking in the ancient town soon after he had passed his thirtieth year: and first in its Grammar School. George Antrobus, M.A., who was appointed master of Tamworth Grammar School in 1659, and held the post till 1708, appears to have been both a successful and an improving master. It is of interest also that William Whiston, the celebrated divine, was a pupil of his, and married his daughter. Antrobus added a bay and a half to the building in 1674, and in 1677 raised a considerable subscription and rebuilt the schoolroom. To this fund Thomas Guy contributed £5, and John Guy (who was now, according to other evidence, in partnership with his brother in London) £2, the Rev. John Rawlet gave £5, and John Vaughton, sen., and John Vaughton, jun., £1 each. The total sum raised was £158 16s. 6d., so that the Guys' contribution was a substantial one, and it is an indication that their fortunes were already firmly established, that they were not niggards of their money, and that they were enlightened enough to bestow it for the benefit of education in the town which was more truly their home than any other.

Guy soon followed up this gift by the first foundation of his almshouses. In 1678 he bought some ground in Gungate, Tamworth, "and did thereupon erect a comely large building, his almshouse, which cost about £200, where he doth bountifully provide for six poor women there inhabiting, and hath given a fair large room therein for a library."* The number seven poor women is more current, and it occurs in other documents of undoubted authenticity. Two of the rooms were thrown into one in 1688 to receive the library which the Rev. John Rawlet bequeathed in 1686 to the schoolmaster and the town of Tamworth; £10 19s. 4d. being raised by public subscription to fit up the room.†

It was no slight or unnoteworthy phenomenon or indication of character, this foundation of an almshouse when Guy had not reached the age of thirty-five. Throughout his lifetime we shall find that "deeds rather than words" was the characteristic of Thomas Guy; and it is interesting to see that his first care was for poor women rather than men. He who could feel for their poverty, in widowhood, or solitude, or age, was a man of true charity. He did not wait, as most men of thirty-three or four would do, to accumulate more money before he established a big charity, but he did what he could, and what was in his heart, at once. A remarkably successful, if an economical man was this Thomas Guy, and he showed the right kind of attachment to his native town. He aided the education of its children, he looked after its poor and infirm in the way that appeared to him wisest and kindest. He wished that there should be "no complaining" in its streets.

The next mention of Guy in the Tamworth records

* "Tamworth Corban, or List of Charities," 1671, and so continued by the Rev. S. Langley, vicar of Tamworth, a contemporary MS.

† The library was removed about fifty years ago to a suitable room at the Grammar School, which itself has been rebuilt on another site.

relates to an equally beneficent endeavour, if it did not produce all the results anticipated. Lord Weymouth (previously, as Sir Thomas Thynne, long member for Tamworth) in 1686-7 gave the corporation a barn and fold to be converted into a workhouse, wherein the poor might be employed and their children instructed; and upon this site a new building was erected by public contributions, Thomas Guy giving £5 and John Guy £1, out of £119 given in money and material. This building, known as the "Spinning School," was used only for children (probably for their instruction and industrial training).

In July 1693 we find the Corporation ordering that the £5 they contributed annually out of the town box to this school should be continued, and at the same time it was announced that Mr. Guy had added a contribution of £10 a year. In course of time the school declined and fell into disuse, till in 1719 the Corporation ordered the building to be converted into a number of houses for the poor.

In 1692 Thomas Guy enlarged his original benefaction for the poor, now taking in men as well as women, and doubling the cost to himself. The Corporation, on August 1st, 1692, resolved: "That whereas Mr. Thomas Guy hath a further intention of Charity to this Borough by building Almshouses for some poor men and there being a spare space of ground at the north end of the women's Almshouses It is therefore ordered that the said spare parcel of ground be granted to the said Mr. Guy for the use of the said poor people as the said Mr. Guy shall see good to dispose thereof." Upon this ground Guy built seven additional rooms for seven poor men, the new building costing about £200, like the former. The estimation in which he was by this time held in Tamworth may be judged from the terms of a resolution passed by the Corporation on July 21st, 1693:

“It is ordered that Mr. Thomas Guy, *our incomparable benefactor*, have free liberty to erect a brick wall in the street in Gungate on the west side of the Almshouses he hath there built.”

The election to the second Parliament of William and Mary, which assembled on March 20th, 1690, was the first in which Thomas Guy sought the suffrages of the burgesses of Tamworth, but he was defeated by Sir Henry Gough, Bart., and Michael Biddulph, Esq. On March 24th his petition was read in the Commons, complaining that although he had the majority of legal votes, the bailiff, by undue practices, had returned Gough and Biddulph. The petition was referred to the Committee of Elections, but with no satisfactory result to Guy. In the third Parliament of William, November 1695 to July 1698, Guy was more successful, being returned with Sir Henry Gough apparently without opposition. A letter from Dr. G. Smalridge, afterwards Bishop of Bristol, dated from Oxford on October 28th, 1696, written to his pupil Walter Gough, son of Sir Henry, contains an inquiry whether Lord Weymouth has sufficient influence at Tamworth to keep Guy out at the next election.*

In the next (fourth) Parliament, which only lasted from August 24th, 1698, to December 19th, 1700, there was a fiercely-contested election, in which Guy obtained 221, John Chetwynd, Esq., 193, and Sir Henry Gough 184 votes. The latter petitioned against the return, on the ground that voters not duly qualified had been admitted to poll. The Committee of Elections reported on March 17th, 1699, unseating Mr. Chetwynd and seating Sir Henry Gough, on the ground that duly qualified freeholders had been improperly excluded from the poll.

* Nichols, “Literary Illustrations,” iii., 253.

The narrative of the proceedings on this petition is exceedingly interesting reading ("Journals of the Commons," vol. xii., p. 584), and supplies one or two particulars specially relating to Guy, who was undoubtedly present at the election, and who defended his seat vigorously and successfully. It was alleged before the Committee (Sir Rowland Gwynn, chairman) that the bailiffs, as returning officers, had unduly favoured the sitting members. On the preliminary question, as to the right to vote, it was decided that not only the bailiffs and capital burgesses were entitled to vote, but also all freeholders, whether resident or not, and all inhabitants who paid scot and lot. In relation to this matter it appeared that Mr. Chetwynd and Mr. Guy desired that the poll of out-freeholders might be separately taken, which accordingly was done. Then Guy's own vote was objected to, as he did not pay scot and lot, nor was he in any levy (of rates or taxes). The franchise was pretty wide, for many whose votes were examined paid only *1d.* or *2d.* to the levies, and were very poor, and many were practically lodgers, several living in houses conjointly. The putting people into the levies for only *1d.* or *2d.* was objected to as an abuse, to give a pretence for voting. Many who voted were disqualified as recipients of charity. One Richard Blyth was an inmate of Guy's almshouse, but was polled because he was in the constable's levy. An illegal adjournment of the poll took place, various votes being received on a second day. "Before the adjournment the bailiff's son broke the peace, and would shove and hinder those that came for the petitioner;" and what the bailiff's son did we may expect found imitators. Various instances of partiality in the reception and rejection of votes were brought forward.

As to the adjournment, we read that "the bailiff and the recorder were both ancient men, and the bailiff

having not dined was quite tired out about six o'clock. At the request and by the advice of the recorder, as well as for his own ease, about six o'clock, after three proclamations in the Hall and at the Market Cross, he adjourned the poll until next morning." At this time many had got drunk, and there was a great disturbance, particularly among the petitioner's friends. There was some evidence of threatening, bribery, and treating by the petitioner's agents. Finally the petitioner's counsel gave up all attempt to question Guy's election, and the resolution seating Guy was passed by the House without a division; the other resolutions, as to the right of voting, and unseating Mr. Chetwynd, by 176 to 150, and by 179 to 144 respectively.

Not long before this Parliament was dissolved, Guy again signalised himself as a benefactor to Tamworth by undertaking to build a new town hall. There had been originally two public halls in Tamworth, one for the Staffordshire, the other for the Warwickshire part, this town being in the unpleasant position of being divided between two counties. The Warwickshire hall, however, fell into disuse, and the Staffordshire hall was let out in portions to private individuals, one room being occasionally used for public purposes.

Guy having offered to erect a new town hall at his own cost, and in such a manner as might be most convenient and advantageous for the town, the Corporation arranged to pull down the old (Warwickshire) hall and some adjacent houses belonging to the Corporation, and also two other houses bought for the purpose. Several exchanges of property were made by the corporation, and Lord Weymouth (in 1701) gave a piece of ground with a shop, which he directed to be pulled down, and the materials to be sold for the benefit of the poor. The Corporation allowed Guy to dispose of the materials of the old hall at his pleasure. The building of the new

hall was begun in 1701, and completed by the summer of 1702.

The edifice thus erected by Guy, says Palmer, "consisted of a room of considerable dimensions, supported by three rows of large pillars of stone with semicircular arches, each row containing six pillars. The ascent to the room stood at the east end; and the space below was destined as a place wherein to hold the weekly market. In the centre of the roof was placed a large wooden glazed lantern, with a weather fane; leading out upon a platform defended until lately (1845) by balustrades." In 1771 two new rooms were added at the east end, but in 1811-2 these were replaced by two larger ones, and a clock was placed in front. The space beneath the large room, occupied for market purposes, was enclosed in 1835. The building, without any pretence to architectural beauty, is substantial and useful. The old part is built of red brick with stone dressings, the new entirely of brick. In 1889 new Assembly Rooms and Municipal Buildings were erected, and Guy's Town Hall is now very little used.

Among other minor notes of Guy's connection with Tamworth, in 1702 he was allowed to have a piece of waste ground, at a moderate price, on which to build several houses, and in 1703 a lease of two houses was granted to him at £7 rent, he intending to build on the site.

In 1703 he is a party to some amicable proceedings before the Justices at Westminster for freeing certain property in Tamworth and neighbourhood from part ownerships, for which Guy and others were to pay £360; and in 1707 we find him appearing in a similar case, Guy paying £60 to free some property in Tamworth from rights which the Cawnes, probably relatives of his, possessed.

We may note that there is a slight mention of John

Guy in January 1703-4; the Corporation desired him to deliver a letter for them to a Mr. Port, probably in London.

For the fifth Parliament of William, February 6th, 1701—November 11th, 1701, there was again a severe contest, and the poll was as follows:—Thomas Guy, 222; Sir Henry Gough, 196; John Chetwynd, 136. "This election was by freeholders, as well those that live out of the town as within, scotters, lotters, and burgesses." On January 21st, 1701-2, a letter of thanks from Guy, dated January 13th, for his election was read in the Corporation.

To the sixth Parliament of William, December 30th, 1701—July 2nd, 1702, Tamworth returned the Hon. Henry Thynne (only son of Lord Weymouth) and Thomas Guy. This was "a popular election and no opposition."

The same members were also returned to the first Parliament of Anne (August 20th, 1702—April 5th, 1705), but the Hon. Henry Thynne being also elected for Weymouth, and choosing to sit for that borough, a new writ was issued, and Sergeant Girdler, Recorder of Tamworth, was chosen. Guy and Girdler were returned again in 1705 to the second Parliament of Anne (June 14th, 1705—April 15th, 1708), after a severe contest with Richard Swynfen, Esq. (probably son of a previous Member, John Swynfen), who declared that he had been elected, but that Mr. Girdler had been returned by the undue practices of one of the bailiffs; but his petition fell through.

In the third Parliament of Anne, July 8th, 1708, Girdler and Swynfen were returned and Guy was rejected. We have seen no record of the poll.

Palmer's account of the matter ("History of Tamworth," p. 447) is as follows. In 1707 the burgesses— notwithstanding the many services of their "incomparable benefactor," and his repeated promises that, if

they would support him, he would leave his whole fortune to the town, so that there should never be a pauper here—returned an opposing candidate. The cause of Guy's rejection is said to have been his neglect of the gastronomic propensities of his worthy, patriotic, and enlightened constituents, by whom the virtues of fasting appear to have been entirely forgotten. In the anger of the moment he threatened to pull down the town hall which he had built, and to abolish the almshouses.

“The burgesses, repenting of their rash act, sent a deputation to wait upon him, with the offer of re-election in the ensuing Parliament (1710); but he rejected all conciliation. Being advanced in age, he never represented any other place. He always considered that he had been treated with great ingratitude; and he deprived the inhabitants of Tamworth of the advantages of his almshouses.”

Mr. Palmer has been good enough to inform me that he gleaned the particulars of Guy's quarrel with the electors of Tamworth from an old lady who, in 1838, when he listened to her reminiscences, was about eighty years old. Her father was one of the leading inhabitants of Tamworth when the events relating to Guy were well known there. Her account was fully and independently confirmed by a gentleman of equal age, William Parsons, senior, who possessed the poll-books, etc., of the Tamworth elections in which Guy figured. What has become of these books and papers since his decease, and that of his son, has not been ascertained. Mr. A. A. Clarson, of Tamworth, is of opinion, however, that the causes which led to Guy's rejection must be looked for in the political history of the time rather than in local or personal matters.

To complete here the history of Guy's connection with Tamworth, we may state that by his will Guy

established a trust, including three members of the Blood family, John Cheatly, Arthur Alcock, Thomas Orton, John Radford, and his trusty friend John Osborn, to maintain his almshouses for fourteen poor persons, men and women, who should be inhabitants of the townships of Wilnecote, Glascote, Bolehall Street, Amington, Wigginton, or Hopwas,—Tamworth being left out, as we have noted before. His own relations were to be preferred, if any should offer themselves, and appeared to be proper objects of such a charity. The inmates might be removed for misbehaviour. Out of the perpetual payment of £125 due from the Stationers' Company, by bond, dated February 3rd, 1717, £115 was assigned for the support of the almshouses, £80 of it to be applied to maintaining the almspeople, by payments of two shillings per week to each, and the surplus was for repairing the premises or other purposes. The remaining £35 was to be applied by the trustees to apprenticing children, nursing, or such-like charitable deed, of four, six, or eight persons of the families of Voughton or Wood, or proceeding therefrom, as the trustees thought fit; and if no others could be found, of such other persons as were proper objects of charity.

The almshouse, says Palmer, is said to occupy the site of the original Guild Hall of St. George, an important religious confraternity in earlier times in Tamworth. It is a plain substantial building, presenting two sides of a square, with a garden behind common to the fourteen poor. Each of the almspeople occupies one room, having a separate entrance. The front towards Gungate was rebuilt in 1827, and bears a tablet recording the foundation. Out of the annual income, and from savings during vacancies, etc., £1,400 was accumulated and laid out in the purchase of property in the parish of St. Martin's, Birmingham, on which leasehold houses have been built. The leases

will expire in 1920, and a considerable increase of income will then accrue. The weekly pay of the pensioners was increased about 1825 to 3s. 6d. The £35 assigned to the benefit of Guy's poor relations was, when Palmer wrote, distributed to such annually, without reference to their place of residence, in sums varying from 5s. to £2, and any surplus was laid by to add to the endowment. In 1845 the trustees had extended the property by the purchase of the old premises known as the Spinning School.

A new scheme was framed by the Charity Commissioners in 1879. It provides that the fourteen alms-people shall be poor men and women of good character, not less than fifty years old ; that Guy's poor relations shall have preference ; and then others of the family of Vaughton or Wood, and that not more than two such shall be inmates at any one time. Preference is to be given to those who have become reduced by misfortune from better circumstances. The weekly stipend is fixed at not less than 4s. 6d. or more than 8s. a week, with coal in addition. The present income of the charity is about £230 per annum, which will be very largely augmented about 1920, on the falling in of certain building leases in Birmingham, as above noted. There still remain a considerable number of people in and around Tamworth who claim to have rights in the charity as relatives of Guy or the Vaughtons or Woods.

It was stated in the *London Journal* of January 2nd, 1725, that Guy "allowed £10 per annum to the minister of the town (Tamworth), and the like sum to a dissenting minister."

CHAPTER IV.

GUY, PARKER, AND OXFORD UNIVERSITY PRINTING.

IN order to make this somewhat complex business intelligible, it is necessary to go back a good many years, and briefly trace the history of the various grants of the privilege of printing. The Church, inasmuch as it included almost the only learned persons, and was the guardian and judge of morals, assumed the censorship over books. At the Reformation this privilege was merged in the Royal prerogative, and no books could be printed without the king's license. In the reign of Queen Mary, the right of printing was granted as a monopoly to the members of the Stationers' Company, under regulations issued by the Star Chamber. But in 1585 Queen Elizabeth forbade printing except in London, Oxford, and Cambridge, and the licensing of books was still committed to the Church in the persons of the Archbishop of Canterbury and the Bishop of London; in special cases books might be licensed by the king's printers, or by the chief justices.

Passing over a good many years, we come to the Restoration period, when, by the Licensing Act of 1662, the privilege of printing was limited to London, York, and the Universities of Oxford and Cambridge; the number of master-printers was, as in 1637, limited to twenty, and all new works were submitted to an official licenser.

From more than one of the MSS. contained in the Ballard Collection, vol. xlix., in the Bodleian at Oxford, particulars are derivable showing that there had before this been a long-standing jealousy between the king's printers, the Stationers' Company, and the University of Oxford. The latter claimed that it had an undoubted right to print all books not publicly prohibited; but the interest and constant endeavour of the London printers was to restrict or put an end to this right. From early in Charles I.'s reign there was an agreement between the three parties that the University should forbear printing certain books, and that the Company should pay them £200 per annum for this forbearance, part being paid by the king's printers.

But it appears that the Oxford University printers had been ruined during the Commonwealth period, and it was believed by the king's printers that the Oxford competition in printing Bibles was not likely to be effectual for a long time to come, and consequently they broke their share in the agreement and refused to pay their proportion any longer. They saw that the University had only a cramped room in St. Mary's Church to print in, and that it was unlikely that much printing could be attempted till the new Theatre (Sheldonian) was finished. The king's printers, it is stated, raised the prices of Bibles, especially those of useful and portable sizes, so that the poorer people could not buy them.

So matters appear to have proceeded till Dr. Fell was Vice-Chancellor of Oxford. Printing was gradually resumed, but not the printing of Bibles. The University was impoverished, and it was not till Dr. Yates, who had been appointed one of the delegates of the press with Dr. Fell, had brought into the printing business a capital of some four or five thousand pounds, that the printing of Bibles could be resumed.

The first book undertaken was a quarto Bible, known

as the quarto of 1675. The copy at Canterbury is bound up with a Common Prayer of 1675, printed at "Oxford at the Theatre," and having on the title-page the interior of a church with figures. The Old Testament and Apocrypha have an undated title-page, with a rude copy of Raphael's "Transfiguration" above, and two female figures below—one, veiled, representing the Law; the second, bareheaded, the Gospel. The New Testament, dated 1675, "At the Theater in Oxford," has a plate representing a young man writing on a dislocated obelisk with an arrow. The Metrical Psalms, also printed at Oxford 1675; are bound up in the same volume. This edition does not rank among the choicer specimens of printing, but is not without interest. At the same time Bibles in all forms were set up and issued at such a cheap rate that folios which had been £6 were reduced to £1 10s. ; quartos of 13s. 4d. came down to 5s. 6d. ; * duodecimo Testaments which had been 1s. were reduced to 5d. The same thing, in proportion, occurred with the price of prayer-books and books of homilies. A document, believed to have been drawn up by Bishop Fell in 1679, puts the case thus:—

"Besides the ease given to the nation in lessening thus the price of Bibles and service-books, there has been wrought an advantageous change in their numbers. For now almost everyone, however indigent, is encouraged to buy; and very many well-disposed persons have laid out considerable sums of money for great quantities of books to be distributed in charity to the poor, so that there have been, and are, four times as many Bibles printed as were used to be, to the great benefit of souls, and their advantage in Christian knowledge. There has likewise been made a considerable improvement in reference to trade, for whereas great numbers of Holland Bibles were

* One document states that the king's printers lost £500 on the quarto edition.

imported into England, and that Scotland, Ireland, and our Plantations were in a manner wholly supplied by them, they are all now mostly furnished from hence. The king's printers, aggrieved at this state of things, at this time endeavour the reinforcing their monopoly, and have proffer'd (*sic*) a Bill in Chancery against those who have promoted the printing of Bibles in Oxford, hoping thereby to set aside the right of both the Universities, and free themselves from any check in their exorbitant proceedings for the future."

It was urged on the part of the University that the Government should take up the matter and restrain their own printers, so that the nation should not be dependent solely upon them for Bibles, and allow them to charge what rates they pleased. But not to omit any prudent measure, the Bishop and Dr. Yates arranged to take into concert with them some London booksellers, the first being Moses Pitt and another (probably Leake). Pitt, however, became financially embarrassed, and there is no sign that Leake was strong. Consequently Peter Parker and Thomas Guy were introduced to the business (possibly Parker took over some of Pitt's liabilities). Parker, as is evident from the lists already given, was a leading London bookseller; and Guy had become so prominent, although young, that he had a share with Parker in many of his books, and was now introduced to the University business. Of course it may be said that the most important booksellers were members of the court of assistants of the Stationers' Company, and that only opponents of the Company were available. Yet from the serious efforts afterwards made by the leading representatives of the Company to oust Parker and Guy and introduce themselves to the same business, we may judge that the honour (and profit) of a connection with the University of Oxford was by no means lightly esteemed. It was undoubtedly a lift for Guy, as well as a sign of his

sufficient reputation and business experience, to be thus associated with Oxford.

These new men, Parker and Guy, took off the Bishop's hands the stock which had been accumulated, to the value of £5,000, and expended £3,000 in materials for Bible-printing,—a considerable sum to venture on any one risk, with the competition that prevailed. Vigorous work soon recommenced at the Oxford Theatre, and for many years edition after edition of Bibles, Prayer-books, and Psalms was produced, and sold largely. It is noted in a controversial document of 1692, that Parker and Guy had four presses in full work within four months of their undertaking the Oxford work, although they had had to buy complete new founts of type in London during that time; a great contrast to the dilatory and inefficient manner in which their successors of the Stationers' Company started their new contract.

Seeing this, in 1679 the Stationers' Company prosecuted the University before the Council, with the object of getting the University prohibited from printing Bibles altogether. This suit was pressed with all the energy that public and private means could use. In this matter there is unanimous agreement that Parker and Guy were extremely industrious and diligent—as indeed it was their interest to be. They bore a great part of the expense, which was in all nearly £300, and personally procured many points of evidence which greatly strengthened the case for the University. And messieurs the Stationers were defeated.

Then the Stationers set to work to print Bibles as fast and as cheap as they could, to flood the market. So, as in modern days, underselling competition gave cheapness, but certainly did not maintain excellence of workmanship, as may be seen in many of the editions of that period.

Here we may break off to comment on the Bibles,

Prayer-books, etc., which were printed at Oxford during the tenure of Parker and Guy. A number of them are to be found at Oxford and the British Museum, but a greater number at Canterbury, these last almost invariably bearing the imprint of Thomas Guy either alone or in combination with Parker, or Leake and Pitt in addition. The Old and New Testaments, the Psalms and Common Prayer, mostly had separate imprints, and appear to have been bound up in many varied combinations of editions. Thus we find an Old Testament of 1680 varied with a New Testament of 1682, the latter bearing the imprint of the four. A Prayer-book and Bible of 1682 with Guy's imprint alone is bound with metrical Psalms of 1676, "printed by J. C. for the Company of Stationers." An Old Testament of 1684, a New Testament of 1682, and Psalms of 1687 are bound together. There were quartos in 1679, in 1682-3, and 1686-7; octavos and duodecimos in almost every year; and some very small and much clipped 24mos are dated 1685, 1686, and 1687.

The most striking of all these Bibles, however, are the folios. The earliest in date that we have come across is that of 1680 (Loftie, "A Century of Bibles," 353), of which one copy is in the King's Library at the British Museum, with the arms of George III. engraved upon it, and the colophon at the end of Revelations having the names of Pitt, Parker, Leake, and Guy. There is an index at the end. Another copy in the British Museum has Guy's name only; and a third has the four booksellers' names in the colophon and an index, as in George III.'s copy. There is no duplicate of this folio at Canterbury or at Oxford.

The British Museum has a folio of 1682 (Loftie, 369), "printed at the Theatre, Oxford, and sold by Ann Leake, London." It is bound with a Prayer-book of 1681 and Psalms, these and also the New Testament bearing the

imprint of the four booksellers, as also does the New Testament. There is no duplicate at Oxford or Canterbury.

There are two forms of a folio of 1684 (Loftie, 390) at Canterbury, the first containing the Bible only, the title of the Old Testament having a large engraved plate like the quarto of 1675, but with the Theatre engraved below; and the imprint of Thomas Guy only. The other copy includes a Common Prayer without title, the same title to the Old Testament, and the Psalms with no date, place, or name on the title. There is no duplicate in the British Museum or at Oxford.

A folio of 1685 bearing the book-plate of Bishop Burnet is in the King's Library at the British Museum (Loftie, 400). The title has the large engraving before described, and the imprint of Parker and Guy. There is no duplicate of this at Oxford or Canterbury.

Two copies of the next folio, 1688, are at Canterbury; one is at Oxford, and another at the British Museum. One of these (Loftie, 418), at Canterbury, bears the Royal arms on the title, and is bound in morocco, tooled, with cipher "W. R." crowned in the centre and at the corners. It evidently belonged to William III. Every column is enclosed by red rules. The Old Testament has the imprint of Guy only; the New Testament has that of Pitt, Parker, W. Leake, and Guy. The duplicate at Canterbury has Guy's imprint on both Old and New Testaments. The copy of this Bible in the British Museum is bound up with Prayers of 1688, bearing the imprint of Guy alone, and with Psalms having no title. The Oxford copy has Prayers without date, with Parker's imprint; Old and New Testaments, with Guy's imprint; and Psalms without title or colophon.*

* We may gather an interesting notion of the variety of Bibles and print obtainable from Parker and Guy from the following list,

Resuming now our narrative of the connection of Guy and Parker with Oxford, we find the Stationers' Company still suing the University throughout 1683-4-5, first at Chancery, then at Common Law (1684-5), protracting the proceedings, causing expenses amounting to many hundred pounds, which were paid by Parker and Guy. Here we cannot do better than quote verbatim from one of the documents at Oxford, stating the case of Parker and Guy, somewhere in 1691-2; or, at any rate, stating it from their point of view.

“Hitherto the University had no contract with the

contained in P. Parker's edition of E. Coles's English Dictionary, 1692:—

Bibles for Churches, of fair large character, superfine royal paper, Oxford print.

Idem on fine royal paper.

Idem on ordinary royal paper.

Bibles in fol. for Families or Churches, Oxford print.

Bibles in large 4to, on fine royal paper, fair letter.

Idem on ordinary paper.

Bibles in middle-sized 4to, both of Oxford, Cambridge, and London print.

Bibles in small 4to, Oxford print.

Bibles in 8vo, large fine paper, Oxford print.

Idem on ordinary paper.

Bibles in 12o, large Oxford print, fine paper.

Idem on ordinary paper.

Bibles in 12o small, in a longer and lesser letter, Oxford print.

Bibles in 24o, longer and lesser letter, Oxford print.

Also a curious sett of Sculptures for Bibles in fol., in 4to, and in 8vo, containing about 170 cutts.

Common Prayers of a large character, printed on fine royal paper, now used in their Majesties Chappel-royal.

Common Prayers in a lesser fol. for Churches; for Clerks, in 4to, on royal paper; in 8vo, larger and smaller; in 12o, fine and ordinary paper; in 24o.

Also curious Cutts or Sculptures for Common Prayers in 8vo, 12o, and 24o.

Books of Homilies, on fine Dutch demy paper.

Idem on ordinary paper.

Company, but the whole was left [lett ?] to Parker and Guy at £200 per annum, and the Company depended upon them;* but the Bishop [Fell] was pleased to agree with the Stationers for three years for part of the sum to forbear printing their copies,† and to leave to Parker and Guy the printing Bibles and Common Prayer Books, etc., at another part of that sum; the Stationers being free of Parker and Guy, who know better how to deal with them than the University, they paid the first year's rent, and, five quarters more being due, they refused payment of it, and procured a *quo warranto* to be brought against the University. They now disown they had any hand in it; but not to mention the guineas which were given out of the Company's stock and upon that account,‡ and the £300 allowed to Henry Hills for secret service, it is most certain that fourteen of the principal men of their Company attended at the Attorney-General's Chamber in the prosecution of the *quo warranto*.

“For this arrear of rent the University comprinted § upon the Company, which soon brought down their money, but they refused to pay the five quarters unless the University would also receive rent for the quarter in which they had comprinted upon them; so that arrear and all the rent ever since remains unpaid by the Company.

“The University were now weary of the Company, and having been long abused by them, resolved to have no more to do with them. Whereupon Parker and Guy treated with the Bishop of Hereford, then Vice-Chancellor, and the delegates, for the sole right of printing within the University; and having then expended

* That is, not to print certain books.

† Certain books in which the Stationers claimed special rights.

‡ Another account speaks of a plate of 500 guineas going one way, a tun of wine another, and a Bible which cost £60 to bind, presented to somebody else.

§ That is, printed books in direct competition.

upwards of £200 in defence of the *quo warranto*, it was agreed by the said Bishop and Delegates that upon payment of £240, being the arrears due from the Company, Parker and Guy should be duly constituted the University Printers, and that they should never make any agreement with the Company without the consent of Parker and Guy; and in pursuance of this agreement Parker and Guy paid to the Bishop £240, and received a patent under the seal of the University to be the University Printers, with all privileges and powers thereunto belonging." [This was carried into effect on March 27th, 1684.]

So matters went on till the death of Bishop Fell in 1686. Considerable delay ensued in settling his affairs; but in 1688 the University constituted the three executors of Bishop Fell their delegates for printing, granting them the same powers which the Bishop had had in his lifetime, for three years. The executors thereupon continued Parker and Guy as printers, as before, and, indeed, the University formally named them their printers during pleasure. It appears further from their own statement that Parker and Guy agreed with the delegates that, in consideration of £320 paid to the University, they should continue University printers during their lives, and that the delegates agreed never to make a fresh agreement with the Stationers' Company without the consent of Parker and Guy.

The agreement with Bishop Fell's executors terminated about Lady Day, 1691, and now a battle royal ensued. The Stationers' Company resolved to use every means in their power to oust Parker and Guy from Oxford. They fomented complaints, some of which were no doubt just, others certainly unjust, against Parker and Guy. Among their allegations was one to the effect that Parker and Guy had made a profit of £10,000, or even £15,000, sterling by their connection with Oxford

printing, and had thereby advanced "from a low and mean condition to considerable fortune." There is no sign that they were "of a low and mean condition;" nor is there any proof of the allegation that they, Parker and Guy of all others, had conspired with the king's printer and other papists to undermine the privilege of the University. This was devised to set against Parker and Guy the anti-papal party in the University; but it was an absurd suggestion that they who were fighting the king's printers should so play into their hands. These are but specimens of the wild charges made against Parker and Guy. The Stationers gained over some influential men at Oxford, including Mr. Harrington and other Christ Church men, to their side, and especially the new Vice-Chancellor; and as the delegates appointed to select books for printing and to supervise the press still contained a majority for Parker and Guy, on April 22nd, 1691, a new delegacy was appointed in an unusual manner, containing several opponents of these printers and friends of the Stationers' Company.

In order to state the case for and against Parker and Guy quite fairly, we will here copy a document (Ballard, xlix., p. 196 back), which states the complaints made against them, certainly in a prejudiced fashion, but which we can well imagine to have been a view honestly taken. The writer, however, is evidently a partisan of the Stationers' Company. It is interesting as giving us some very direct points of testimony in reference to this great contest. It is much to be regretted that it bears no signature:—

"As to the new agreement, it cannot be thought the University are obliged in justice, interest, or honour to renew with Mr. Parker and Guy. Not in law and justice: for they were no original parties in this late possession: 'twas let and leased to Moses Pitt, who received Parker and Guy without the Bishop's know-

ledge or approbation ; who vehemently opposed their being made parties in the lease ; and nothing but Mr. Pitt's inability to raise the money constrained him to a consent. They are at present only tenants at will ; and have had their bargain for their rent ; and cannot pretend to any tenant-right of renewing : nay, what they seem most to value their interest upon, their half-seal, was given them several months after the convocation had granted the whole concern of printing to the executors of the late Bishop Fell for three years.

“ Not in interest : for the University have these thirteen years been losers by them ; they having paid no more than £200 per annum, which was given formerly by the Company for non-printing ; whereas these men have fully occupied the privileges, in the Theater-structure, to its exceeding damage and injury. They have indeed seemed to enlarge the privileges to the University, but they themselves have enjoyed the full benefit and advantage of it for so many years ; notwithstanding the University were at a vast charge, to defend their new-asserted right, even to several hundred pounds, as appears by their accounts, without the least accession of advantage to the University.

“ Not in honour : the late Lord Bishop (who was so great a patron to printing) lamented his letting to these men ; and some time before he died, declared his resolution to eject them ; leaving the same instructions to his executors (which the difficulties of the times only prevented). He often protested against their many large impressions of bad books, as to correcting, paper, and letter, and filling the Theater with a number of the most profligate fellows, to the dishonour of the University and damage of the inhabitants. Since my lord's death they have printed on paper worse than ever, and on letters so far worn out that no ballad-letter was ever to that degree so bad. They designedly leave so little margin in all

their small and cheap Bibles, that they cannot be bound a second time, to the great damage of the poor ; which (with the badness of the paper and work) renders their half-crown Bibles much dearer than the same volumes elsewhere sold at a greater price. They get the profit, the University the disgrace, and the country cheated. They have printed lately an impression of twelve thousand Bibles, of a letter so scandalously bad that (if presented) would probably be found, by any grand jury, a public cheat to the nation. They have (contrary to law) intruded men of the basest and meanest condition into the trade and art of printing ; always, by any fall of trade, discharging the legal workmen, keeping those only who had a sole dependence on themselves : notwithstanding the Act of Parliament says, that if any lawful workman be out of employ he shall be received, though the master can do his work with his own hands and apprentices ; and inflicts a penalty of five pounds upon every refusal. The Act gives this reason for it : that the encouragement of honest and able workmen will prevent their temptation of serving secret presses, which can otherwise be supplied only by ignorant interlopers, punishable by this and several other laws. And notwithstanding this Act declares this licentiousness in printing to be dishonourable to Almighty God, a disturbance of the public peace, and an alienating the hearts of their Majesties' subjects ; yet these men have brought up more of those unlawful workmen than the whole kingdom ever since printing has been established by a law ; and allowing even these fellows who had no right themselves, to take an excessive number of prentices, to the great impoverishing and scandal of the trade, and whereby secret presses (either employed against the Government, or invading the properties of other men) are never like to be unfurnished ; thereby subverting the whole design of the Act.

“Besides what is above specified, it must not be forgot that Guy and Parker, by their late insolent behaviour (in opposing the authority and violating the privileges of the University beyond the example of former times), have rendered themselves altogether unworthy of the favour of the University, or any longer to enjoy those privileges which by several statutes they have forfeited ; in asserting notorious falsehood in matter of fact in their petition to the Queen and Council against the Vice-Chancellor (which was thence referred to the Archbishop of Canterbury, and upon his report to the Council rejected), whom they have lately threatened, and the officers of the University acting by his authority, with vexatious law-suits against the charter and statutes of the University ; and particularly have brought a writ of *quo minus* against the Vice-Chancellor, Dean of Christ Church, etc., and put it into the hands of the Sheriffs, by their agents every day soliciting him to grant warrants upon it, threatening to execute by arresting the Vice-Chancellor, with the Beadle before him.”

On back of p. 197, in a different hand :—

“One of the stories now made use of to the impeding this treaty is that the Company of Stationers brought and vigorously prosecuted the late *quo warranto*. The charge upon the Company is equally malicious and false ; only asserted, without the least proof. ’Tis well known that the *quo warranto* was brought by Henry Hills, pursuant to directions from Court, the said Henry Hills having first turned out those new tenants from the Table of Assistants. The *quo warranto* was grounded upon the many illegal practices of Parker and Guy ; as appears by the Report of the Attorney-General to the King and Council, which he affirmed sufficient to forfeit all the University’s right to printing. And there are strong presumptions that this very *quo warranto* was first concerted between Mr. Parker and Hills ; for by

this means they preserved themselves in the University Press, at the very time when they were warned out by the late Bishop's executors, to whom they were then tenants."

In contradiction to these stories Dr. John Wallis, who knew as much about the business as any one, wrote on January 23rd, 1691-2, to Dr. Bernard, one of the delegates for printing, the delegates having agreed to be determined by his opinion on the case, an account, in which he said: "I do not know that Parker and Guy, who are now your printers, have ever failed in paying you, to a penny, whatever they promised; nor do I find that the Company do charge them to have ever failed in any agreement made with them, though but verbal."

In a letter written by Dr. Wallis, on December 15th, 1691, he expresses a strong opinion that it was not desirable to enter into a law-suit with Parker and Guy if it might fairly be avoided. It was true the Stationers' Company offered to defend the University and indemnify them; "but," he says, "how well are our rights likely to be defended if the wolves be set to defend the — (sheep?). Now as to Parker and Guy . . . they have been also true and firm to us, and very diligent (sparing no cost or pains) to defend our rights: in all our pleadings in Law Suits they were our Printers,* and have never faltred (*sic*) with us (that I know of) in anything. And we have reason to think they will still be true to us, because it is their interest so to be (whereas it is the interest of the others to betray and undermine us, and which they will certainly do to the utmost of what they can)." We cannot put out Parker and Guy, he says, without a costly law-suit; both in law and equity they have a strong hold. "As to Parker and Guy, I have no personal concern for them (but only the public interest

* That is, put forward by the University as such.

of the University). If you like not them, I am contented that others be (in a fair way) put in their places, if we can find others who can, and will, do our work as well and as faithfully as they have done (which will not be easy to find). But we must not be unjust to them, or put such terms on them as will involve us (and the Bishop's executors) in needless and chargeable suits, when both law and equity will certainly relieve them.

“P.S.—If you like not Parker and Guy, the proposals of Elliot are much more safe and more advisable than those of the five men.”

These five men were some of the chief members of the Stationers' Company, more than one having been Master, viz., Isted, Bellinger, Mortlock.

After several meetings and debates, the majority of the delegates agreed to the proposals of Messrs. Isted and the rest. A new delegacy was afterwards appointed by Convocation, and having learned (in July, 1691?) what had already been arranged, notwithstanding the long letter of Dr. Wallis (published by Derham, see p. 48) read by Dr. Bernard, it was carried by the majority of votes that Mr. Isted's terms should be accepted, as being more honourable and more for the interest of the University than anything offered by Guy and Parker. The advice of Sir Francis Pemberton was taken as to what kind of agreement should be made. The delegates (or their majority) expressed their opinion that, far from the Company of Stationers' interest being to destroy printing in the University, nothing could be supposed more to their interest than to perform their agreement. None had ever given such security, or entered into more extensive covenants for the real benefit of the University. The University, also, was sufficiently secured in the matter, for they had reserved the power of printing themselves on any breach of the articles of agreement. “The University,” it was triumphantly observed, “now

need not the assistance of another Dr. Yates ; they are sufficiently provided with a complete Imprimerie and founding-house of their own, which they never possessed before ; and all upon a day's warning to begin and finish all the vendible books the Stationers claim right to." Evidently modesty was not now the attitude of the majority of the delegates.

The agreement which the delegates thought so much of, promised the payment of the same rent as before, viz. £200 a year. The printers were to take all books in stock, and whatever the University printed at its own charge (not exceeding five hundred copies of each), at a clear profit of 20 per cent. to the University ; to collect books due to the University under two Acts of Parliament ; to keep up the printing of Bibles, Prayer-books, etc., in Oxford, the prices to be fixed by the Vice-Chancellor and delegates ; to indemnify the University and Bishop Fell's executors from any suits by the king's printers or any others ; not to transfer the right of printing any book without permission under the common seal of the University ; to indemnify the University from the claims of £240 and £250 made by Parker and Guy ; to give personal security for £3,000 ; and to employ such journeymen printers as might legally work and were then in Oxford. The University made the agreement for five years, with liberty to renew on the same terms if they thought fit ; promising not to transfer their interest during the five years, on due performance of the articles.

When the new delegacy had been appointed, a series of strategic movements took place on both sides. Some of these are best described in the Ballard MSS., xlix., p. 240:—

“ Parker and Guy seeing this (*i.e.* the appointment of a delegacy unfavourable to them), and having provided paper and other materials for printing thirty-five

thousand Bibles and many thousand other books, ordered their servants before they began printing them to wait upon the Vice-Chancellor and his new delegates, to let them know what they were about, and that they would not begin that work unless they could be assured they should finish without disturbance. The Vice-Chancellor and all the delegates bid them go on in God's name, and promised they should not be disturbed.

“In confidence of this the work was begun; nevertheless the Vice-Chancellor and three of nine of his new delegates contracted with the company to be their printers, and to oust Parker and Guy.

“And in October last (1691) the Vice-Chancellor came into the Theatre printing-house with the defendants Sherwin, Hall, and Hughes, and commanded Sherwin, Hall, and Hughes to beat down the presses; who presently beat down and carried away four printing presses, and scattered and threw under foot their Bibles and about the letters and materials of printing, and threatened the workmen to send them to prison if they worked any more, whereupon many of the workmen gave off and would work no more; and afterwards Edwards (Vice-Chancellor) and Aldrich came again to the Theatre and threatened to lay the men by the heels if they did not forbear. Shortly afterwards, notwithstanding all this, in October last, the Vice-Chancellor received £50 of Parker and Guy for rent due at Christmas last (*i.e.* 1691).”

This was followed by the imprisonment of Robert Elliot, apparently the foreman printer, and when Parker himself appeared in Oxford he was admonished to forbear printing, and to remove everything from the Theatre in four days; and on claiming his privilege as printer under the seal of the University, the Vice-Chancellor sent him likewise to gaol, where he and Elliot remained till, some time in January, they were

discharged by the Court of King's Bench on *habeas corpus*. Guy came to Oxford also, and he was pretty certainly occupied in getting up the case against the University, who claimed the right to judge the cause in their own court. In the end the Vice-Chancellor prevailed so far as to get Parker and Guy removed on January 27th, 1691-2.

One other extract from Ballard (xlix., p. 240) may be given:—

“The wiser and most sober part of the University condemn the Vice-Chancellor for his behaviour in this matter, and the major part of the heads of houses were against him, and baffled him several times; but it being in his power to call a convocation together when he pleased, he watched his opportunity, and after many defeats called them together and at last did his business, many of Mr. Parker and Guy's friends being absent and surprised.”

[In a different hand.] “When he had imprisoned Mr. Parker he sent for the Stationers to come down, and sent several Masters with them from college to college to gain votes and to blemish Parker and Guy as criminals, one for crimes being imprisoned by Mr. Vice-Chancellor, etc. These arts he used with many more before the University determined Parker and Guy's title, viz., January 27th, 1691-2.”

It appears from a minute of the Stationers' Company, dated February 1st, 1691-2, that the Master reported that he had come to an agreement with Oxford; but as Parker and Guy had much misrepresented the Company the University absolutely refused to treat with them, but only would treat with Mr. Ambrose Isted (Master), Mr. Henry Mortlock (Warden), and Mr. John Bellinger (Assistant), who hoped the Company would indemnify them (which they did), and that Roger Norton (one of the king's printers) might become bound

with them. And Roger Norton agreed that he would pay to the Company £30 per annum, as he lately did to Parker and Guy for not printing his grammar at Oxford during the time agreed upon.

Parker and Guy brought an action against the University, claiming £1,500 damages for their expulsion and the resulting loss; but when they saw that the restoration of their contract was hopeless, they appear to have compromised the matter of damages in order to make the best bargain possible in closing their business; and the University agreed with Mr. Isted and his partners that the cost of all unfinished stock should be paid to Parker and Guy.

The following is a copy of the grant of the privilege of printing to Parker and Guy by the University of Oxford in 1688, contained in "Papers relating to the Printing at Oxford, given me (*i.e.* probably Ballard) by Mr. John Rance, senr., of Holywell in Oxon," in the Ballard MSS., xlix., 232. It will be seen that it fully acknowledges them as printers to the University then and for many years past, and as residents and inhabitants within the limits of the University; which gives us the probable fact that Guy resided at least part of the year at Oxford. The grant is a full one of everything relating to printing and bookselling; and the appointment is not for a term of years, does not contemplate termination, and only in one clause speaks of the appointment being "as long as it shall please us."

"Cancellarius Magistri et Scholares Universitatis Oxon: Omnibus has Literas nostras gereñ dat' Decimo die Augusti Anno Dni Millesimo Sexcentesimo Octogesimo Octavo inspecturis Salutem. Cum jam per plurimas annos prox^e præteritos Petrum Parker et Thomam Guy Typographos, Librorum Impressores et Bibliopolas nostros indigenas existentes, et infra Obedientiam Dni Regis Angliæ natos, et infra septum vel ambitum dictæ Universitatis residentes, et inhabi-

tantes, Domos conductivas ibidem habentes et tenentes, adhibuimus ut Typographos nostros, et Operarios, seu Ministros nostros in Re Typographicâ ad imprimendum et vendendum Libros, aliaque ad rem illam spectantia peragendum, eosque ut tales jam antehac per Scriptum communi nostro Sigillo munit' designavimus et constituimus; Sciatis jam quod nos Cancellarius Magistri et Scholares eosdem Petrum Parker et Thomam Guy designamus constituimus approbamus ratificamus confirmamus et continuamus Typographos, Librorum Impressores et Bibliopolas nostros et Successorum nostrorum ad imprimendum vendendum omnimodos Libros seu Codices publice non prohibitos rite approbatos seu approbandos quamdiu nobis placuerit in eo munere officio seu Ministerio permansuros; eosque omnibus Privilegiis et Potestatibus eo spectantibus induimus: In ejus rei testimonium Sigillum nostrum communem presentibus apponi fecimus.

“Concordat cum Registro Convocationis Universitatis Oxon facta debitâ Collatione per me.

“Ben: Cooper, Notarium publicum et Registrarium Universitatis Oxon.”

The new printers, who were appointed for five years, soon showed that they were far less in the University interest than Parker and Guy had been. They fell behind in payments, and failed to fulfil their promises in many respects. There are many interesting particulars in Ballard, vol. xlix., about the controversies the University had with the Stationers' Company, but they do not fall within our scope. The contract with Parker and Guy was never renewed.

The only printed account of any of these events, prior to our researches, was found in the most unexpected quarter, namely, “Philosophical Experiments and Observations of the late Eminent Dr. Robert Hooke, and other eminent Virtuosos in his time. Published by W. Derham, F.R.S., 1728.” At pp. 217-24 is “A copy of the account which Dr. Wallis gave to Dr. Bernard, one of the Delegates for printing, by a messenger sent from Oxford, for that purpose, the Delegates having agreed to be determined by his opinion in the case, at Serjeants' Inn, in Fleet Street, January 23rd, 1691-2.”

CHAPTER V.

GUY'S LATER YEARS.

BEFORE going on to discuss Guy's later life, we may note that neither Parker nor Guy took office in the Stationers' Company in earlier years; but the Company were not unwilling to take their money, in the shape of fines for non-acceptance of office. On October 17th, 1687, both Parker and Guy paid the fine of £24 for not accepting nomination as "renter warden." Probably the Company did not want them, and they did not want the office; but it appears very like an act of spitefulness on the part of the Court of Assistants to fine these two particular men, when they no doubt knew they were unwilling to accept the nomination. There had been a long series of wrangles before that date between the Company and our two Oxford printers; and, as we have seen, their differences did not abate in later years. Even as late as 1699 there were disputes between the Company and Parker and Guy, when at last the Company agreed to pay them £50 in discharge of their claim, which evidently was admitted to be just. Parker was more than once proceeded against by the Company, the last occasion being in 1707-8.

On September 6th, 1703, Thomas Guy bound John Osborn his apprentice for seven years. Whether he was a relation or not we are not told. Guy had numerous relatives named Osborn, but if this John Osborn were a

relative, no doubt we should have learned the fact from Guy's will. For it is practically certain that this apprentice was the trusted friend of Guy's old age, and his successor at the Oxford Arms. At what date the transfer of the business was made we do not know, but Guy continued to live in the same house. This we know from his bequest to Anne Gorton, Osborn's servant, to whom he left £50, "if she be living in the house with me at the time of my decease." Another apprentice taken by Guy was Jeremiah Batley, who was bound to him for seven years on July 7th, 1709.

In these later years, when his former chief opponents had disappeared from the Court of Assistants, we find Guy's name in the list of Assistants, though the date of his election is not recorded. His name first appears in the minute-book of the Stationers' Company as attending a meeting of the Court on March 25th, 1708-9; but he was not very regular in his attendance for some years. In 1712, and afterwards, he attended very regularly, and in most cases he is distinguished in the list of Assistants as "Thomas Guy, Esq.;" possibly because of his having been a member of Parliament.

It was in 1694 that Thomas Guy was elected Sheriff of London and refused to serve. The date has never previously been recorded in print as far as we know; but a brief search in the Record Department of the Town Clerk's Office of the City of London, kindly permitted by the Library Committee, discovered the following entry in the "Journal of the Mayor and Aldermen of the City of London." From its curious terms it is worth reproducing in full:—

"26th June, 1694. (Ashurst, Mayor.)

"This day Nicholas Carey, Citizen and Goldsmith of London, and Thomas Guy, Citizen and Stationer of London, lately elected by the Commons of this City to be Sheriffs of the said City of London and County of Middlesex for

Carey and Guy,
disch. Sheriffs.

the year ensuing, made their personal appearance before this Court, and being severally required to enter into bonds with condition for their several appearances on the Vigil of St. Michael the Archangel and then and there taking the said office upon them, did allege their several inabilities and incapacities to hold the said office, and declared their refusals to seal their bonds, whereupon this Court acquainting them that by an Act of Common Council made in the Mayoralty of Sir Robt. Ducey, it was enacted that whosoever shall declare his refusal to take upon him the said office doth forfeit £400 in such manner as in the said is expressed. The said Nicholas Carey and Thomas Guy, in obedience to the said act and laws of this City, submitted to the penalties of £400 a-piece imposed by the said Act, and paid the said several sums of £400 and twenty pounds a-piece more towards Maintenance of Ministers for the prisons of this City unto the Chamber of this City, Whereupon this Court did discharge them from holding the said office for the year ensuing pursuant to the said Act and At their request to be recommended to the Common Counsell to be exempted from the said office for the future this Court doth agree that they shall be recommended accordingly."

Ordered that Mr. Chamberlain do give receipts for the respective fines as now read and approved of in this court.

No doubt the great expense of the Shrievalty influenced Guy against accepting it. Also he had no love of pomp or show, and was quite fully occupied, no doubt. That he had a great repute for wealth at the time was evident; and we may recollect that in 1695 he was first elected member for Tamworth, and had previously been seeking its suffrages.

It is most probable, from what we know of his general philanthropy, that Guy had many times been brought into contact with hospitals and their work. And we may, perhaps, infer that his own birth on the south side of London Bridge disposed him more especially to take an interest in St. Thomas's Hospital, then situated a little to the south-east of that bridge, abutting against St. Thomas's Street and the Borough High Street. At the end of the seventeenth century some rebuilding of the

hospital, which was old, low and damp, had been accomplished; and various endeavours were made to enrol new governors, who might be disposed to aid in the good work. At this period it was customary to choose or invite notable citizens to become governors, and to notify the choice by presenting them with a green staff. In 1704 Thomas Guy was thus requested to accept the office of Governor. It was in this year that it was resolved, in consequence of irregularities in the hospital, to build a house for the Treasurer to reside in, in order to secure due order and control; and probably this circumstance led to a similar arrangement in Guy's Hospital later.

In 1707 we find in the Minutes of St. Thomas's Hospital that Guy attended the Court meetings, and is always named among the Esquires first on the list. In 1708 there is the following entry: "Severall of the governours here present made liberal subscriptions towards the better support of the charity, and more particularly Thomas Guy, Esq., who lately erected three new wards on the north side of the first court at his own charges, expending £1,000, and now at this Court was pleased to declare that he would give to this Hospital £100 a year to the benefit of the poor in this Hospital." At the same time, Henry White was chosen Steward, and his age was overlooked "at Mr. Guy's instance, his so great liberality."

There was formerly in a niche on the northern side of the main street front of the Hospital the following inscription: "This Building, on the North Side of this Court, containing three wards, was erected by Thomas Guy, Esq., Citizen and Stationer of London, a worthy Governor and bountiful Benefactor to this Hospital, anno 1707."

Guy's gift of £100 a year was one with a definite purpose, due to thought and observation. He had noticed

how weak and unfit for the business of life patients recovering from illness often were, needing time and money to enable them to get stronger before resuming work; and his benefaction of £100 a year was to help in supplying such need. He had often before supplied the steward with money for clothes and for other necessities in such cases. Dr. Mead was his great helper and adviser in these matters. In 1709 the Court of Governors gave special orders to take in and shelter the sick and lame "Palatines," *i.e.* refugees from the Palatinate in Germany, who had come over to England in the preceding year on the faith of promises of comfortable settlement in Carolina made by English merchants. At one time, no fewer than fourteen hundred of them were congregated in the warehouses of Sir Charles Cox, M.P. for the Borough of Southwark; and much pestilence was the result. In this year (1707), Guy gave £100 towards the support of these "Palatines," some of whom were sheltered in tents within St. Thomas's. In 1713 and 1714, at meetings of the Grand Court of St. Thomas's, Thomas Guy is named first. No doubt his labours and his high consideration at St. Thomas's continued to the end of his life. In 1724 he made a new entrance, with iron gates, the piers being of stone, from the Borough High Street into the Hospital. In the pediment over them were the King's arms (George I.) He had previously improved the old stone front, which stood next the street, also building two large brick houses, on what was called the "toft" (*i.e.* a space clear for building) of the old gateway, the south-west corner of the court. These works are said to have cost him £3,000. (Manning and Bray's "Surrey.")

The next transaction, of which particulars are copied from entries in the Minute Book of the Stationers' Company, describes another of Guy's philanthropic

arrangements,—made before the realisation of his South Sea stock,—and it has a fitting place here in consequence of its relation, in its final form, to St. Thomas's Hospital.

At a Court of the Stationers' Company, held Monday, August 5th, 1717, at which Guy was not present, Mr. Mount informed the Court that Thomas Guy, Esq., one of the Court of Assistants, had given him directions to acquaint them “that he would give to the Company, for the use of the poor thereof, £1,000, they paying and distributing £50 per annum, by quarterly payments, to the poor members and widows, for augmenting the quarterly charity; also, that he would pay into the Company £1,100, to have £50 per annum to be paid quarterly to such charitable uses as he should appoint by will or writing, and the further sum of £1,650 to have paid £75 per annum, also quarterly, for another charitable use, as he should appoint by his will or any other writing, and the Company to give bonds under their common seal for payment of the two last sums of £50 and £75 per annum, quarterly, clear of taxes.

“The Court, upon consideration and debate thereof, thankfully and readily accepted of the first proposal; and as to the two last, Mr. Warden Sprint and Mr. Mount are desired to discourse Mr. Guy further thereon as to the payment of the said two last yearly payments, and make their report to the next Court.”

There is no further mention of the subject in the Minutes until October 7th, when “Mr. Mount reported to the Court that Mr. Warden Sprint and he had discoursed Mr. Guy concerning his two last proposals,” and that “he insisted upon the proposal delivered in as to the interest of the two sums of £1,100 and £1,650, but would be contented to have it paid yearly instead of quarterly; and as to the first proposal of paying £50, a debate arising thereupon, Ordered that it be referred back to

Mr. Warden Sprint and Mr. Mount to discourse the matter further with Mr. Guy and report to the next Court."

On November 4th, 1717, Mr. Sprint and Mr. Mount reported that Guy still insisted on £50 yearly being given to the poor members for his donation of £1,000, and "the Court, upon the question put, agreed to accept thereof." And no doubt they only did right, for they had, in the first instance, thankfully accepted this gift without questioning the terms. We see, very clearly, once more Guy's strong will and clear-headed resolution to have his own way when once determined; but there is nothing that is not creditable to him.

On December 23rd, 1717, another debate took place upon Guy's proposals, Guy himself being present. They were all accepted, with yearly payments of the last two. Bonds in respect of these payments, "from the Company to the Mayor, aldermen, and citizens of the City of London, governors of the Hospital of St. Thomas the Apostle," of £2,000 and £5,500 penalty respectively (twice the sums given), to pay £50 yearly to the poor of the Company, and £125 half-yearly to Thomas Guy for life, and after his decease to such uses as he by his will might direct, were ordered to be sealed at a Court on February 3rd, 1718, *nem. con.* The capital sum, it appears, was paid in to the English stock of the Company.

At a pension court on March 21st, 1718, we read that "Mr. Guy's pensioners, to the number of eighteen, were paid the first time."

On July 5th, 1718, among a large number of candidates proposed for the Mastership of the Stationers' Company, including nearly the whole Court of Assistants, Guy's name is included; but he was not elected. He was also noted among the candidates or persons qualified for the Mastership on July 4th, 1724; but most of the names were withdrawn before the election. The last

meeting of the Court at which he was present was September 1st, 1724.

John Osborn became a member of the Court of Assistants of the Company in April 1723. He did not long remain at the sign of the Oxford Arms after Guy's death. It is most interesting to note that Thomas Longman, founder of the house of Longman, was apprenticed to John Osborn, whose daughter he married; so that we may trace a continuous chain between Thomas Guy and the great firm "at the Sign of the Ship" of the present day. In October 1724, after Longman had purchased the business of William Taylor, the publisher of "*Robinson Crusoe*," a prospectus of Robert Boyle's works was issued "to be printed for W. and J. Innes, at the West End of St. Paul's Churchyard, J. Osborn at the Oxford Arms in Lombard Street, and T. Longman at the Ship and Black Swan in Paternoster Row." A few months later Osborn transferred his business and capital to his son-in-law's establishment in the Row, and continued in partnership with him till his death.

Early in 1721 the Minutes of St. Thomas's record the first formal arrangement about Guy's new hospital. "Our worthy governor and benefactor, Thomas Guy, intending to found and erect an Hospital for Incurables, in the close of this hospital, in the parish of St. Thomas, we have agreed to grant him a lease, or to such persons as he may appoint, of several parcels of ground within the close of this hospital, and in the parish, upon several leases, and under several ground rents, amounting to £17 14s. per annum—purchased by said Thomas Guy, or in trust for him for 1000 years at £30 per annum, tax free." On March 1st, 1721, "our worthy benefactor, Thomas Guy, having desired a small piece of garden, late Norgate's, for his new Hospital—granted." On May 6th, 1724, thanks were given to Guy for his

“unparallel'd bounty in gifts to this hospital, and in erecting at his own charge another hospital for incurables.”

How was the money for this expenditure obtained ?

We read in Maitland : “Some time after” (*i.e.* after Guy had acquired money by printing Bibles at Oxford), “England being engaged in an expensive war against France, the poor seamen on board the Royal Navy, for many years, instead of money received Tickets for their Pay ; which those necessitous but very useful men were obliged to dispose of at thirty, forty, and sometimes fifty in the hundred discount. Mr. Guy discovering the sweets of this Traffick, became an early Dealer therein, as well as in other Government securities, by which, and his Trade, he acquired a very great Estate.”

It has sometimes been represented that Guy obtained his fortune by unworthily taking advantage of the necessities of poor seamen. But we think there is no difficulty in disposing of this idea. It is well known that in the times of William and Anne, when England was straining every nerve against Louis XIV., finance was wretchedly managed, and the pay of seamen and soldiers was often in arrears. In fact, the arrears then accumulated were the beginning of our National Debt. For years payments were postponed, and it was impossible to get a settlement.* Thus it became a serious risk to purchase seamen's pay tickets, and there was no more impropriety in buying them at a discount of thirty per cent. than in buying consols at seventy during the

* The author of “A Tract on the Debts of the Nation,” in four papers, 1712 (Somers Tracts, Scott's edition, vol. xiii., p. 310), in commenting on the great proportion of debt made and left by the navy, says expressly : “The seamen, who have victuals and all things necessary supplied for them on board, can bear to wait some time for their wages” : thus necessitating the ticket system.

In “A State of the Five and Thirty Millions,” etc. (Somers,

depression caused by a great war. In fact, whoever bought the seamen's tickets at half price was running a risk of losing his money, as it then seemed; and the seamen were glad to get a market price. And as there are always usurers and capitalists ready to make money at others' expense, it is idle to imagine that Guy could have bought seamen's tickets largely unless he had been willing to give somewhat more than the market rates. We have no trace of his transactions in this matter, but it is at least consistent with his general philanthropy to suppose that, compassionating the poor seamen who could not get their money, he offered them more than they could get elsewhere, and that this accounts for his being so large a purchaser of seamen's tickets that it was a well-known fact in his biography. Instead of being to his discredit, we think rather that it is to his credit, and that he managed to benefit a large number of necessitous men, while at the same time, in the future, benefiting himself. A few years' delay in payment would give him a considerable interest lawfully earned.

Maitland proceeds, after his narrative about seamen's tickets: "In the year 1710, when the debt of the Navy was increased to divers Millions, an Act of Parliament was made, to provide for the payment of that and other sums due from the Government, by erecting the *South Sea Company*, into which the creditors of Divers Branches of the National Debt were impowered to subscribe the several sums due to them from the Publick; among whom Mr. Guy, being possessed of such securities to the amount of many thousands of pounds, subscribed xiii., 317), in the "Navy Office" estimate of the Navy Debt on September 30th, 1711, we find the following:—

"Due to men remaining unpaid upon the books of ships paid off since the 13th of February, 1688":—

<i>Before this reign</i>	.	.	.	£57,824	13s.	5d.
Since this reign	.	.	.	£212,517	2s.	7d.
To ships in sea pay	.	.	.	£1,829,724	0s.	0d.

the same into the said *South Sea Company*; for which he and the rest of the subscribers were to receive an annual interest of six *per cent.* upon their respective subscriptions till the same were discharged by Parliament.

“In the year 1720 the *South Sea Company* proposed to the Government a scheme for redeeming the Publick debts by increasing their capital; which being approved of, it no sooner received the sanction of Parliament than the National Creditors from all parts came crowding to subscribe to the said company the several sums due to them from the Government. By which great run, one hundred pounds of the company's stock, that before was sold for one hundred and twenty pounds (at which time Mr. Guy was possess'd of forty-five thousand and five hundred pounds of the said stock), gradually arose to above one thousand and fifty pounds. Mr. Guy, wisely considering that the great rise of the stock was owing to the iniquitous management of a few, prudently began to sell out his stock at about three hundred, (for that which probably at first did not cost him above fifty or sixty pounds), and continued selling till it arose to about six hundred, when he disposed of the last of his property in the said company. Which has occasioned those the best acquainted with his affairs to aver that by the execution of the pernicious South Sea scheme Mr. Guy got more money within the space of three months than what the erecting, furnishing, and endowing his hospital amounted to.”

We have thus studied the origin of the funds, and so far as possible traced the development of Guy's intentions on the subject of the foundation of his hospital. The ground which he had taken for his project, situated on the south side of St. Thomas's Street, was covered with small houses, to whose occupants he immediately gave notice. It is said that all the old buildings were pulled down by the end of 1721. The remainder of

Guy's life was occupied in superintending the development of his great project. A design was procured from Mr. Lane, an eminent surveyor and architect, and "proceeding with all the expedition of a youth of fortune erecting a house for his own residence," Guy succeeded in getting the foundation of his intended hospital laid in the following spring (1722): "the building whereof was carried on with such expedition that the fabric was roofed before the death of the founder, which happened on the 27th of December, 1724, in the 80th year of his age" (Maitland). We are told by the same authority that Guy at first fully intended placing his foundation entirely under the governors of St. Thomas's Hospital; but that he altered his resolution by the advice of his friends, so as to make its constitution perfectly independent. He would then, it is said, gladly have changed the site, which was low, close, and marshy, but it was too late, the buildings having advanced to the second story.

We have no further particulars of Guy's last days except the facts already given. We can imagine him always full of his great project, but never so full that he could not remember and yield to all the claims of relationship, and the appeals of friendlessness. His character is depicted by his works. We cannot think that this man of deeds had anything like a melancholy ending. The only regret would be that he could not see his great hospital completed and opened. But the realisation of his project was so certain at his death that he must have enjoyed in some measure the delights of fruition. In little more than a week after his death Guy's Hospital was opened, and on January 6th, 1725, sixty patients were admitted.

"Upon the death of Mr. Guy," says Maitland, "his executors found in his iron chest one thousand guineas, which they imagined were put there to defray the expense

of his funeral ; wherefore they caused him to be buried in a very pompous manner ; at whose burial there were no less than forty coaches, with six horses each."

From various notices in the London journals of the time we learn that Guy's remains lay in state at Mercers' Hall in Cheapside, and were on Thursday, January 7th, removed from thence "with great funeral pomp" to the Parish Church of St. Thomas's, Southwark, where they were interred until the chapel of Guy's was completed. Two hundred blue-coat boys from Christ's Hospital walked in the procession and sang before the hearse. The *Daily Post* of Saturday, January 2nd, 1725, says: "The figure of the said gentleman's face is taken in plaister since his death, in order as 'tis said, to have his effigies cut by it, and set up in his new hospital to perpetuate his memory."

The following epitaph was inscribed upon the monument by Bacon erected about 1780 over Guy's remains:—

"Underneath are deposited the remains of Thomas Guy, citizen of London, Member of Parliament, and the sole Founder of this Hospital in his lifetime. It is peculiar to this beneficent man to have persevered, during a long course of prosperity and industry, in pouring forth to the wants of others all that he had earned by labour, or withheld from self-indulgence. Warm with philanthropy and exalted by charity, his mind expanded to those noble affections which grow but too rarely from the most elevated pursuits. After administering with extensive bounty to the claims of consanguinity, he established this asylum for that stage of languor and disease to which the charity of others had not reached ; he provided a retreat for hopeless insanity, and rivalled the endowment of kings. He died the 27th of December, 1724, in the eightieth year of his age."

There are several portraits of Guy at the Hospital,

mostly posthumous. That represented in our frontispiece is the only one having pretensions to originality, having been painted by Vanderbank, and dated 1706. The portrait is engraved from a photograph of the picture, taken by the late Dr. Alfred Swaine Taylor, F.R.S., of Guy's.

As to the position occupied by Guy in London during his later years, we have John Dunton's emphatic testimony, published in 1705 in his "Life and Errors." Guy is described by Dunton, next after Chiswell and the Churchills, in the following terms:—

"*Mr. Thomas Guy*, in Lombard Street. He makes an eminent figure in the company of Stationers, having been chosen Sheriff of London and paid the fine; and is now a member of Parliament for Tamworth. He entertains a very sincere respect for English liberty. He is a man of strong reason, and can talk very much to the purpose upon any subject you will propose. He is truly charitable, of which his almshouses for the poor are standing testimonies."

In contrast to this high praise we must in justice mention that in 1728, after Guy's death, when Dunton was strongly tinctured with insanity, and was certainly jaundiced and spiteful against mankind in general, who had not welcomed his thousand and one projects with the cordiality he desired, he published "An Essay on Death Bed Charity, exemplified in the Life of Mr. Thomas Guy, late Bookseller in Lombard Street; Madam Jane Nicholas; and Mr. Francis Bancroft, late of London, Draper; Proving that great Misers giving large donations to the Poor in their last wills is no charity." As to "Madam Jane Nicholas," her offence was that she was the mother of Dunton's second wife, and would neither lend nor give him money, after he had squandered so much in doubtful ventures and unpopular causes. And the bias of what he writes in this pamphlet is evident when he accuses Guy,

together with his mother-in-law, of "compounding with God Almighty for giving nothing to the Poor in their lifetime." This last accusation we have already seen to be false, and this will be more thoroughly proved before we have done. Guy was a consistent philanthropist from an early age, but it is no discredit to him in this character if he refused to assist Dunton in his ever-recurring straits.

Another charge brought by Dunton against Guy is, however, more serious. He says: "As to Mr. Thomas Guy, that has left such a large Donative to the poor of St. Thomas's Hospital in Southwark, there is never a Book-binder in London that has bound any Books for him will give him a good Word, for he never employed any Bookbinders but such that would work at under Rates, so that he almost starv'd the men he employed to bind those Books by which he got his estate." Now although some colour is given to the above charge by the fact that something of the same kind was alleged against Parker and Guy at Oxford, yet in each case the charge is brought by persons interested against Guy, and evidently biassed. We may certainly grant that he was what is termed "close-fisted," and would only part with money in the way of business for value received; but that he would deliberately pay starvation wages cannot be credited, in the face of abundant testimony to his discerning philanthropy. No doubt he would justify what he did by referring to "market price" and "no compulsion"; and there has always been one side wishful to keep the "rates" up, the other desirous of lowering them.

In another place Dunton speaks of those who "gave nothing to the Poor in their lifetime, or but a few Farthings, which are next to Nothing, nor even at their Death would give anything to the Poor or their own Family, could they carry their Riches with them to the

other world, which was exactly the case of Mr. Thomas Guy. . . ." We shall see hereafter how well Guy provided for both his family and the poor. When he says, "These two scraping and useless wretches, Mr. Thomas Guy and Madam Jane Nicholas, liv'd undesired and dyed unlamented," he is contradicted by his own testimony in 1705, by his own untrustworthiness, and by other evidence. Few would not prefer Thomas Guy's to John Dunton's character, life and achievements.

Dr. Wilks formerly had a copy of Guy's will, in which had been written a memorandum to the effect that someone, having sent his son to Guy as apprentice, removed him owing to Guy's extreme parsimony. This copy cannot now be traced, and without knowing the source we must not rely on it. An apprentice could not be taken away unless it were proved at law that the employer withheld necessary food. It looks like a story invented because Guy was economical.

The same cause probably accounts for the two stories given by Nichols ("Literary Anecdotes," iii., 599):—

"Thus he began to accumulate money, and his gains rested in his hands; for, being a single man, and very penurious, his expenses were next to nothing. His custom was, to dine on his shop-counter, with no other tablecloth than an old newspaper; he was also as little nice in regard to his apparel. The bulk of his fortune, however, was acquired by purchasing seamen's tickets during Queen Anne's wars, and by South Sea stock in the memorable year 1720.

"To show what great events spring from trivial causes, it may be observed, that the publick are indebted to a most trifling incident for the greatest part of his immense fortune's being applied to charitable uses. Mr. Guy had a maid-servant, whom he agreed to marry; and, preparatory to his nuptials, he had ordered the

pavement before his door to be mended so far as to a particular stone which he marked. The maid, while her master was out, innocently looking on the pavours at work, saw a broken place they had not repaired, and mentioned it to them ; but they told her that Mr. Guy had directed them not to go so far. 'Well,' says she, 'do you mend it : tell him I bade you, and I know he will not be angry.' It happened, however, that the poor girl presumed too much on her influence over her wary lover, with whom the charge of a few shillings extraordinary turned the scale entirely against her ; for Guy, enraged to find his orders exceeded, renounced the matrimonial scheme, and built hospitals in his old age.'

Unfortunately, Nichols refers to no contemporary authority,—indeed, to no authority at all, for this story. We have not been able to trace it to its source. It must, therefore, be taken as a piece of legend which may contain a small modicum of truth. Supposing there were a servant girl who, presuming on Guy's good nature, thought he would marry her, and began to exercise authority too soon, we can easily conceive that he might dismiss her, and so give origin to the tale. But the idea that such an accident determined the course of his life does not appear probable, from all we have laid before the reader. From 1678 he was certainly a well-planning philanthropist. While his fortune was moderate, his benevolent intentions were mainly concentrated upon Tamworth. When Tamworth rejected him, he had already begun his career of beneficence at St. Thomas's Hospital ; and his final act is consistent with all his later life. Whether in his early years he may possibly have allowed his fancy to settle on a servant we cannot decide. Charles Knight ("Shadows of the Old Booksellers") considers that the order given in October 1671 by the Common Council for compelling tenants to pave the foot pavements in front of their houses, six feet wide, may

have been the occasion when the incident took place. Possibly so. At that time Guy had been only three years in business. It is not worth while to speculate much on a story so destitute of authentication.

In the *Saturday Magazine* for August 2nd, 1834, is a biography of Guy, mainly following Maitland, with a print of Guy's statue in the Hospital chapel. The notice includes the following anecdote, given as supplied by a trusted correspondent who had frequently contributed to the magazine :—

“The munificent founder of Guy's Hospital was a man of very humble appearance, and of a melancholy cast of countenance. One day, while pensively leaning over one of the bridges, he attracted the attention and commiseration of a bystander, who, apprehensive that he meditated self-destruction, could not refrain from addressing him with an earnest entreaty, ‘not to let his misfortunes tempt him to commit any rash act’; then, placing in his hand a guinea, with the delicacy of genuine benevolence, he hastily withdrew. Guy, roused from his reverie, followed the stranger, and warmly expressed his gratitude, but assured him he was mistaken in supposing him to be either in distress of mind or of circumstances, making an earnest request to be favoured with the name of the good man, his intended benefactor. The address was given, and they parted. Some years after, Guy, observing the name of his friend in the bankrupt list, hastened to his house; brought to his recollection their former interview; found, upon investigation, that no blame could be attached to him under his misfortunes; intimated his ability and also his full intention to serve him; entered into immediate arrangements with his creditors; and, finally, re-established him in a business which ever after prospered in his hands, and in the hands of his children's children, for many years, in Newgate Street.”

This story may possibly be one of those which originated in Guy's well-known character, but it bears several marks of genuineness. There is nothing impossible in it. That Guy should have walked over London Bridge meditatively and pensively, and that his humble appearance and dress should have added to the impression that he was melancholy and might perchance make away with himself, seems quite likely. It might even be that he was then meditating on the woes of the sick poor, and deliberating how to relieve them. The subsequent conduct imputed to Guy is fully in keeping with his character, and there can be little doubt that if the incident did not occur precisely as stated, he was a man quite capable of such actions.

The next story is one of a very different character. It is one of a class of miser stories, put down to various persons at different times, who were in temporary note for the accumulation of wealth or for miserliness. Now we have no authenticated account of Guy's being a miser in the true sense of the term; and he was certainly unlike a miser in his numerous gifts throughout his lifetime, and in his timely expenditure in relation to the Oxford printing business.

"Vulture" Hopkins, as he was called from his alleged rapacity in seizing on his gains, was a rich miser, who, like Guy, made a great fortune in South Sea Stock. He is sarcastically treated in Pope's "Moral Essays," Epistle III., lines 85, 291-8. He died in 1732, and was buried at Wimbledon parish church. (See Elwin and Courthope's Pope, iii., 136, 152.)

The story, as told by the editor of *Notes and Queries* (2nd series, vol. viii., 208), on what authority we are not informed, runs thus: "On one occasion Hopkins paid an evening visit to Guy, the founder of the hospital in Southwark, who also was as remarkable for his private parsimony as his public munificence. On Hopkins

entering the room, Mr. Guy lighted a farthing candle which lay ready on the table, and desired to know the purport of the gentleman's visit. 'I have been told,' said Hopkins, 'that you, sir, are better versed in the prudent and necessary art of saving than any man now living, and I therefore wait upon you for a lesson of frugality; an art in which I used to think I excelled, but am told by all who know you that you are greatly my superior.' 'And is that all you came about?' replied Guy. 'Why then, we can talk this matter over in the dark.' Upon this he with great deliberation extinguished his new-lighted farthing candle. Struck with this example of economy, Hopkins rose up, acknowledged himself convinced of the other's superior thrift, and took his leave."

We may be excused from any further attempt at summing up Guy's character. The data which exist for such an estimate have been fully set forth, and every one is free to judge for himself. We confess that we sympathise with the words in Maitland,—evidently reflecting the current opinion in 1739 of the Guy's governors, many of whom had known Guy,—which declare that "The chief design of our Founder in getting money seems to have been with a view of employing the same in good works." Another quotation may be given from the "Advertisement" to the edition of Guy's will issued by the governors of the Hospital in 1732. It declares that "many of his poor though distant relations had stated allowances from him of ten or twenty pounds a year, and occasionally larger sums; and to two of them he gave £500 a-piece to advance them in the world. He has several times given £50 for discharging insolvent debtors. He has readily given £100 at a time on application to him on behalf of a distressed family. These are some of his good deeds which are come to light since his death; from which every one must be convinced that his private acts of charity were many and great;

and from their secrecy, that they flowed from a right principle." In 1712 Guy subscribed five guineas to the fund for the benefit of W. Bowyer, printer, when he had lost everything by fire, "not knowing," he says, "how soon it may be our own case." The largest subscription was ten guineas.

Guy's will was a most elaborate and characteristic document. It was published in 1725 by John Osborn, and extended to fifty-five pages. It ran through three editions in the same year. The title is as follows: "A true Copy of the Last Will and Testament of Thomas Guy, Esq., Late of Lombard Street, Bookseller: Containin an account of his Publick and Private Benefactions."

The will begins thus: "The Last Will of Thomas Guy, Esq. In the Name of God, Amen.

"I, Thomas Guy, of the Parish of St. Mary Woolnoth, in London, Esquire, being of sound and disposing Mind and Memory, considering the uncertainty of life, do make this my last will and testament in manner and form following; that is to say,

"First, I commit my soul to Almighty God, in hopes, through His mercy and the merits of my Saviour Jesus Christ, to enjoy eternal rest; and my body to be decently buried at the discretion of my executors, hereinafter named: and as for such temporal estate as it hath pleased God to bless me with, I give and dispose thereof as followeth."

Then follows a long list of bequests, apparently to every living relation, including children of cousins to the third generation. His lands at and near Tamworth were divided between his cousins George Orton, John Voughton, and the grandchildren of his late sister, Anne Varnam. Thomas Hurt, one of these grandchildren, received an annuity of £200, inclusive of £40 which Guy was already bound to pay; showing that Guy had previously been providing for his sister's family. In

fact, by the terms of other legacies, it appears that Guy was partly supporting some of his cousins. In addition to bequests of estates, Guy thus divided among his relations £63,000, mainly in sums of £1,000 four per cent. stock, thus giving them all annuities of £40 a year. These legacies were popularly called "Guy's Thousands."

Other bequests of money or stock amounted to £11,750. The recipients include such names as those of John Wood, currier, and Thomas Wood, hardwareman, of Birmingham; Anne Jenkyns, daughter of Thomas Hudson, deceased; and John Morling, son of Elizabeth Morling, late of Oakingham. Among them we find bequests of £500 each to "Margaret Guy and Samuel Guy, the children of Samuel Guy, late of Egham;" which would seem to confirm the statement that the Guys came from Egham; but there is no mention of these Guys as being relations of Thomas Guy. It may be presumed that all the earlier bequests were to Guy's relations on the maternal side. Anne Guy certainly belonged to a large family, which did not omit to multiply itself.

Much care and thought had evidently been applied to various points concerning the legatees. The testator is careful that those who were wives should receive their annuities into their own hands, and for their own use. Those who were under twenty-one were not to receive their legacies immediately, but the interest was to be paid, for their maintenance, education, and apprenticeship, to their parents or guardians.

Next came a series of bequests of more general beneficence, such as £1,000 for the release of poor prisoners for debt in London, Middlesex, or Surrey, in sums not exceeding £5 for any one case. It appears from Maitland that, by the good management of the executors, more than six hundred persons were set at liberty by means of this bequest. An annual payment of £400

was to be made by his executors, and afterwards by the Governors of Guy's Hospital, to Christ's Hospital, for which they were to have liberty to nominate every year "four poor children, Boys or Girls, whether Orphan or otherwise, or the children of Freemen of the City of London, or Unfreemen, not less than seven or more than ten years of age . . . with preference to my relations, as often as any such shall offer themselves." Next follows the application of the annual payment of £125 by the Stationers' Company (as per bond referred to on p. 54), which Guy now devoted, £80 to the almshouses at Tamworth, £35 to "putting out children apprentices, nursing, or such-like charitable deed, of four, six, or eight such poor persons of the family of the Voughtons or Woods" as the trustees of the almshouses might think fit; and in default of such, to other fit persons. The balance of £10 was assigned to Joseph Hughes, of Oakingham, Bucks; Abraham, Josias, and Joseph Chitty, London merchants, and John Osborn, and their successors in trust, to apprentice, nurse, etc., two or more poor persons of the family of the Guys, or, in default of such persons, to other fit objects of charity. A sum of £1,000 was also given to the same trustees (with one added) as were appointed to release prisoners for debt, to relieve "such poor people, being Housekeepers, as in their judgments shall be thought convenient." John Osborn's name is left out of the list of executors, a legacy of £100 being left to him, a special request being made that he will assist the executors in the execution of the will. To Anne Gorton, Osborn's servant, the sum of £50 was left, "if she be living in the house with me at the time of my decease."

Finally comes the text of the great foundation. All the residuary estate was left to Sir Gregory Page, Bart., Charles Joy, Treasurer of St. Thomas's, William Clayton, Esq., of Marden, Thomas Hollis, senr., John Kenrick,

John Lade, Dr. Richard Mead, Moses Raper, and John Sprint, all governors of St. Thomas's, on trust to finish the two new squares of building for his new hospital, and such other buildings and offices as might be necessary, and provide the hospital with beds and all conveniences to "receive and entertain therein four hundred poor persons, or upwards, labouring under *any distempers, infirmities, or disorders, thought capable of relief by physic or surgery*; but who, by reason of the small hopes there may be of their cure, or the length of time which for that purpose may be required or thought necessary, are or may be adjudged or called incurable, and as such, not proper objects to be received into or continued in the present hospital of St. Thomas, or other hospitals, in and by which no provision has been made for distempers deemed or called incurable: of whom my mind is, that they receive and entertain lunatics, adjudged or called, as aforesaid, incurable, not exceeding twenty in number at one time." Entire discretion was given to the executors and trustees as to whom they should admit. They were to "provide suitable and proper diet, physic, and all other necessaries" for such persons, either during their lives or so long as the executors thought fit to continue their stay. The patients were to be subject to rules laid down by the executors and governors, and be liable to be expelled at their pleasure.

"And my mind and will further is, that if my said executors and trustees shall not find cause, or, on any account whatsoever, not think fit to keep all or great part of the beds or wards in the said intended hospital filled and supplied with sick persons deemed or called incurable, as aforesaid; it shall and may be lawful for them to cause any number of the said beds or wards to be filled and made use of, in like manner and with like patients, as the beds in the hospital of St. Thomas are ordinarily

used"; and they were to be provided for similarly to recent practice in St. Thomas's.

Application is directed to be made forthwith to parliament or to the king to obtain an incorporation, naming his executors, together with about fifty other governors of St. Thomas's, so that the total number might be above fifty and not exceed sixty, to form a governing body, with a president and treasurer, with power to use a common seal to hold, buy, or sell property and take other corporate action. Also it was requested that an acting committee, composed of twenty-one members of the governing body, should be appointed for the constant and ordinary management of business: seven of the committee to go out of office yearly. Guy farther desired that Sir Gregory Page, Bart., should be the first president, and Charles Joy, Esq., the first treasurer; and he also named the first committee, including Drs. Richard Mead, Thomas Crow, Francis Fauquier, and Edward Hulse. Future elections of physicians and surgeons, registrar or clerk, and solicitor and chaplain, were to be made in full court by the Governors, while the offices of apothecary, steward, matron, cook, and sisters were to be filled up by the Committee. As soon as they were incorporated the Governors were to expend as much as was available of the residuary estate in the purchase of lands or reversions in fee simple, so that the rents might be a perpetual provision for the sick. If there was a surplus income at any time, it might be applied to "the relief of such other poor sick persons, or such other proper objects of compassion," as the Governors might deem most suitable.

The will was signed and sealed on September 4th, 1724, in the presence of John Oldfield, William Peppys, John Adlam, and Samuel Adlam. It was proved on January 4th following, by Charles Joy, John Lade, and John Kenrick.

BOOK II.

GUY'S HOSPITAL IN THE EIGHTEENTH CENTURY.

CHAPTER I.

THE HOSPITAL—RISE OF THE MEDICAL SCHOOL.

THE executors appointed by Guy lost no time before beginning their arduous labours. They met on January 8th, 1725, the day after Guy's funeral, to concert measures for the execution of his will. Even before the funeral the Hospital had been opened, and on January 6th, 1725, sixty patients were admitted.

Careful consideration was given to the proper incorporation of the governing body, and it was found that an Act of Parliament was the most satisfactory mode of establishing the Corporation. The Act, which passed without opposition in the session of 1725, describes Guy as having "caused to be erected in the Parish of St. Thomas, in the Borough of Southwark, a magnificent edifice, consisting of two spacious squares, with proper offices thereunto belonging," and then recites the principal portions of Guy's will relating to his Hospital. It went on to enact that the nine executors and fifty-one gentlemen nominated by the founder's will should be a "Body Politick and Corporate, by the name of *The President and Governors of the Hospital founded*

at the Sole Cost and Charges of Thomas Guy, Esquire ; and by such name to have perpetual succession, and a common seal, with power to alter and change the same at discretion." The estates real and personal of Thomas Guy were to be vested in them ; and they and their successors were declared capable in law to purchase out of the said estate or its produce any other estate not exceeding £12,000 per annum ; to sell, exchange or lease the same ; to sue or be sued in any Court of Record ; and to transact all affairs relating to the premises, according to the will.

The first president, treasurer and twenty-one "committees" were appointed as named in the will ; Sir Gregory Page being the first president, and Charles Joy, Esq., the first treasurer. In them was vested the management of the whole estate of the Hospital. Here we may note that at Guy's the original meaning of the word committee—a person to whom certain trusts or functions are committed—is retained, and the body of committees is always referred to as the "Court of Committees," with the accent on the last syllable, the first two being quite unaccented.

The president and treasurer were to hold office for life, unless they resigned, or unless they were removed at a special general court of the governors called for the purpose by the president, treasurer, or seven of the committees. When a vacancy occurred the office was to be filled by a member of the Corporation, to be elected at a general court of the governors within forty days of the occurrence of the vacancy. Seven of the committees were to go out of office each year, their places to be supplied at a meeting of the general court. The president or treasurer and any seven committees were to be a full Court of Committees, and to have power to sell or dispose of any of the Hospital estates, provided that the proceeds were forthwith reinvested in some other

purchase of lands, so as not to exceed the annual value of £12,000.

The Committee, a term also used in the Act of Parliament as synonymous with Court of Committees, was empowered to choose and remove at pleasure all officers and servants of the Hospital, except the physicians, surgeons, clerk and chaplain, whose appointment was left to the general court; to appoint their salaries or other rewards; to take in such poor, sick and maimed persons under their care, as they should judge to be objects of compassion; to make such provision for their maintenance and care, as they should think necessary; and to manage and determine by themselves or their deputies everything necessary for carrying on "so great and good a work." All their transactions and accounts were to be subject to the inspection and control "of such governors as shall by the laws of the Corporation be appointed for the purpose." This provision appears to detract rather seriously from the powers given to the Committee; but it probably only meant to provide for an effective audit and for a power of final control to be given to the general court of governors.

The Court of Committees was empowered to choose new governors from time to time, so that the number might never exceed sixty. If the number became reduced to forty, the Lord Chancellor, Lords Chief Justices and Lord Chief Baron, on being applied to by five or more governors, were to elect new governors to make up the number to fifty.

The president and governors might make any by-laws for the government of the Hospital which were not repugnant to the laws of the kingdom. The president (or treasurer, if presiding) was to have a casting vote in addition to his ordinary vote in cases of equal voting. The president and governors were finally empowered to erect a statue or statues, and a monument or monuments,

to perpetuate Guy's memory, provided that the total expense did not exceed £2,000 (see p. 94).

Guy's property consisted entirely of personalty, with the exception of a wharf, held for lives under the City of London, which was sold in 1755 for £2,500, and of the reversions of two fee-farm rents, the one of £115, payable out of the possessions of the dissolved monasteries of Rochester, Leeds and Bexley, and the other of £9 6s. payable out of the rectory of Thorn, which Guy had contracted for, but which had not been conveyed to him before his death. The purchase money, £2,550, was paid by the executors. These rent-charges first became due in 1729; but the Dean and Chapter of Rochester, the owners of the lands in question, resisted payment, until compelled by the Court of Chancery in 1734.

The administration of the estate was attended with considerable difficulty, in consequence of the very numerous legacies; and, while large sums were at once made available for the purposes of the Hospital, it was seven years before the estate could be considered as realised. On October 28th, 1732, a banking account was opened in the name of the president and governors, and the sum of £220,134 2s. 7½*d.* was carried over to it as the balance of Guy's estate. Including his payments for the building of the Hospital, his legacies, annuities, etc., Guy in his last years must have possessed about £330,000.

We may here briefly recount the principal estates and their localities purchased by the governors of Guy's in the last century. Large purchases were made in Essex, including the Great Bardfield, the Beaumont, and the Leeze Priory estates, in all approaching 8,000 acres. In Herefordshire a large estate was purchased for £60,800 from the Duke of Chandos. The Lincolnshire estate, principally in Sutton and Lutton, was part of a grant

made to the Duke of Lennox by Charles I. In 1741 this land consisted of about 5,162 acres, including 1,840 acres lately embanked, and 680 acres not yet actually reclaimed from the sea. Owing to some litigation affecting the title to the reclaimed land, the Hospital had to pay for this estate £39,000 instead of £37,000, the price contracted for.

In 1779 the Snowsfield estate, adjacent to the Hospital on the south-east side, and covered with houses, was purchased for £4,200. A strip of land behind the west wing was given by Mr. Elliot in 1779; other considerable purchases in the neighbourhood were made in the present century.

The original building of Guy's Hospital, forming the two squares, divided and connected by the broad colonnade, above which wards are situated, was completed and furnished at a cost of £18,793 16s. 1d. It was soon found that the two squares were insufficient for all the necessary purposes, being especially deficient in accommodation for resident officers, and in not containing a chapel. An additional piece of land in front of the Hospital was therefore (recently, says Maitland, 1739) taken, the annual rent of the whole Hospital site, payable to St. Thomas's, being now increased to £90. Maitland gives an engraving which includes a sort of bird's-eye view of the new buildings and front square as then designed. We recognise the treasurer's house, the counting-house, with the governors' court-room (the central building on the eastern side), the medical superintendent's and the old dressers' block; the plain face of the portions of the northern sides of the squares visible on either side of the projecting entrance, with porter's lodge in the middle; the statue of Guy in its present position; and on the western side, the nurses' block, the chapel, and the chaplain's and

apothecary's houses extending to the street. All these have three stories with garrets. Behind we see the two squares with close-set arches all the way round, and with two extremely plain stories and a range of garrets above. The architecture is extremely plain, and somewhat difficult to characterise. The faintest possible trace of debased Italian style may be discovered in the low rounded arches of the ground floor. The building in its early state contained 12 wards, and 435 beds (see p. 94).

The governors of Guy's diligently set to work to complete their staff, and on May 11th, 1725, they appointed a steward, a matron, sisters, etc.; and it is stated in the *Daily Post* of May 15th that arrangements were so forward that they will soon be able to take in the Incurables. On May 22nd we read in the same paper that the salaries of the nurses and other servants were fixed at considerably higher rates than in any other hospital, the better to prevent their extorting money from the patients—a practice strictly forbidden on pain of losing their situations. It was at the same time stated that there were several candidates for the post of chaplain, to which a salary of £100 and a handsome apartment were attached. Early in May a Mr. Callaghan was chosen apothecary to the Hospital, and about the same time Messrs. Cooper and Croft were appointed the first surgeons to Guy's.

The Hospital account book shows the following as the list of salaries first fixed:—

<i>Per annum.</i>	£	s.	d.
Treasurer . . . . .	. . . . .	00	0 0
Clerk . . . . .	. . . . .	40	0 0
Steward . . . . .	. . . . .	80	0 0
Chaplain . . . . .	. . . . .	80	0 0
Two Physicians, £40 each . . . . .	. . . . .	80	0 0
Two Surgeons, £40 each . . . . .	. . . . .	80	0 0

<i>Per annum.</i>	<i>£</i>	<i>s.</i>	<i>d.</i>
Apothecary	80	0	0
Surgery Man	30	0	0
Apothecary's Two Servants	78	0	0
Butler, with his Horse	67	2	8
Cook, and her Servant	32	0	0
Porter	35	0	0
Beadle	30	0	0
Matron	50	0	0
Eleven Sisters, £25 each	275	0	0
Eight Nurses, £16 each	128	0	0
Twelve Watchwomen, £10 8s. each	124	16	0
One Brother, belonging to the Lunatics	35	0	0
One Sister, belonging to do.	25	0	0
<hr/>			
Sum total	£1,349	18	8

One might find some subject for comment in the foregoing list. £80 seems to have been the maximum stipend then conceivable by the governors; and it may have represented five times its nominal value, or £400 a year nowadays. The cure of souls and bodies, as represented by the chaplain and the apothecary, was paid at the same rate; and the steward attained the same high position. The payment to non-resident physicians and surgeons, £40 each per annum, was certainly liberal for the time; but the same scale has continued to the present day, when it has become a mere trifle. We cannot understand why the porter should receive so large a relative stipend as £35, and the beadle £30, when the clerk, whose duties must always have been many and responsible, received only £40. The matron, sisters and nurses certainly were well paid, considering the low monetary value of women's services at that period; but rations were not then given in addition to their stipends.

An early account of admissions and discharges from

Guy's is of interest, as showing the regular order into which the work had fallen:—

Years.	Admitted.	Discharged.	Buried.	Remained.
1728	1,544	1,276	204	410
1729	1,844	1,572	274	403
1730	1,751	1,514	214	398
1731	1,714	1,506	210	401
1732	1,800	1,468	269	417
1733	1,954	1,683	256	417
1734	1,755	1,524	257	384
Totals .	12,362	10,543	1,684	2,830

The number of patients in the Hospital on July 27th, 1738, was 406, with 16 out-patients. The total sum expended on account of the House in 1737 amounted to £7,978 14s. 1d.

It appears that remarks were early made, probably by those whose relatives had failed to obtain admission as "Incurables," and by others to whom they complained, that Guy's intentions were not being carried out. Consequently in 1732 the Governors reprinted Guy's will, with an "Advertisement," in which they defended themselves. We have already quoted from this "Advertisement" passages in which the Governors defend Guy from the false charge of doing no good in his lifetime. The "Advertisement" begins thus:—

"The Governors of Mr. Guy's Hospital, having been censured as acting contrary to the intention of the Founder, by discharging persons from the benefit of his Charity, because they were incurable; they think it necessary to justify themselves: And to this end they have reprinted his Will, which alone might be sufficient to remove this mistake, his intention being therein very plainly expressed and declared.

"He himself apprehended, and his suspicions were

confirm'd by those he consulted, that the word, Incurable, was of too large and indefinite a signification: And, indeed, People generally understood by it, such as labour'd under distempers, loss of limbs, blindness, and other natural or accidental deformities, and even age itself. And if taken in such an extensive sense, his Hospital must soon have become an Almshouse, in which (to use his own Words) Parishes, as well as particular persons, would shift off from themselves the burthen of their dependents and indigent relations, to be provided for during their lives; which he foresaw, and often spoke of with great concern to several of his Executors and other persons yet living; and accordingly has described the persons, for whose relief he designed his Hospital, to be such as are (Will, pp. 37, 38, 39, 40) thought capable of relief by Physick or Surgery, and has submitted the several species or kinds of sick persons deemed or called incurables, and also the time of continuing them in his Hospital to the Discretion and pleasure of his Trustees."

The Governors of Guy's were careful that their patients should have their own special forms of prayer, and we find that in 1738 they published "Directions and Prayers for the use of the Patients in the Hospitals of Southwark, founded at the sole Costs and charges of Thomas Guy, Esq."

For some reason, too, a special "penny token" was issued from Guy's. Manning and Bray, in their "Surrey," vol. iii., Appendix cxv., give, in a list usually termed Provincial Tokens: "Guy's Hospital. Obverse, a large Building—Guy's Hospital—ex. erected MDC'XXII. Reverse, the Arms of London, between Palm Branches. 'London Penny Token,' on a raised circle round the coin."

Another note of interest about Guy's in the last century is supplied by Mr. Rendle. The registrar of the

Deadman's Place burying-ground, by Barclay's brewery, made a saint of Thomas Guy; one entry being, "1758, buried Mrs. Draper, from Saint Guy's Hospital."

For the substance of the following description of engravings and topography, we are indebted to Mr. William Rendle, F.R.C.S., unrivalled as a Southwark antiquary, and a student of Guy's as early as 1830.

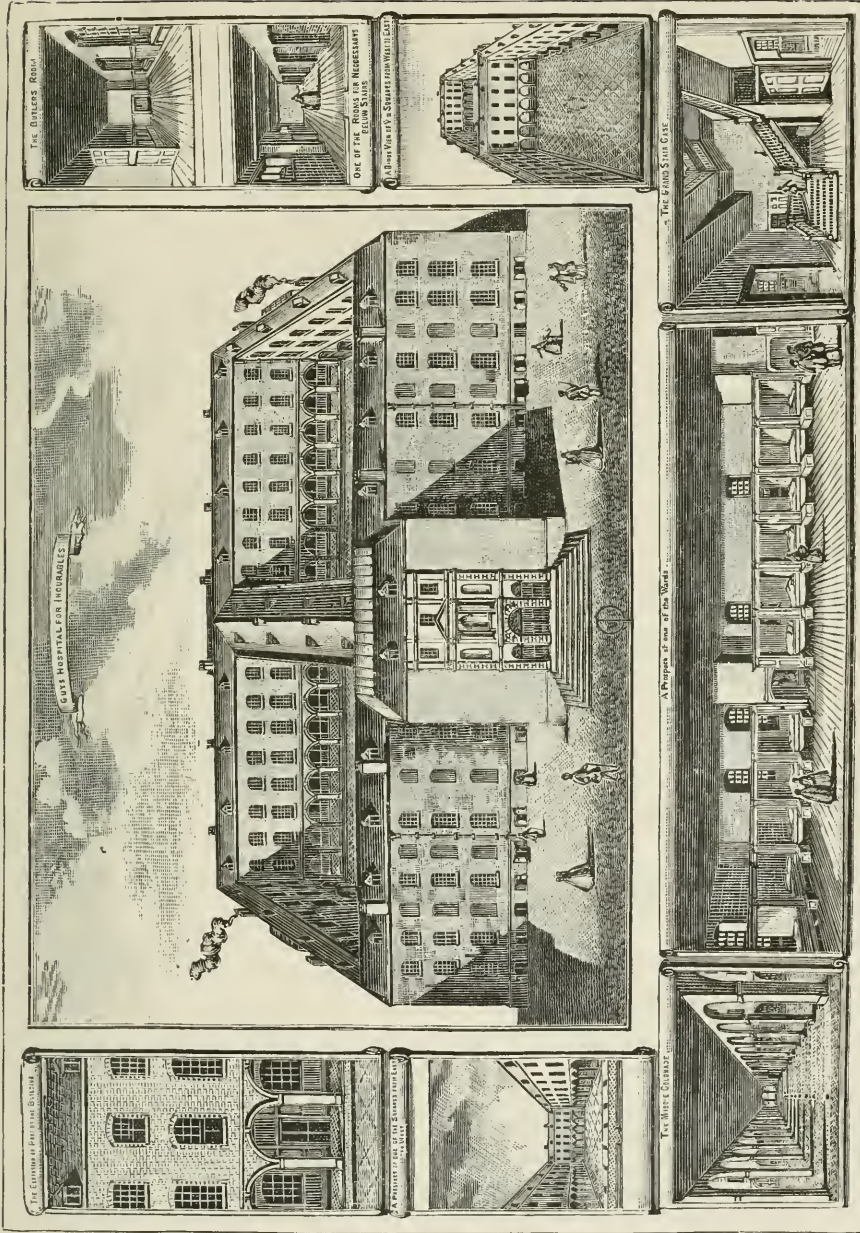
"There are many pictorial representations of old Guy's. The first was published by John Bowles in 1725. The engraving was a large sheet of about twenty-six inches, comprising a central view, and some eight small engravings round it. This is very scarce now, but there are two in the British Museum print room, one in Crowle's Pennant, the other in the Crace collection. Under the central view is this inscription, 'Printed and sold over against Stocks Market and at Mercer's Hall.'

"In the old view the main plan was much as now, with many differences of detail. We have in this early view the front centre and extensive wings, the central entry to a large covered passage leading right through from front to back. This arched entry of rusticated work rises from the steps of the front square. Above is a pediment with, in the centre, a medallion—a woman with a child-patient naked in her lap, and behind her a pelican feeding its young, as fabled, from her breast;—on the right and left of this medallion, within the pediment, are semi-recumbent figures, male and female, apparently suffering.

"Over all, on the sky view, is a sort of ribbon ornament across, with on it—

‘GUY'S HOSPITAL FOR INCURABLES.’

On each side of the main front, set back, are the front elevations of the wards, showing a great number of windows on each side, and windows and doors half below



FROM AN ENGRAVING BY JOHN BOWLES, 1725.

the ground level. In the front square, as yet without building or statue, are groups of people in the costume of the period. The eight small engravings round the central one show the 'Elevation' of some parts of the wards and colonnades under; 'The butler's room'; 'One of the rooms for necessaries below'; 'A bird's-eye view of the square' on each side of the central walk. The engravings underneath, the whole length across, are 'The grand central staircase'; and a view of wards right and left. The beds are apparently of substantial carpenter's work, fitted all round against the walls; in some the windows, as part of the wall, appear to open upon the bed. Patients are in bed, and doctor, nurses, and attendants appear in the wards, and a very cheerful large fire is there. Proceeding along the central passage from front to back, you come into Collingwood Street, which bounded the old Hospital.

"There is another view, by West and Toms, dated 1738, which shows [*a design of*] the front square margined with buildings running north from the Hospital, obscuring the wings of the Hospital; on the west is the chapel, with offices and official residences, and on the east official residences and other houses. The iron work and front screen have, in the older engravings, a not unpleasant appearance.

"A very large and remarkable map of London, known as John Rocque's plan of actual survey, was published soon after Guy's Hospital was built, and shows the neighbourhood pretty exactly as it was at the time.

"Immediately parallel with the back steps of the colonnade was Collingwood Street, running west and east: east to Maze Pond, meeting it where the Baptist Chapel (now removed for the Hospital College) was; west to the back of the 'King's Head,' 'White Hart,' 'George,' and 'Talbot,'—renowned inns, with a history, under one name or another, for hundreds of years. A

large open ditch intervened between what now is the Hospital boundary and the back of the inns, 'Ditch Side,' and of some length it appears on the map. The ditch had long acted as a running stream towards the Thames, draining land and houses all the way from the 'Green Man,' in the Kent Road. The great ditch or watercourse has, with all its tributaries, been enclosed for a sewer within my time.

"Thomas Guy must have often contemplated the filthy flood, deep enough to drown people—which, indeed, happened now and then to the young and the unsteady. Notwithstanding the accumulated filth always running by, Guy's was, upon the whole, a remarkably healthy Hospital, partly from the fact that the stream was, in all its length, open, and almost always speeding on to the river, and partly, *before* sanitary times, the Hospital was so healthily built. And another fact must be taken into account: although so near the river, and the centre of London, open fields were at hand. Between Collingwood Street (long since quite gone) and Snow's Fields was a veritable field, where, as early back as I can recollect, medically, I visited some poor patients in old wooden houses; some of them, say, two hundred years old, and, I fancy, gabled, standing where Hunt's House now is. Snow's Fields *were* fields and tenter grounds. In other directions fields extended south to almost any extent you liked to walk.

"In another direction were tents set up on open ground. 'The Tents' in Rocque (for poor Palatines, driven hither by war about 1708) are shown just where St. Thomas's Street East was, and where, in my time, Dr. Addison used to take us, in a semi-serious, amateur sort of walk, to the 'Botanic Gardens,' by the 'Ship and Shovel,' east of Guy's."

For a long time the chief hospital teaching and



NEIGHBOURHOOD OF GUY'S HOSPITAL IN 1746.

lectures were designed to make and educate surgeons. "Medicine," to quote Professor Quain (Introductory Lecture, University College, London, 1874), "was but little taught, and that little was intended for the general practitioner—then called apothecary—whose studies at a School needed not, at that time, to extend beyond six or twelve months. The physician then was, in a sense, foreign to London. He received but little of his education here, for he was compelled to resort to other places for the doctor's degree. His academical home, his "Alma Mater," was elsewhere. London was but his "place of business." One physician at that time not uncommonly lectured on medicine, on chemistry, and on *materia medica*, in addition to performing his duties at the Hospital. English students habitually went to Paris to study medicine, where the courses were complete and supported by government.

It must be noted, to the credit of Guy's, that one of the earliest public courses of anatomy and surgery was given by Samuel Sharp, then rising into note. He relinquished his course in 1746 to William Hunter.

Chevalier in his Hunterian Oration tells us that "the syllabus of Mr. Bromfield's lectures (1743), including anatomy and surgery, comprises the whole in thirty-eight; that of Dr. Nicholls (1743) proposes anatomy, physiology, the general principles of pathology and midwifery, to be completed in thirty-nine lectures; and the syllabus of Mr. Nourse, in 1748, 'Totam rem Anatomicam complectens,' has twenty-three lectures."

William Hunter says: "I attended, as diligently as the generality of students do, one of the most reputable courses of anatomy in Europe. There I learned a good deal by my ears, but almost nothing by my eyes; and therefore hardly anything to the purpose. The defect was that the professor was obliged to demonstrate all

the parts of the body, except the bones, nerves, and vessels, upon one dead body.

“There was a foetus for the nerves and blood-vessels; and the operations of surgery were explained, to very little purpose indeed, upon a dog. And in the whole course which I attended in London, which was by far the most reputable that was given here, the professor used only two dead bodies in his course. The consequence was, that at one of these places all was harangue,—very little was distinctly seen; in the other the course was contracted into too small a compass of time, and therefore several material points were left out altogether.” (“Introductory Lectures,” pp. 88-9.)

Fortunately there is extant a most complete review of the medical and surgical teaching at Guy's during the greater part of the last century. It was written by Joseph Warner, surgeon to Guy's from 1745 to 1790, and a pupil at Guy's as early as 1734. A dispute between John Hunter and his colleagues at St. George's Hospital about surgical teaching was the origin of this document, which is of great value to us now.*

“HATTON-GARDEN, Dec. 29th, 1792.

“DEAR SIR,—When I first became acquainted with the two hospitals of St. Thomas and of Guy, which was in December, 1734, the established rules of those hospitals at that time were that each surgeon was permitted to receive four pupils and four dressers at a time, inclusive of apprentices. For instance, if a surgeon had one apprentice only, in such case he, the surgeon, might take three dressers; if he had two apprentices, two dressers only; if he had three apprentices, one dresser only; if he had not any apprentice, he might take four dressers. No apprentice or dresser was ever known to pay a pupil fee. The names of the pupils were, upon

* See also *Lancet*, 1888, vol. ii., p. 642.

their admission, entered in a book at the steward's office ; and it was expected that every pupil should bring with him a certificate from his late master, signifying that he, the pupil, had served five years with diligence and sobriety. If any pupil or dresser conducts himself improperly during his attendance upon the business of the hospital, such pupil or dresser renders himself liable to be reprov'd or even expelled by the treasurer, according to the nature of the crime. Until of late years it was not customary to enter the names of the apprentices or dressers at the steward's office ; but now it is. For many years past the pupil money has been and is still equally divided betwixt the six surgeons and the two apothecarys of both hospitals, but previously to this each apothecary was limited to three pupils only.—N.B. All the money received from apprentices and dressers is the whole and sole property of the surgeon, or surgeons, with whom such apprentices and dressers are entered at the steward's office of the respective hospitals. The number of pupils at these hospitals has for many years past been unlimited, but the number of apprentices and dressers is not unlimited. These rules and orders are made and ratified by a Grand Court of Committee of the Governors of the Hospitals, and are liable to be altered by them at pleasure. It is with pleasure I now comply with your request, and with respectful compliments to yourself and to every part of your family,

“ Dear Sir,

“ Your most obedient and very humble servant,

“ JOSEPH WARNER.

“ To JOHN GUNNING, Esq., Old Burlington-street.”

“ SURGEONS.

“ Mr. Guy's Hospital, being modelled from St. Thomas's, differs very little in discipline. Each surgeon sees the whole number of his patients once a week, when

he presents out those who are cured, and gives directions for the rest. Particular bad cases are seen every day if necessary, because, by a rotation, one surgeon at least visits the hospital every day. On Saturday, the physicians and surgeons all meet and go in pairs to visit all their patients. The hours of business are from 11 to 1 o'clock. There is no house surgeon. One of the dressers is in waiting for a week by rotation to take the care of accidents, and the surgeon of the week is always in readiness to be called on if wanted for an operation. Friday is the general day for operations and for grand consultations. The physicians nor their pupils have any concern with the surgeons' theatre. Notice of operations is put up in each surgery, and sent to the surgeons only. The hours of attendance at both hospitals are the same.

“SURGEONS' PUPILS.

“Formerly they brought certificates of their apprenticeships, but now they only bring their money. There are customs understood, but no rules; in the case of misconduct, beyond the power of the surgeons, application would be made to the grand committee of governors, who have the power of expulsion. The fees of apprentices and of dressers belong to the surgeon under whom they enter. . . . When a body is opened to inspect disease, anyone may be present. The time for opening a body is usually early in the morning, or after lecture at noon. All the pupils within a reasonable distance from the hospitals are called to accidents. The pupils are considered as belonging to the hospitals, not to one particular surgeon. The surgeons and physicians are only officers of the hospitals, and receive a salary of £40 per annum. They are never present at courts or committees. The surgeons receive no other monies from the charity, and are amenable to the general court of the governors for their conduct. . . . The pupils do not bring any

certificate, but the gentleman's name with whom they served an apprenticeship, and the place of his abode, is entered in the steward's book at the time of his entry. . . . They are obliged to submit to the rules that regulate the hospital, and are subject to be expelled for any misbehaviour by the committee. . . . All the fees for the admission of the apprentices and dressers are the sole property of the gentlemen under whom they enter. . . . All the profits arising from the admission of pupils are shared equally between the surgeons of St. Thomas's and Guy's Hospitals with the apothecary of each, so that there are eight claimants on each division, which takes place on the first Monday in every alternate month. . . . The dressers and pupils cannot be admitted for a less term than six months. . . . On leaving the hospital there is a certificate signed by each surgeon of St. Thomas's and Guy's Hospital, specifying the time for which they entered. In that certificate, the word *diligently* is expressed, which, I think, should be omitted, and a blank left for the surgeon to fill up if it meets with his approbation. The hand-writing of the surgeon would carry more weight with it, and we should be less liable to advance what was not a fact. . . . The dressers pay £50 per annum, or £31 10s. for six months; the pupils 24 guineas per annum, or 18 guineas for six months. The pupil's business is only to look on, and to make such an enquiry as he shall chuse of the surgeon who is then attending. . . . There are not many bodies opened for examination; but where we can obtain leave for an inspection it is the business of the surgery man to acquaint the pupils with the intention, and all those that wish may attend. The time for doing it is not by any means fixed, but is generally done after the practice is over, and before the anatomical lecture for that day. . . . It is the business of the surgery man to make them acquainted with every accident immediately on its

entry, for which he receives 2s. 6d. per quarter. . . . They may quit the hospital whenever they please, and return again when they chuse. . . . When a pupil enters at either of the hospitals he is considered as belonging to both, and has the same privilege at each. It is the business of the surgeon who attends to give them the best instruction he is able without considering to whom they entered. The apothecary enters the greatest number of them, not for himself, but for the surgeons. . . . The surgeons do not receive any gratuity for operations. They find their own instruments, and keep them in good condition. . . . They cannot become governors during their attendance as officers. There is not any contribution levied on them. . . . There is not any difference in the manner of conducting the business at either hospital. . . . At St. Thos. Hospital the days of attendance are Tuesday, Thursday, and Saturday at 11 o'clock. At Guy's Hospital the days are Monday, Wednesday, and Friday, at the same hour. At Guy's we visit the whole house every Monday and Friday. At St. Thos., I believe, every Tuesday and Saturday. The Thursday morning is employed in the admission and discharge of patients with them, and the Wednesday with us. The time in visiting the whole house is nearly one hour and a half. . . . There is not any house surgeon at either of the hospitals. . . . We have not any fixed days for consultations and operations. If the former should be thought necessary it may be done with us either Monday or Friday, as the physicians should attend at the same time and on the same days. The operations are generally appointed at twelve o'clock on one of those days that is usual to see the whole house. If there should be any case that requires an operation which would be more conveniently performed at any other time of day than the Monday or Friday, it is always done by giving

a notice. . . . When any operation is to be performed the day is fixed that is most agreeable to the surgeons, and notice is stuck up at the surgery of each hospital mentioning the operation and by whom performed. There is not any notice given to the physicians, and it rarely happens that you see a physician in the theatre at the time. When any accident is brought in, the surgeon whose week it is receives notice, and according to the nature of such accident he either goes immediately over, or trusts the management of it to the dresser who is waiting there. . . . The hours of attendance are the same, but the days being different it gives the pupils the opportunity of attending every surgeon at each hospital. There have been lectures read in anatomy in which observations in surgery has ever been introduced from the beginning, first by Mr. Girl, then Mr. Sharp, Mr. Warner, Mr. Else, and at present by Mr. Cline. The fee for these lectures and for the dissecting room is twelve guineas. There are lectures read every morning at half-past seven on Midwifery by Dr. Lowder in the borough; they continue until half-past eight. At ten o'clock in the morning Mr. Babington, the apothecary at Guy's, gives a lecture on Chymistry, which continues until eleven, when the practice begins. Those mornings that pass without the lecture in Chymistry, Dr. Saunders supplies with one on the Practice of Physic. The Chymical lectures continue until there has been two courses given, which employs them from the 1st of October until the month of May. The anatomical lectures are every day from one o'clock until three. These are read at St. Thomas's Theatre by Mr. Cline, the former in Chymistry, and the Practice of Physic at the Theatre at Guy's. All the pupils that enter for the anatomical lectures pay seven guineas; if they chuse to dissect and attend the dissecting-room they pay five guineas extraordinary. The terms for the Chymistry,

Materia Medica, and Practice of Physic are ten guineas. I cannot take upon me to say when they were first instituted, but there were lectures read before the year 1750. There are not any Chirurgical lectures given but those that finish each anatomical course by Mr. Cline. They have amounted hitherto to twelve in number to each course. The lectures have always been delivered *viva voce*."

The above narrative omits the following important facts:—In 1760 there occurred a quarrel between Guy's and St. Thomas's about reciprocal attendance of students at operations, and all intercommunication was broken off. In 1768 it was resolved by the Governors of Guy's "that the barrier between this Hospital and St. Thomas's be taken down, and that the pupils of St. Thomas's have free leave to see not only the operations, but also all the other practice of this Hospital." St. Thomas's reciprocated these advantages, and thenceforward these Hospitals were known as the "United Hospitals" and the "Borough Hospitals"; they were, in fact, regarded as twins.

We may here complete the notice, begun on p. 79, of the successive stages by which Guy's Hospital was completed during the last century. On March 21st, 1731, the Governors approved of a model of a statue to the Founder by Scheymaker, who attended the meeting, and was commissioned to cast the statue in brass, at a cost of five hundred guineas. This statue, placed in the centre of the front quadrangle, on a square pedestal, represents Guy in his livery gown, with a small scroll in his right hand. In bas-relief on the pedestal, in the separate square panels, are representations of the Good Samaritan, Christ healing the sick, Guy's armorial bearings, and an inscription on the front

panel to this effect: "Thomas Guy, sole Founder of this Hospital in his life-time, Anno Domini 1721." The eastern wing, designed by Mr. Stear, architect, was begun in 1738, and rapidly completed at a cost of £9,300. The west side of the square, including the chapel, was not commenced till 1774, Mr. Jupp being then the architect; but the design appears to have closely followed the plans made in 1738. This western wing was completed in 1780 at a cost of £14,537. The centre façade was at the same time altered and remodelled into its present form by Mr. Jupp, and seems to have been rather dear at £6,922. In 1774 also there was built a separate lunatic house for the accommodation of twenty confirmed lunatics, in accordance with Guy's will. From the minutes of the Court of Governors it appears that the lunatic house was rebuilt in 1797 by William Hobson at a cost of £4,388. Four years previously the Governors had resolved that only *female* lunatics should be admitted into the Hospital in future. But in Rees' Cyclopædia (dated 1819) a "keeper of the lunatic men" is included among the officers of the institution. Possibly the explanation may be that, though no fresh male cases were admitted, it took many years to get rid of those occupying the house at the time when this resolution was passed.

When the chapel and new façade were completed, there came the question of statues. Mr. Bacon then executed his well-known statue of Guy (placed in the chapel and dated 1779), and the figures of Hygeia and Æsculapius in the niches of the façade. The bas-reliefs between the pillars represent the prevailing practice of the time with regard to blood-letting. The model of the statue of Guy was approved by the Governors on November 6th, 1776. The cost was not to exceed £1,000, but it actually cost £1,160 10s.

The physicians and surgeons of Guy's presented a

memorial to the Court of Governors, dated October 13th, 1785, in which various alterations for the improvement of the wards were recommended. Among them the following appears: "That beds be removed from the present wards into the old chapel, making that a convalescent ward." This suggestion was carried out, and Chapel Ward, as it was called, was opened in 1788. It occupied the whole length of the central corridor on the first floor. Though the name was subsequently changed to "Esther," the ward existed as such until a quite recent date. In July 1788 the Treasurer reported "that four wards had been fitted up in this Hospital agreeable to the desire of the physicians and surgeons," as expressed in the memorial above mentioned. A later note says, "In consequence of which (*i.e.*, the memorial) some new wards have been made and others altered." The sites of the new wards are not specified, but the allusion is no doubt to those on the ground floor, which were made by filling up the spaces between the pillars and arches around each quadrangle. The engraving by John Bowles shows that there was an outer wall to the corridors on the ground floor, and many windows in it. By bricking up these arches, with the exception of semi-circular spaces for windows, the passages were readily converted into wards; and the spaces thus enclosed are now occupied by the Accident and Cornelius wards, the surgery, the medical library, and sundry offices. It may be noted in passing that the quadrangles and corridors are represented in the engraving as being neatly paved in a chess-board pattern, while the area in front of the building is covered with pitchings.

The first record of the admission of patients into Cornelius Ward is on December 14th, 1808, at which time Accident Ward had been in constant use for some years.

John Howard's visit to Guy's Hospital on September

17th, 1788, gives us the advantage of a skilled outsider's impression, and it is on the whole favourable. He found some of the wards too low, being only nine feet and a half high; and the wooden beds and testers in the old wards he naturally condemns as harbouring bugs. The new wards, with their iron bedsteads and hair beds, he praises as being clean and fresh; and he commends the method of ventilation. He was much pleased with the construction of the new water-closets, which were flushed with water on a self-acting system. The baths were excellent, in clean and neat rooms. Various improvements were being carried out under Mr. William Blackburn, the architect. The number of patients in the Hospital at that time was 304. It is noted that both at Guy's and St. Thomas's large quantities of beer were brought into the Hospital from outside, and that the patients who were able easily got out and visited the adjacent gin-shops, there being no proper attention to the gates. Let us hope that this was but a temporary possibility.

The PHYSICAL SOCIETY of Guy's Hospital was founded in 1771, and is therefore as old as the Medical Society of London, or even older according to some accounts. Its members were composed for the most part of the officers of the two Hospitals, together with the general practitioners in their neighbourhood, although numerous other medical men of celebrity joined the Society. Its archives show that many distinguished men occupied seats on the benches of the present medical and chemical theatre of Guy's, when there were interesting subjects under discussion. Thus we read in the Life of Allen, the chemist, that he was elected a member of the Physical Society in 1794, and in 1802 went with Astley Cooper and others to hear a paper on the cow pox.

A capital library belonged to the Society, and the books were allowed to be taken out for perusal by the

members. Again, Thelwall, the Radical friend of Cline, of St. Thomas's, received the privilege, not only of attending Cline's lectures and operations, but of becoming a member of the Physical Society of Guy's, which very rarely admitted a non-professional. Thelwall was even allowed to read a paper before the Society, entitled, "An Essay towards a definition of Animal Vitality." It was read on the 26th of January, 1793, and led to a memorable debate, being discussed for no fewer than six successive evenings. At the close a special vote of thanks was given to the author.

CHAPTER II.

THE EARLY PHYSICIANS TO GUY'S.

JURIN TO THOMLINSON.

IN selecting DR. JAMES JURIN as their first physician, the Governors of Guy's Hospital possibly were influenced by some expression of Guy's own opinion before his death. In any case, their choice was justified by his high scientific position and his rapid advance in practice. He was the son of John Jurin, a citizen-dyer of London, who was able to obtain his admission, when seven years old, to Christ's Hospital. After proceeding as scholar to Trinity College, Cambridge, in 1702, he graduated B.A. in 1705, and was elected Fellow of Trinity in 1706. Dr. Bentley, the famous Master of Trinity, recommended him to the favour of the Governors of Christ's Hospital as "a youth of very great hopes"; or, as we should now say, one from whom much might be expected. He found occupation in travelling as tutor with Mordecai Carey, a younger scholar of Christ's Hospital, during part of 1708-9. Having taken his M.A. degree in 1709, Jurin was appointed in the same year Master of Newcastle-on-Tyne Grammar School. His literary and scientific abilities were soon exerted, by Bentley's advice, in editing, with considerable additions, the "General Geography" (in Latin) of Bernhard Varenius, for the Cambridge University Press, which published the book in 1712. During his residence at

Newcastle Jurin also gave public lectures on experimental philosophy. So successful was he as master, that he was able in a few years to save a thousand pounds, thus securing the means to follow out his original desire to study medicine. He resigned his mastership in 1715, and returned to Cambridge, where he graduated M.D. in 1716. Settling in London, he was admitted a candidate of the College of Physicians in June 1718, and a Fellow in June 1719.

Jurin was elected a Fellow of the Royal Society early in 1718, for his name appears as Fellow in the title of papers in the part of the "Philosophical Transactions" published for January—April 1718. The first of these refers to a subject still of importance to the medical profession—"An Enquiry into the Cause of the Ascent and Suspension of Water in Capillary Tubes"; and the second, immediately following it, was "On the Motion of Running Water," in part of which he discusses mathematically the speed of the blood in the human body at different parts of its course. Later in the same year Jurin contributed an important paper on the power of the heart, addressed to Dr. Mead, in which he boldly asserted that the bodies of animals were machines, whose motions and actions could only be understood by the study of mechanical principles. He proceeds to expound and apply these principles very acutely, criticising previous explanations. This brought him into controversy with James Keill, M.D. In a paper issued in 1719 Jurin exposed the current fallacy that the blood-clot was lighter than serum, and determined the specific gravity of cold blood as 1054; 1055 is now given as the average in Foster's "Physiology," showing how carefully Jurin's experiments were made. But when we see what Jurin thought was the composition of blood, we realise how far physiology has travelled since his time. He describes blood as composed of "Phlegm,

Oil, Volatile and fixt Salts, and Earth." Yet he was one of the most learned men of his time, and an acute Newtonian philosopher. He was elected Secretary of the Royal Society in 1721, and held the office till 1727, editing vols. 31 to 34 of "Philosophical Transactions."

In 1724 he proposed a plan for taking systematic meteorological observations at different places, and in the next year he persuaded the Royal Society to send barometers and thermometers to a number of their correspondents abroad, at the Society's expense, undertaking himself to see that they were safely despatched. Thus he may be credited with the parentage of our modern systems of accurate meteorological records.

During these years he had been growing notable in medical practice, especially by the part he took in supporting and promoting the practice of inoculation for small pox. His "Letter to Dr. Caleb Cotesworth, F.R.S.," one of the physicians to St. Thomas's Hospital, containing "A Comparison between the Mortality of the Natural Small Pox and that given by Inoculation," with an account of the success of inoculation in New England, was followed by a succession of pamphlets recording the progress of inoculation in Great Britain during the years 1723-6. We learn from the former that Jurin was then (1723) Lecturer on Anatomy at Surgeons' Hall. Evidently, after the recognised heads of the profession, such as Radcliffe, Mead, and Cotesworth, there was no one more fit to be chosen first physician to Guy's Hospital. This office he held from its opening in 1725 till March 1732, when he was compelled to resign, owing to increase of private practice.

Apart from his mathematical and physical investigations, and his belief in inoculation, we have little evidence as to Jurin's special talents as a practitioner beyond the fact of his success. In 1732 he published a collection of "Physico-mathematical Dissertations,"

including his principal papers read before the Royal Society. A little later he entered into philosophical and religious controversy, under the pseudonym of "Philalethes Cantabrigiensis," writing, under the title "Geometry no Friend to Infidelity," a defence of Sir Isaac Newton and the British mathematicians, in the form of a letter to the author of "The Analyst" (Bishop Berkeley), attacking him for having accused mathematicians of infidelity. This was followed, in 1735, by "The Minute Mathematician, or the Free-thinker no Just-thinker; set forth in a second letter to the Author of the Analyst." These pamphlets are of considerable force and merit. Under the same pseudonym Jurin carried on a spirited discussion with Dr. Pemberton, in defence of Newton, in "The Works of the Learned" for 1737-9. Jurin was a good Latin scholar, and Thomas Bentley's edition of Cæsar (1742) was undertaken at his suggestion, and consists in large part of his notes.

One of Jurin's most important later contributions to science, "On Distinct and Indistinct Vision," was appended to Robert Smith's "Optics," 1738. It was criticised by Benjamin Robins, F.R.S., to whom Jurin, as was his wont, replied. We must leave mathematicians to decide regarding the merits of the controversy.

A more congenial medical field is opened up by Dr. Jurin's "Account of the Effects of Soap-Lye, taken internally, for the Stone," first published in 1742. He described his sufferings from gravel, allayed by purgatives, followed by illness about Christmas, 1740, owing to the passage of a stone from the kidney to the bladder, and the voiding of a small red stone of the size of a pea. After subsequent severe sufferings, he would not take the then vaunted quack remedies of Mrs. Stephens, for which she received no less than £5,000 from Parliament in 1739. But after reading the "Experiments and Observations" of Dr. Stephen Hales, F.R.S., on the

dissolving power of soap-lees on calculi, Jurin resolved to take the same (containing both lime and potash in abundance), in gradually increased doses. After a few months he grew better, and voided a succession of small stones, showing signs of the solvent power of the lime, and a little later he considered himself perfectly cured. In 1745 he published a second edition, in which he confessed that he had given up the use of this drastic medicine (although it had conferred much benefit on many), owing to the extreme difficulty of obtaining it always of the same strength. But he had arranged with an apothecary to supply a substitute almost free from nauseous taste or smell. He apologises for concealing the manner of preparation, averring that it was only for the public benefit. He named it "Lixivium Lithonripticum," and took it daily himself.

The "Lixivium," like the soap-lees, was destined to bring the controversial physician into one more controversy. When he was called in to attend Robert Walpole, Earl of Orford, in the latter part of 1744, he found reason to believe there was a stone in his bladder, and, in concert with Sir Edward Hulse, he administered his "Lixivium." Although several stones were voided by the earl, John Ranby, serjeant-surgeon to the King, could not refrain from attributing his death, which took place on March 18th, 1745, to Jurin's strong medicine, and published a long "Narrative" of the case from his point of view. An "Epistle" to Ranby, defending Sir Edward Hulse and Jurin, and evidently inspired by them, followed. Ranby published an Appendix to his pamphlet, and the physicians replied in a long "Additional Postscript." "Advice to John Ranby," "An Expostulatory Address to John Ranby," and two "Letters from a Physician in Town to another at Bath," were followed by a humorous "Charge to the Jury, or the Sum of the Evidence on the Trial of

A. B., C. D., and E. F., all M.D., on the Death of one Robert at Orfud," from which we should like to quote, but that the case has no bearing on Guy's Hospital. Fortunately, in our days it is not necessary to take strong caustic lime to dissolve stones.

Jurin was one of the Censors of the College of Physicians during several years; he was a member of the Council in 1748-9, and was elected President on the death of Dr. Tyson, on January 19th, 1750. He only survived his elevation to the presidency a few weeks, dying at his house in Lincoln's Inn Fields, on March 29th, 1750, in his sixty-sixth year. He was buried at St. James's, Garlick Hill, E.C. His widow survived him till 1784, their only son, James, of the Hermitage, in Northumberland, having died childless in July 1782. Jurin left a considerable legacy to Christ's Hospital out of his ample fortune. A bust of him is in the library of Christ's Hospital. The Harveian Oration for 1761, delivered by Dr. (afterwards Sir George) Baker, contains an eloquent tribute to Jurin's merits; it is quoted by Dr. Munk in the "Roll of the College of Physicians," vol. ii., p. 66.

We have much less knowledge about Dr. JOHN OLD-FIELD, who was elected physician to Guy's at the same time as Dr. Jurin, but who stands second on the list. His father, Joshua Oldfield, D.D. Edin., was the minister of Maid Lane Presbyterian Chapel, Southwark, for twenty-nine years, and died in 1729. He came of a family nearly the whole of whom had dissented from the Act of Nonconformity, when several of them who were ministers were ejected. John Oldfield entered at Leyden in 1717, being then twenty-seven years of age, and graduated M.D. there in 1718, and ten years later received the same degree from Cambridge University, when he had already been some years physician to Guy's. He was Fellow of

the College of Physicians in 1730, and Censor in 1735. His connection with Guy's lasted until his death on June 25th, 1748.

Charles Jarvis's fine edition of "Don Quixote" (2 vols., 4to, 1749) gives us our only glimpse of Dr. Oldfield, in a character but slightly connected with Guy's. He was asked to write an "Advertisement" concerning the prints, of which there are many in the two volumes. He shows himself to be a discerning critic of the fitness of illustrations to such a work, and defends the choice of topics and moments adopted by the artists. He was on the alert to avoid the too frequent use of the same expression in the characters represented. He had made considerable use of his anatomical knowledge in the study of expression,—a knowledge which makes many medical men clever judges of engravings, and of pictures in general.

It appears very probable also that MATTHEW CLARKE, M.D., who was elected physician to Guy's in March 1732, on Dr. Jurin's resignation, was the son of an eminent dissenting minister, namely, Matthew Clarke, pastor of the Independent Church in Miles' Lane from 1692 to 1726. He was born in London, and entered at Leyden University as a medical student on September 5th, 1721, at the age of twenty. In 1728 he obtained the degree of M.D. from Cambridge University. He was elected physician to Guy's three years before he sought the licence of the College of Physicians, where he was entered as a candidate in 1735, elected a Fellow in 1736, and Censor in 1743. He retained his physiciancy to Guy's for twenty-two years, retiring in 1754. His practice must have been successful, or his fortune favourable, for he retired from practice soon afterwards, and lived at Tottenham to a good old age, dying in November 1778.

CHARLES FEAKE was another undistinguished man among the early physicians of Guy's. He was a member of Caius College, Cambridge, and graduated M.B. at Cambridge in 1738, and M.D. in 1743. He was elected a Fellow of the College of Physicians in 1745, and served as Censor in 1747, 1754, and 1758. He was Harveian Orator in 1749, and member of the Council in 1761. He was elected physician to Guy's in 1745, and held the appointment till his death on August 2nd, 1762. His appointment was the first occasion on which a third physician was elected at Guy's, and the practice continued until a fourth was added in recent years.

NICHOLAS MUNCKLEY, M.D., was another worthy man who has left little trace behind him except the honours he received from the College of Physicians, and the exceptional fact that he was created M.D. of Cambridge in 1753 by express royal mandate, being already M.D. of Aberdeen in 1747. He had been partly educated at Leyden, where he entered in August 1745, at the age of twenty-four. He was appointed physician to Guy's Hospital in 1748, and retained the post till his death on February 20th, 1770. At the College of Physicians he was made a Fellow in 1754, was Gulstonian Lecturer in 1756, and Censor in four separate years.

DR. WILLIAM MAGIE, or MACGHIE, was one of the Guy's physicians cut off too early by death to allow him to show his powers. He was the only physician to Guy's not a Fellow of the College of Physicians. He was educated at Edinburgh, where he graduated M.D. in 1746. Appointed physician to Guy's in January 1754, he had filled that office for less than two years and a half, when his death took place, on June 7th, 1756.

HENRY HINCKLEY, M.D., educated at Magdalene College,

Cambridge, graduated B.A. in 1749, and, removing to King's College, took his M.D. degree in 1754. He had already been appointed physician to the Middlesex Hospital in 1752, but he was called to be physician to Guy's in 1756, whereupon he resigned the Middlesex appointment. At the College of Physicians he was elected Fellow in 1755, Censor in five different years, and he acted as Treasurer from 1762 till his death in 1779.

CHARLTON WOLLASTON, M.D., was one of the Guy's physicians prematurely lost to science, who might have been expected to rank high among his illustrious family. He was the second son of Francis Wollaston, F.R.S., of Charterhouse Square, by Mary, daughter of Dr. John Francis Fauquier, one of the first Governors of Guy's. He was born in 1733, and educated at Sidney Sussex College, Cambridge, where he graduated M.B. in 1753, and M.D. in 1758. In 1757 he was elected physician to the Middlesex Hospital, but gave up his post in a few months to live at Bury St. Edmunds, where he remained till 1762. He had been elected Fellow of the College of Physicians in 1760, and delivered the Harveian Oration in 1763, a high honour for a young man of thirty. In 1762 Guy's Hospital sought his services as physician, but his career was early terminated by an attack of fever, which cut him off on July 26th, 1764. He is described as uniting singular modesty with great ability, and as having charmed every one by his manners. The only fragment of his which we have found is a Latin letter on catarrh, addressed to Sir George Baker in 1764.

It is worth noting that Dr. Charlton Wollaston was the uncle of William Hyde Wollaston, the eminent chemist and mineralogist, who was the son of his elder brother, a clergyman.

DR. ROBERT THOMLINSON, who closes our list for the

present, has left no trace of his medical ability for our inspection. He was a native of London, and proceeded to Trinity College, Cambridge, where he graduated M.B. in 1760, but did not proceed to M.D. until 1766. He was elected physician to Guy's in 1764, and held his appointment till his death from "gout in the stomach" in 1788. At the College of Physicians he was in favour, for after becoming a Fellow in 1767, he was Censor in 1769 and in three subsequent years, and Treasurer from 1780 to 1787.

CHAPTER III.

GUY'S PHYSICIANS IN THE LATTER PART OF THE EIGHTEENTH CENTURY.

SAUNDERS TO RELPH.

THE first physician of real eminence in his profession who became attached to Guy's after Jurin (who appears to have done nothing to make Guy's a medical school) was WILLIAM SAUNDERS, a Scotchman, who brought to London the results of the teaching of William Cullen. He was the son of a physician in Banff, Dr. James Saunders, and was born in Banff in the year 1743. Choosing the medical profession, he naturally went to Edinburgh University, whose medical school was then the only one in Great Britain worthy of consideration. He was not only a pupil, but also a friend of William Cullen, whose "Nosology" so long held the field in the classification of diseases.

Saunders graduated M.D. at Edinburgh in 1765, his exercise for the degree being upon antimony. Coming to London, Dr. Saunders was no doubt commended to Dr. (afterwards Sir) George Baker by his chemical knowledge, and Baker availed himself of the young physician's assistance in the chemical investigations connected with his enquiry into Devonshire colic. He began to lecture on chemistry and pharmacy in Covent Garden, and is said to have made £1,000 a year by his lectures. He published a "Syllabus of Lectures on

Chemistry and Pharmacy" in 1766, extending to twenty-four pages. The stage which chemistry had then reached may be judged from the fact that acids are said to effervesce with alkaline salts containing "air." Acids are enumerated as "Vitriolic, Nitrous, Muriatic, and Vegetable," the latter having four principal species: (1) "The Native," *Succus Lemonum*, etc.; (2) the Fermented, *Acetum Tartarum*; (3) the Distilled, *Acidum Abietis*; (4) the Sublimed, *Flores Benzoin*. Still, the syllabus is quite up to the knowledge of the time. Dr. Saunders also issued a "Catalogue of the Materia Medica" for the use of his students. A long list of foods and fruits comes at the beginning, under the head of "Nutrientia," and "Bos, Beef and Veal; Ovis, Mutton and Lamb; Capra, Goat and Kid; Cervus, Venison," are attractively set down. Of Birds and Fish a long list follows, concluding with "Volucrum Ova, Birds' Eggs." *Materia Medica* lectures have changed since Dr. Saunders' time.

Dr. Saunders, after his first "Letter to Dr. Baker on the Endemial Colic of Devonshire," in 1767, returned to the subject in "An Answer to Geach and Alcock on the Endemial Colic of Devonshire," 1768. In 1770, largely through Baker's and Lord Mansfield's influence, he was elected physician to Guy's Hospital, where he had only Drs. Hinckley and Thomlinson as his seniors. He continued his studies on antimony, and in 1773 published a little treatise on its use in the treatment of disease.

Saunders' advent seems to have been the signal for novel arrangements at Guy's. He obtained permission to lecture, or announced his intention of lecturing, on the theory and practice of medicine at Guy's, the lectures being by special arrangement open to all medical pupils of both Guy's and St. Thomas's. His "Elements of the Practice of Physic," printed in 1780 for the use of his students, deals with general pathology in ten

introductory pages out of 136. He relies both on the dogmatical and the empirical methods, as giving, in combination, the best guidance. A disease he defines as "the impeded action of any one function of the body." According to an advertisement of 1783, his lectures were given at Guy's three times a week at 9.30. They included, in addition to physiology and medicine, chemistry and materia medica. These lectures were in addition to clinical lectures.

Dr. Saunders was one of the early advocates of the value of red Peruvian bark as compared with the pale form in common use in agues, fevers, etc.; but he supposed that the two kinds of bark were obtained from different parts of the same tree, instead of, as is now well known, from different species. He treated many cases successfully with the red cinchona, and had so many confirmations of his views from other doctors, that he was led to publish "Observations on the Superior Efficacy of the Red Peruvian Bark in the Cure of Fevers, Interspersed with Occasional Remarks on the Treatment of other Diseases by the same Remedy." The first edition appeared in 1782, and a fourth was called for in 1783. He dedicates this edition to his colleagues, Drs. Thomlinson and Hervey, and Messrs. Warner, William Lucas, and William Cooper, as a mark of his high esteem of their professional characters. The dedication is dated from Jeffries Square. In 1805 he was living in Russell Square. He had evidently taken great trouble to discover all he could about Peruvian bark. He collected as many specimens as he could, and arranged them "in the order of their goodness" for the benefit of his students. The appropriateness of the publication, and the demand for it, was further shown by its translation into French, German, and Latin.

The first introduction of the red bark into England, as told by Dr. Saunders, was quite by chance. "In the

year 1779, a Spanish ship from Lima, bound to Cadiz, was taken by the *Hussar* frigate, and carried into Lisbon. Her cargo consisted chiefly of this bark, and a considerable quantity was bought at a very low price at Ostend, by some of our London druggists. . . . The druggists in whose hands the red bark was found it difficult to dispose of it, its appearance being so very unlike that of common bark; at last they offered it, by way of trial, to such apothecaries as reside in counties where agues are frequent. The success attending its use soon convinced them of its superior efficacy. It was early introduced into the hospitals, and its greater powers became universally acknowledged."

An interesting testimony is given by Dr. Saunders in this book to Dr. Skeete, who afterwards became one of his colleagues. He writes: "By my desire Mr. Skeete, a very ingenious and attentive young gentleman from Barbadoes, and a student of medicine in Guy's Hospital, made several experiments to ascertain the comparative antiseptic power of red bark with the common Peruvian bark. . . . His experiments were conducted with great accuracy, and the result of them submitted to the examination of many gentlemen at Guy's Hospital."

Dr. Saunders' next work, "A Treatise on the Structure and Diseases of the Liver" (1793), being the substance of the Gulstonian Lectures delivered by him at the College of Physicians in the previous year, is naturally of less value, owing to the extreme ignorance of that time as to the true physiology of the liver. Yet a number of interesting experiments were made or suggested by the author, and those on living animals (dogs) were made by "an ingenious friend, Mr. Haighton, Teacher of Physiology at Guy's Hospital." In the therapeutical part of his subject Dr. Saunders is a great advocate of the drinking of warm water. He was

strongly against the indiscriminate use of mercury as a specific for all diseases of the liver. One of Haighton's experiments with dogs consisted in injecting two drachms of "crude mercury" into the crural vein. Of course, the dog died in a few days, and its lungs were found crowded with tubercles, each surrounding a nucleus of mercury. Such was the crude vivisection of the end of the last century. A fourth and much enlarged edition of this "Treatise on the Liver" was published in 1809, with an account of the hepatitis of India.

The last work of Dr. Saunders that we must notice is his "Treatise on the Chemical History and Medical Powers of some of the most celebrated Mineral Waters, with Practical Remarks on the Aqueous Regimen." It was published in 1800, dedicated to Sir Walter Farquhar, Bart., his intimate friend for thirty years, and physician to the Prince of Wales. A second edition was published in 1805. Saunders seems to have given much attention to mineral waters, and to have analysed or obtained analyses of the most noted. For the latter he expresses his obligations to "my old pupil and ingenious friend, Mr. Charles Rochemond Aikin." He comes to the notable conclusion that much of the effect of mineral waters is due to the constituent they all have in common, namely, water, and proceeds to advocate the drinking of water at various temperatures as a most valuable means of cure for many diseases. He also advocates cold bathing and cold affusion in many cases.

There can be little doubt that Dr. Saunders, as he increased in practice, utilised the services of others to swell his books. We may remark here how vexed Dr. Haighton was at the slight mention of him in Saunders' "Treatise on the Liver." Sir Astley Cooper says of Saunders, "He was a most entertaining lecturer, but superficial person, with a considerable share of genius.

He would give out that he should lecture next day on Absorption, and ask some one to get him Cruickshank, that he might not come down entirely ignorant." No such serious accusation, this. Dr. Munk says of him, judging from previous biographical accounts: "His attainments in science were considerable; his industry and exertions indefatigable. His progress to eminence was rapid, and in the course of a few years he was in the enjoyment of a very lucrative city business." He became a Fellow of the Royal Societies of London and of Edinburgh, and of the Society of Antiquaries. He was specially admitted a Fellow of the College of Physicians in 1790, on Sir George Baker, the President's, nomination, having been content to remain a Licentiate since 1769. He was Censor during four years, Gulstonian Lecturer in 1792, and Harveian Orator in 1796. He was appointed physician-extraordinary to the Prince Regent in 1807, and retired to Enfield in 1814. There he died, on May 29th, 1817, aged seventy-three. A portrait of him, presented by Mr. J. J. Saunders, his son, is in the College of Physicians.

An important matter in which Dr. Saunders was concerned after leaving Guy's, was the foundation of the Royal Medical and Chirurgical Society. On May 22nd, 1805, an inaugural meeting was held at Freemasons' Tavern, Dr. Saunders in the chair, at which it was determined to establish a society comprehending the several branches of the medical profession in London, to receive professional communications, and to form a library. The first meeting of the society, when constituted, was held in Gray's Inn, in December 1805, but it was not till 1809 that the first volume of its well-known "Transactions" was published. Among the members of the first Council were: Dr. Saunders, President; Charles Rochemont Aikin, Secretary; Dr. William Babington, Vice-President; Astley Cooper,

Vice-President; Dr. James Curry; Dr. Alexander Marcet, Foreign Secretary; with others, including many of the best names in medicine and surgery at that time. The names quoted show the influential part Guy's men played in establishing the society. In 1812 the society became "Royal," by obtaining a charter from the Prince Regent.

Two features of originality have been lately brought to light in Saunders' views. Dr. A. E. Garrod, in his work on "Rheumatism" recently published, says:—

"Although it has only recently received much attention, the miasmatic theory is at least as old as the present century. Dr. William Saunders, of London, writing to Haygarth in the year 1809, said: 'With respect to your inquiries on the subject of acute rheumatism, I am assured by much experience and accurate observation that, with all its inflammatory symptoms, it is an ague in disguise.'"

In an "Essay on Delirium Tremens," by Thomas Sutton, M.D., in 1813, he says: "Delirium Tremens may be known to some medical men to a certain extent, but to many is wholly unknown." And he then has a note to this effect:—

"Dr. William Saunders, late physician to St. Guy's (*sic*), and for many years lecturer on medicine at that Hospital, whose opinion I had the advantage of obtaining on this tract, considered the assertions in this paragraph to be perfectly correct; but stated to me that he had mentioned the disease alluded to in his lectures for many years, and had been in the habit of noticing and distinguishing it from phreuitis during forty years of his practice. It is a considerable gratification to me to be able to introduce the opinion of this respectable physician on some important points connected with this subject."

In another note he says that "Dr. Saunders quite agrees with the accuracy of the description, but thinks some

observation like the following might be given on the occasional employment of the hands, in addition to what I have stated. He has often considered the motion of the hands in this state of disease, as if the patient might, with imperfect vision, be searching for things, and occasionally rapidly catching or avoiding them. Such, for instance, as if in search for rats or mice, being things he wished partly to lay hold of and partly to avoid."

In one or two other places he alludes to Saunders, always with respect.

Of JAMES HERVEY, M.D., who was the successor of Dr. Hinckley at Guy's in 1779, there is not much to record. A native of London, he was sent to Queen's College, Oxford, in 1767, at the age of sixteen, where he graduated M.A. in 1774, M.B. in 1777, and M.D. in 1781. He was elected physician to Guy's in 1779, and continued to hold the post till 1802. He had a sufficient independence, and was not anxious to gain practice or distinction; but he was reputed an able physician. It was his habit to spend the summer at Tunbridge Wells, where he had a select practice when that watering-place was greatly in vogue among London fashionables. The College of Physicians appears to have found him a "good fellow," for after becoming a Fellow in 1782, they chose him Gulstonian Lecturer in 1783, and Registrar in 1784, an office he filled for thirty years. He was Censor of the College during six years, between 1783 and 1809, Harveian Orator in 1785, and Lumleian Lecturer from 1789 to 1811. He was, no doubt through the College of Physicians, appointed the first Registrar of the National Vaccine Establishment. His death took place at the beginning of 1824.

DR. THOMAS SKEETE is another of the Guy's physicians

who showed much promise, but was untimely cut off by death at an early age. He was born in Barbadoes, in 1756 or 1757, being presumably the son of a sugar planter. He was a pupil for six years in Barbadoes with Mr. R. J. Farre, who was for many years a medical practitioner in Barbadoes. His son Dr. J. R. Farre, a pupil at Guy's, and his grandsons Drs. F. J. Farre and Arthur Farre, all attained eminence. Skeete was in due time sent to England, and entered as a pupil at Guy's. During this period he rendered great assistance to Dr. Saunders in chemical experiments relating to Peruvian bark, as acknowledged in Saunders' book on the subject. To obtain the M.D. degree with sufficient speed, Skeete resorted to Scotland in 1783; and, after a two years' course at Edinburgh, removed to Glasgow, where he graduated M.D. in February 1785. He appears to have made extensive studies on Peruvian bark on his own account. These he published in 1786 in a book of more than three hundred and fifty pages, entitled "Experiments and Observations on Quilled and Red Peruvian Bark," etc., with remarks on the nature and treatment of a large number of diseases in which bark might or might not be given. Dating his dedication from Paternoster Row, he speaks of the advantages he had derived from Dr. Saunders' judicious practice, and from his engaging excellence as a teacher; and he eulogises Mr. (afterwards Sir) Walter Farquhar for his disinterested kindness to him. He informs us that the book grew out of a dissertation which won a prize medal from the Harveian Society at Edinburgh. We also learn that he was experimenting with opium and studying its effects on men and animals, with a view to future publication of his results. He was elected physician to Guy's in 1788 on the death of Dr. Thomlinson; but he fell a victim to a disease of the liver on May 29th, 1789, at the age of thirty-two.

Of DR. JOHN RELPH, who succeeded Skeete in 1789, there is very little to record. He was a native of Cumberland, and became a medical student at Leyden in March 1778, graduating as M.D. in the same year. We may presume that he had had some previous medical education. He came to London, and was elected a Licentiate of the College of Physicians in 1784. We do not know by what influence he succeeded in obtaining the vacant post at Guy's in 1789; but in 1794 he showed that he was influenced by prevailing fashion at Guy's, by writing a treatise of his own on Peruvian bark, though he described it as "An Inquiry into the Medical Efficacy of a New Species of Peruvian Bark." He was largely assisted, however, in the chemical part of his work by "Mr. Babington, teacher of chemistry at Guy's Hospital, who very obligingly conducted all the experiments which were thought necessary." Of course Mr. Babington was the future physician to Guy's; and indeed without his help, and Relph's long historical quotations, the book would present but a sorry appearance. We gain one piece of information which may be new to many: "At Guy's Hospital I have had frequent opportunities of treating agues of every description, for though this disease does not very frequently originate in London, yet it is often brought into the metropolis." Many cases it is said annually came in harvest time from the fenny parts of Essex and the hop-gardens of Kent.

Dr. Relph died at his house in Mark Lane on March 24th, 1804. Thus ends the list of physicians to Guy's Hospital appointed during the eighteenth century.

CHAPTER IV.

THE EARLY SURGEONS TO GUY'S.

CROFT TO PIERCE.

WE know very little about the first four surgeons elected to Guy's. The profession of surgery was not then looked upon as in any way equal to that of a physician. This was, no doubt, partly owing to the association of surgeons and barbers in one of the City Companies. William Cheselden, at St. Thomas's, first elevated the profession of surgery and made it respected. The surgeons at last succeeded in obtaining a separation from the barbers, a separate Company of Surgeons being formed in 1745, John Ranby, sergeant-surgeon to George II., being the first Master of the new Company, and Messrs. Cheselden and Sandford being the first Wardens. (See "The Craft of Surgery," by South and D'Arcy Power.)

Neither Mr. Croft nor Mr. Cooper, the earliest appointed surgeons to Guy's, held office long. It appears from the records that Croft was required to reside within the walls of the Hospital. Croft resigned in 1727, and Cooper in 1732. Mr. Baker, appointed in 1727, retired in 1733. HASELL CRADOCK, the next surgeon, appointed in 1732, was cut off by death on December 11th, 1736.

In Read's *Weekly Journal, or British Gazetteer*, London, for Saturday, January 1st, 1737, appears the following epitaph on Mr. Hasell Cradock, more interest-

ing for its information than charming for its literary style :—

“ In this Tomb *Hasell Cradock* lies, }
 Surgeon Senior was of Guy's— }
 Hopes with the Just one Day to rise. }
 Agreed, he had a skilful Hand,
 Which all Times did Applause command.
 Add to this, *Great Humanity*,
 Not the least tinged with Vanity.
 Has oftentimes been heard to say,
 'Mong his Acquaintance, ' Friends, I pray,
 You'll send to me the Maim'd that's poor,—
 In Truth you can't oblige me more.'
 And thus continued he—for sure,
 No Pleasure can exceed such Cure.
 'Tis granted, that he had some Pride, }
 But 'twas, that Objects ne'er deny'd, }
 And Malice always quite defied.
 His Memory ever will be dear }
 To every one who knew him here ; }
 Even strangers will vouchsafe one Tear. }
 Of *Hasell Cradock* there's an End—
 Good *Christian, Surgeon, and Good Friend.*”

It is noteworthy that all through the last century the special permission of the Governors had to be obtained before any surgeon might “cut for the stone.” Thus, on July 19th, 1733, Mr. Cradock gained this permission in the following terms: “If a convenient place can be provided for cutting, and a ward proper for the cut patients, then Mr. Cradock be allowed to cut the next season; and Mr. Treasurer is desired to consider of such place and ward.”

SAMUEL SHARP was the first great surgeon appointed to Guy's. Born about 1700, his surgical education was gained as a pupil of Cheselden at St. Thomas's. He afterwards studied for a considerable period in Paris. Returning to England, he was elected surgeon to Guy's on Baker's retirement in 1733. In the same year was

published Cheselden's "Osteographia," and verses were addressed to the author praising him for his numerous successful operations, and concluding thus:—

" Long may you live, and bless the land
With your unerring skill and hand.
May this ne'er fail, that never warp ;
And may they both descend to Sharp."

This doggerel is, of course, only interesting to us as testifying to the writer's belief in the abilities of Sharp, who was evidently rising into note. It is worthy of remark that Joseph Warner, in his letter about Guy's lectures already given (p. 88), mentions that he became connected with Guy's in 1734. He was apprenticed to Sharp at the age of seventeen, and probably knew Cheselden. So that, from Cheselden to Warner, and then through Sir Astley Cooper, there are living Guy's (retired) physicians and surgeons, separated only by two links from Cheselden.

Warner was not long before he published his valuable "Treatise on the Operations of Surgery," which he dedicated to Cheselden. It was published in 1739, and a second edition was called for in the same year. It continued to sell, for a tenth edition appeared in 1782.

We do not know the precise date when Sharp began to lecture on anatomy and surgery to a society of navy surgeons * in Covent Garden, but it was in 1747 that he relinquished this work, which was taken up by William Hunter. Sharp's growing practice led to his giving up these lectures; and the same cause combined with ill-health induced him to resign his hospital appointment in 1757. Before this, however, he had published his "Critical Inquiry into the Present State of Surgery" (1750), displaying no less acumen than the former

* Cheselden early gave lectures at St. Thomas's. Dr. Frank Nicholls lectured on anatomy in 1728, Mr. Nourse in 1730.

work, and had contributed to the Royal Society "A New Method of opening the Cornea, in order to extract the Crystalline Humour," published in the "Philosophical Transactions" for 1753. The same volume contains another paper from his pen "On the Styptic Powers of the Agaric." In 1749 he had been elected member of the Paris Royal Society of Surgery, and was, of course, a Fellow of our own Royal Society.

Being seriously unwell from overwork, Sharp undertook a tour through Italy in the winter of 1765-6. Travelling was then so tiresome on the Continent as to swallow up, by its worries and discomforts, most of the pleasures of the journey. Sharp's visit produced not only a book of travel, but also a hot controversy. It reveals incidentally many facts in his life of which we should otherwise have no knowledge. It appears that he suffered constantly from asthma. We learn that, during his residence in Paris, he was acquainted with a poor starving French gentleman there, who knew no more of England than the fate of Charles I. and James II., and who, with tears in his eyes, was accustomed to thank *le bon Dieu* that he was not born a king of England. It appears that Sharp had known Voltaire in his youth (about 1726), presumably in Paris, and had met him again in Paris in 1749; and his principal reason for travelling by Geneva was to call upon Voltaire. He gives a very interesting picture of Voltaire in his hospitable home, and of Mdlle. Clairon, the actress, whose performances he had often seen in 1749.

At Venice Sharp is very particular in his description of the *Carliere Servente*, or *Cicisbeos*, and very severe on the practice. He notices with disgust many obscene and unpleasant customs in Italy. On his arrival at Rome, he writes: "Give what scope you please to your fancy, you will never imagine half the disagreeableness that Italian beds, Italian cooks, Italian post-horses,

Italian postilions, and Italian nastiness, offer to an Englishman in an autumnal journey, much more to an Englishwoman." In another place he says: "I have a notion few men accommodate themselves better than myself to the little inconveniences and difficulties which must occur;" but he would never again come to Naples because of the discomforts of the journey. "I think I shall love England the better for having quitted it," he remarks; "I am sure I shall always entertain a higher opinion of the people there for this excursion." He noticed in Florence, at the hospital, an iron-framed bedstead, made to exclude bugs, and he informs us that attempts to make similar bedsteads in England had failed. He tells us that, "in the hospitals at London, bugs are frequently a greater evil to the patient than the malady for which he seeks an hospital; and could I have interest enough with the Governors to bring about an imitation of this frame, I should be exceedingly rejoiced in the comfort it will afford to so many thousands of miserable wretches, that are tormented, sometimes even to death, by these nauseous vermin."*

Sharp's "Letters from Italy" appeared in August 1766, and, being generally approved by the reviews, a second edition was called for in 1767. Meanwhile Joseph Baretta (author of the well-known Italian-English Dictionary), the friend of Dr. Johnson, was exceedingly indignant at Sharp's animadversions on his country and countrymen, and set to work to write his "Account of the Manners and Customs of Italy," in two volumes, which were published in 1768. He professes not solely to attack Sharp; but his book is practically a running comment, in the bitterest style, on the "Letters from

* This seems to confirm a story, supposed to be exaggerated, which Sir William Gull was in the habit of relating, to the effect that when Mr. Harrison was appointed Treasurer of the Hospital £40 a year was paid to a "bug-catcher."

Italy." He successfully defends the Italians in some respects, and gives much information that an Italian alone could give. But the animus displayed by Baretti procured for him the severest censure of the *Critical Review*; while Sharp, in his answer, was fortunate enough to unearth a number of contributions by Baretti himself to the *Frusta Litteraria*, or *Literary Scourge*, which he published in 1763-5 in Venice, and which contained many similar censures to those of Sharp. The little pamphlet issued by Sharp, entitled "A View of the Customs, Manners, Drama, etc., of Italy, as they are described in the *Frusta Litteraria*, etc.," was but as oil to the controversy. Baretti, in a second edition of his book, defended himself vigorously; but, on the whole, the honours of the controversy rested with Sharp.

It is not a little creditable to Sharp that he attracted so much attention on the Continent. Even after his death his works continued to sell, and we find that the most appreciative notice of his powers and achievements is given by a notable Parisian professor and surgeon, L. J. Bégin (1793—1859). He writes thus: "Sharp is one of those surgeons whose works show in the highest degree the impress of an observing mind, hostile to all authority and routine. There are few diseases on which he did not put forward new ideas, few operations whose instruments or procedure he did not improve. His writings contain many things in few pages, and we find in them both an originality and an independence of thought which charm the reader and always secure his attention. Sharp established that the sarcocele formed by the swelling of the testicles is the only one that becomes cancerous, and in the end necessitates castration; he considered tumours of the epididymis as always vascular, and not liable to become scirrhus. This erroneous opinion was the object of severe criticism.

He was not more fortunate when he asserted that the operation for empyema ought never to be performed after wounds of the chest, to evacuate the blood poured into that cavity. According to him, if the thorax is opened while the hæmorrhage still continues, the latter increases; and, if time is given for the open vessels to cease their flow, it is then preferable to allow the absorbents to take it up. Like Cheselden, this surgeon preferred the ligature of the tonsils to their excision, and he published his views at the same time as Levret in France was maintaining the same view. *Pour pratiquer la pupille anormale*, he introduced a long, straight knife with a slightly concave cutting edge between the ciliary ligament and the iris; made it penetrate the anterior chamber of the eye, with the back of the knife turned towards the cornea; and when the point reached the side opposite to its entrance, he incised the membrane, and at the same time drew out his knife. We owe to Sharp the cylindrical form of the crown of the trephine now in general use. He demonstrated better than any one else the advantages of Cheselden's procedure in the lateral operation for stone. Finally, to conclude this enumeration, which it would be easy to lengthen, Sharp was one of the first to observe that the displaced intestine may be contained in the vaginal tunic of the testicle, and that this only takes place in congenital hernias." (Delorme and Déchambre's "Dict. Encyclopédique des Sciences Medicales," Series III., Vol. 9.)

Whatever defects of temper or discernment Sharp may have suffered from, his moral character is unimpeached. He made a large fortune by his profession, retired from practice many years before his death, and lived till March 24th, 1778.

JOHN BELCHIER, who was appointed surgeon to Guy's

in 1736, three years after Sharp, and who outstayed him at the Hospital for eleven years, having Warner for his junior for twenty-three years, appears to have been a man of some note. He was born at Kingston in Surrey in 1706, and educated at Eton College. His family, no doubt, occupied a good position, for in 1730 a Mr. Belchier was Bailiff (*i.e.*, Mayor and Magistrate) of Kingston, and rendered important aid when a chapel attached to the church fell down and buried a woman in its ruins. She was rescued safely. Belchier was apprenticed to Cheselden, then at the height of his fame at St. Thomas's. He was naturally a follower of Cheselden, like Sharp, and in 1736 he joined the staff of Guy's as surgeon. In 1732 he was elected a Fellow of the Royal Society, and contributed a few slight papers to its "Transactions." In one of them, however, he proved that madder given with food stains the bones a deep red. He was one of the council of the Royal Society from 1769 to 1772. His retirement from Guy's took place in 1768, but he was soon elected a governor of Guy's, and also of St. Thomas's.

The *Gentleman's Magazine* for January 1743 records the following incident as having happened on January 21st: "One Stephen Wright, who, as a patient, came to Mr. Belchier, a Surgeon, in Sun Court, being alone with him in his room, clapped a pistol to his breast, demanding his money. Mr. Belchier offered him two guineas, which he refused; but, accepting of six guineas and a gold watch, as he was putting them in his pocket Mr. Belchier took the opportunity to seize upon him, and after a scuffle secured him." William Wadd, in his "Nugæ Chirurgicæ," p. 184, gives another version of the robbery story, as related by Belchier himself to Mr. Cline. The miscreant was named Captain Wright, and called on him for a pretended complaint; and when Belchier told him there was nothing the matter with

him, the man replied that that was not all,—he wanted his money. Belchier, as was usual with him, had bolted the door of his room. When Belchier offered him money he lowered his pistol, whereupon the surgeon collared him and knocked him down upon some picture frames lying on the floor, and succeeded in holding him till his coachman got in at the window. Belchier survived his retirement from Guy's for seventeen years, dying on February 6th, 1785, at Sun Court, Threadneedle Street. He was a very stout and heavy man. Before he died he fell on the floor; when his manservant, not being able to raise him, offered to go for help, he said, "No, John—I am dying. Fetch me a pillow; I may as well die here as anywhere else." He was buried in the same vault as Guy in the Hospital chapel. It is related of him that, seeing the vanity of all earthly riches, he desired to be buried in the Hospital with iron nails in his coffin, which was to be filled with sawdust.

At the College of Surgeons there is a half-length portrait of John Belchier, painted by Ozias Humphry, R.A.

Respecting MR. PIERCE, elected surgeon to Guy's in 1745, who died or resigned in the same year, we know nothing.

CHAPTER V.

GUY'S SURGEONS IN THE LATTER HALF OF THE EIGHTEENTH CENTURY.

WARNER TO LUCAS, JUN.

JOSEPH WARNER, perhaps the most notable of Guy's surgeons in the period under consideration, was born in Antigua in 1717, on the family estate, which he inherited, together with a ring, said to be the genuine ring which was given by Queen Elizabeth to the Earl of Essex, and which the Countess of Nottingham failed to deliver to the Queen, thus determining the execution of Essex. But the history of this celebrated ring contains many discrepancies. It is said that the Countess of Nottingham revealed on her deathbed the fearful story, and returned the ring to Elizabeth. It then descended to her successor James, who gave it to Sir Thomas Warner, the Governor of the West Indian Islands, as a mark of the value the king placed upon his services. The ring is stated to have remained in the possession of the Warner family. In Knight's "History of England" it is described as a plain circle of gold, of a size to fit the thumb, with a heart formed of a rose diamond fixed upon it.

There is, however, another account of the ring. In the Tudor Exhibition of 1890 a ring was shown, said to be the identical one which Queen Elizabeth had given to the Earl of Essex. It was a gold sardonyx ring with

a cameo of Elizabeth, and was described as having been made for a very small finger and subsequently enlarged. It had descended from Essex's daughter in unbroken succession to the present owner, who exhibited it. The reader must be left to choose between these conflicting accounts.

Young Warner was sent to England early, and was educated at Westminster School. In 1734, at the age of seventeen, he was apprenticed to Samuel Sharp, then recently appointed surgeon to Guy's.

In 1745 many surgeons had volunteered to go with the Duke of Cumberland's expedition to suppress the rebellion in Scotland; among them were Warner, and Cowell, a Quaker. During their period of service, Cowell learnt privately that there was a vacancy for a surgeon at St. Thomas's, for which Cowell, his friend Dimsdale, also a Quaker, and Warner intended to compete. Without informing Warner of the vacancy, Cowell told him that very particular business took him to London, and he accordingly departed thither. Dimsdale, who had previously been an unsuccessful candidate, resigned his claims in favour of Cowell, and Cowell was elected. It is said that Warner never forgave this piece of deceit, and that when he met his colleagues at the Court of Assistants at Surgeons' Hall, he invariably accosted them thus: "How d'ye do, gentlemen? I am glad to see you, all, except Mr. Cowell" (Wadd, "Mems., Maxims, and Memoirs," 1827).

Warner was, however, speedily compensated by his election as surgeon to Guy's, in succession to Pierce, and he continued Sharp's lectures at the Hospital when the latter gave them up.

Warner, in 1754, published "Cases in Surgery, with Remarks; to which is added an account of the preparation and effects of the Agaric of Oak in Stopping of Bleedings, after some of the most capital operations."

It was dedicated to the President, Treasurer, and Governors of Guy's. In the dedication Warner says, what very many of the staff of Guy's have since maintained, "that a hospital is not only an instrument of relief to the distressed who are immediately helped there, but also a means of helping others, by furnishing such principles and practice as may improve the art of Surgery, and thus render the benefit more general." The book was acceptable, for a second edition was called for in the same year. The cases extend all over the domain of surgery, and are related with brevity, skill, and judgment. The author often puts most acute queries. Many of the cases had been previously published in the "Philosophical Transactions." Warner's "Description of the Human Eye, with its Diseases" (1773; second edition, 1775), is perhaps his most valuable publication. He was a good operator on the eye. He also wrote "An Account of the Testicles, their common coverings and coats, and the diseases to which they are liable" (1774; second edition, 1779). In 1764 he was elected a member of the Court of Assistants of the Corporation of Surgeons, and in 1771 became an examiner, which office he retained throughout life. One of his latest efforts was in strongly supporting the candidature of Mr. Norris against Astley Cooper for the surgeoncy of Guy's in 1800. He died in 1801. His account of the apprentices, students, and lectures at Guy's we have already given (p. 88). There is a half-length portrait of Joseph Warner at the College of Surgeons, painted by the celebrated Samuel Medley.

Respecting MR. WAY, who succeeded as surgeon on Sharp's resignation in 1757, we only know that he continued in office till 1773; and the same is the case with MR. FRANCK, who followed Belchier in the surgeoncy,

and retained office till 1783. He also was buried in the Hospital Chapel.

MR. WILLIAM LUCAS, sen., who was elected surgeon in 1773, continued as surgeon up to the eve of the nineteenth century, retiring in 1799. J. F. South (surgeon of St. Thomas's) heard him spoken of as a little man, but a very excellent surgeon and operator. Sir Astley Cooper says of him: "Mr. Lucas was a clever manipulator and a neat surgeon, but not an anatomist. He got £300 per annum by bleeding, visited a hundred families, but, he told me, never got more than £500 per annum." Evidently a conscientious man, without the arts which lead to great success.

MR. WILLIAM COOPER, Sir Astley's uncle, surgeon to Guy's from 1783 to 1800, was a much more notable figure, and had much influence on his nephew in contradictory ways at various periods of his life. During his visits to his brother, the Rev. Dr. Cooper, at Yarmouth, William Cooper, it appears, captivated his nephew by anecdotes of London life, and by his pictures of the attractiveness of the surgical profession. Mr. Bransby Cooper describes him as "lively, well-informed, and talented," and "well versed in professional knowledge." Astley Cooper became his articled pupil in 1784, but he resided with Mr. Cline.

Dr. Roots (see Life of Sir A. Cooper) thus speaks of him: "It was in the year 1799 that I dressed at Guy's Hospital for Sir Astley's uncle, Mr. William Cooper, the then much-respected senior surgeon of that institution; and I think it right to offer my warm and grateful feelings to the memory of that excellent man for the many instances of kindness and paternal attention I experienced at his hands. At that period Mr. William Cooper had in a great measure retired from the fag of private

practice, and his greatest gratification and amusement consisted in his daily visit to the hospital and the superintendence of his dressers, whose conduct and practice he most rigidly watched over and advised. Much advantage to the discipline of the hospital itself was derived from its being the hobby and pleasure of this experienced man to be so continually within its walls; for, although Mr. Cooper was never esteemed as a first-rate operator, there were very few surgeons of that day who were thought to possess a more critical knowledge of their profession. . . . Mr. Cooper was always very strict as to professional discipline, and invariably exhibited severe displeasure at any absence or neglect of duty on the part of the pupils; but yet, notwithstanding his rough and rather abrupt demeanour, he possessed a kind and generous disposition. He was an excellent classical scholar. Well can I remember the pleasure he evinced one day, when, upon some accidental circumstance, it was my good fortune to make an appropriate classical quotation, and the gratification I experienced when, the next morning, on meeting me in the ward of the hospital, in the presence of all the students, he presented me with a handsome edition of the author I had used. . . . He never failed to speak highly of the abilities and good qualities of his nephew."

In Sir A. Cooper's Life a story is told illustrative of Mr. W. Cooper's kind feeling: "My uncle was a man of great feeling—too much so to be a surgeon. He was going to amputate a man's leg in the theatre of the hospital, when the poor fellow, terrified at the array of instruments and appliances, suddenly jumped off the table and bolted off; seeing which, the operator, instead of following the man, and attempting to persuade him to submit to the evil which circumstances rendered necessary, turned round and said, apparently much relieved by his departure, 'By God! I'm glad he's gone.'"

Dr. Farre, who was his dresser, said he was never offended except when the name of John Hunter was mentioned, whom he despised and called a stupid fellow. He professed that he could never understand Hunter, and always went to sleep at his lectures.

As Astley Cooper's fame grew, William Cooper seems to have become somewhat jealous of him, especially as their opinions were so markedly contrasted; and it is scarcely doubtful that he strongly opposed his nephew's election as surgeon to Guy's in 1800.

THOMPSON FORSTER was appointed surgeon to Guy's in 1790, and resigned in 1824. He practised in Southampton Street, Bloomsbury. South says he had been in the army and was a very gentlemanly old man, with the upright gait and carriage and spotless neatness of an old soldier, but rather precise and prim in manner. Sir Astley Cooper said of him: "Mr. Forster was a gentleman-like man in his appearance, but not so in reality, for at dinner he would swear at waiters and abuse them. He was only a quarter of an anatomist, but neat and dexterous. The first operation I did after I was appointed surgeon at Guy's was to assist him in an operation for stone, in which he had got into a difficulty." It is said that after Cooper's appointment Lucas and Forster rarely operated except he was present. He must, however, have been a very sensible and good surgeon, if we judge by his description of a case of lithotomy in the first volume of the "Transactions of the Medico-Chirurgical Society," 1806.

MR. LUCAS, JUN., succeeded his father in 1799, and resigned in 1824. Sir A. Cooper says: "He had ill-health and could not study anatomy. He was neat-handed, but rash in the extreme, cutting amongst most important parts as if they were only skin, and making us

all shudder from the apprehension of his opening arteries or committing some other error." South speaking of him says: "He was commonly known as Billy. His father had been surgeon at Guy's before him, and had been spoken of as a very excellent surgeon and operator; but the present son was in every respect a very different man. He was tall, ungainly, and awkward; with stooping shoulders, shuffling walk, and as deaf as a post; not overwhelmed with brains of any kind, but very good-natured and easy, and liked by every one. His surgical acquirements were very small, and his operations very badly performed and accompanied with much bungling, if not worse. He was a poor anatomist and not a very good diagnoser, which now and then led him into rather ugly scrapes. There was a story current that Billy, having to amputate the leg, performed the circular operation and made the covering for the bone at the wrong end, the stump being left uncovered and projecting."

BOOK III.

GUY'S HOSPITAL IN THE NINETEENTH CENTURY.

THE nineteenth century has been far more eventful and important in the history of Guy's than the eighteenth. A Treasurer of great administrative powers improved both the finances and the internal condition of the Hospital, until both were as well conducted as in any hospital then existing. In conjunction with a great surgeon, the same Treasurer founded the independent Medical School of Guy's, and raised it to a high pitch of excellence and success. Although the original foundation of the Hospital remains the peculiar glory of the eighteenth century, the nineteenth produced almost a coequal of the founder in the extent of his benefaction, and later a special fund, to meet decreased income from land, of over £100,000. The Medical School itself has become world-famed, and has received pupils from all English-speaking lands and not a few foreigners. The names of Addison, Bright, Golding Bird, Owen Rees, Gull, Moxon, Fagge, on the medical side; of Astley Cooper, Aston Key, Poland, Hilton, on the surgical—not to mention the living—have been written imperishably in medical history; and their careful clinical teaching, no less than their notable discoveries, have made Guy's students a special type, only too proud of their school.

CHAPTER I.

GUY'S HOSPITAL PROPERTY.

FOLLOWING the plan adopted for the eighteenth century, we may note that the estates belonging to Guy's Hospital in Essex remain much the same as in the last century. From the Hereford estates sales were made and completed in 1810 to an agent of the Hospital and to other persons, for which about £8,000 was paid to the Governors. It was afterwards found that these sales had been made under circumstances of concealment or misrepresentation, and the case was so plain that on reference to arbitration a further sum of £3,100 was awarded to the Hospital and recovered from the representatives of the agent, who had in the meantime died. The tithes of the parish of Burghill were sold in 1811 and 1827 for a total sum of £5,432.

In order to purchase warehouse and other property in Southwark close to the Hospital, the acquisition of which was considered important to the interests of the charity, three farms in Abbeydore, Herefordshire, were sold in 1860 for £12,000; other sales and enfranchisements of copyholds brought up the sum realised to £21,632, while new purchases were made in the same county, amounting to £3,476, leaving a balance of £18,156. At the same time a new valuation resulted in an addition of £2,855 to the gross rental value of the Herefordshire estates. The Governors made extensive

improvements in drainage, farm-buildings, etc., involving a large outlay.

As regards the Lincolnshire property, about 1827 an Act of Parliament was passed for improving the outfall of the river Nene, and at the same time the relative rights of the crown and Guy's Hospital to the foreshore and reclaimed land were defined. £1,000 was paid to the Hospital in 1828 for land taken in order to make a new cut for the outfall, extending for four miles and three-quarters through the Hospital estate, and requiring more than 250 acres of land. Since 1861, 632 acres of land have been added to the Hospital property at the Nene outfall, but the Governors had to construct a seawall over two miles in length to protect their property, as well as a new sluice draining a large quantity of land. The total outlay was £11,050. The increased value of the land by these works was estimated at £50 per acre; but, subsequently, irruptions of the sea and the damage so caused have gone far to increase the cost of this low-lying land, which is almost entirely below high-water mark. A large expenditure has been undertaken since 1859 in making and maintaining good roads through the Hospital property in Sutton and Lutton.

It was not till 1862 that by aid of the Governors the Norwich and Spalding Railway was connected with Sutton Bridge by a branch from Spalding; and since then lines have been constructed from Sutton Bridge to both Peterborough and Lynn, and the sale of farm produce has thus been greatly facilitated. Sales of land were made to the railway companies amounting to £8,840.

The Governors built a church in 1843 at Sutton Bridge, and endowed it with £40 a year, afterwards increased to £150; and by the aid of the Ecclesiastical Commissioners and other interested bodies the endowment was further increased to £225 per annum, exclusive of

pew rents and fees. A parsonage and glebe were provided by the crown through the Commissioners of Woods and Forests. Schools for boys and girls and a master's house had been built by the Governors at Sutton Bridge, a short time before the church was begun. In 1859 it was found advisable to place the school property in the hands of independent trustees, the Governors continuing to subscribe £30 per annum to the schools.

It may be worth while noting in this connection that the ancient estuary of the Nene, the enclosure of which has been referred to, was the scene of the disaster which befell King John, in 1216, on his way from King's Lynn into Lincolnshire. A farmhouse on the Hospital property north of Sutton Bridge, called King John's House, is reputed to stand on the site of a former building where the king stopped to rest after having crossed the river. (See Mr. Thomas Turner's valuable report on "Guy's Hospital and its Property," from 1856 to 1868.)

The purchases of land and houses in the neighbourhood of the Hospital have continued in the present century, and have been effected at great cost; but the benefit to the Hospital has been very great in securing additions to its grounds, and in obtaining the demolition of obnoxious buildings and the cessation of unwholesome trades, while warehouses of great rental value have been built on portions of the sites purchased. The Maze Pond Estate was bought in 1806 for £10,700. The Weston Street Estate, bought in 1831, cost more than £20,000. Land adjacent to the Lunatic House was purchased in 1833 for £2,500. Many other smaller purchases have been made in the neighbourhood. In 1816 £800 was paid to St. Thomas's Hospital for pulling down a row of mean houses fronting Guy's, and entering into a covenant not to erect any building there more than twelve feet high. One portion of land on which several houses

stood was bought for the purpose not merely of pulling the houses down and so giving the eastern wing light and air, but also because it not unfrequently happened that spirituous liquors were illicitly introduced into the Hospital by strings let down from the windows of these houses.

Certain spaces east of the Hospital, formerly used by fellmongers and tanners, and as the burial ground of St. Thomas's Hospital, were acquired by Guy's, on condition that St. Thomas's might bury their dead in the burial ground in Snows Fields. It was these spaces which were afterwards converted into the botanic garden alluded to later. The present site of the pathological museum, dissecting room, etc., was formerly used as the burial ground for Guy's.

A large outlay was made in 1861 in the purchase of Mrs. Holcombe's property in and near Maze Pond, occupying a frontage opposite the Hospital of more than three hundred feet, separated by a street then only twenty feet wide. £27,000 was expended in this purchase, which has been very advantageous in enabling the Governors to ensure non-interference with the light and ventilation of the wards. The streets have been widened, new warehouses have replaced old and ill-built ones, and part of the site is now occupied by the Guy's residential college. The total expenditure in purchase and building has been nearly £50,000, but the net income returned is about $6\frac{1}{2}$ per cent. The Governors also built in 1863 two large houses on a plot of land adjacent to the north-west wing previously occupied by the beadle's house. These were let to members of the Hospital staff. Altogether between 1856 and 1868 the net rental of the Southwark property was increased from £1,900 to more than £6,000.

On February 8th, 1828, William Hunt, a merchant and citizen of London, and a friend of the Treasurer,

Mr. Harrison, added a codicil to his will, by which, after providing for certain bequests and annuities, he left the residue of his property to "the Treasurer and Governors of Guy's Hospital, for the benefit and purposes of that Institution," on condition that "within three years after his decease they should enlarge, extend, finish, and fit up such other buildings adjoining the said Hospital; and also finish and provide the same with beds and all other conveniences necessary to receive and entertain therein at least one hundred more persons than were provided for by the said Thomas Guy." Mr. Hunt lived at Petersham, in Surrey, and was for many years an influential governor of Guy's Hospital. He died on September 23rd, 1829, and was buried in the vault beneath the Chapel alongside of Thomas Guy. His estates realised about £200,000, of which £180,000 came to the funds of the Hospital. In compliance with the conditions of the bequest, some temporary buildings on land adjoining the Lunatic House were speedily prepared at a cost of £3,500; and on December 23rd, 1830, the first patients were received into them. These buildings were removed when the present Hunt's House was erected. In the Treasurer's office there are portraits of William Hunt, his father, and his brother. William is represented as a thin, bony man with angular features and severe expression. The hair at the back of his head is tied with a bow into a short queue, and he wears a high stock.

The circumstances which led the Governors of the Hospital to make an appeal for a special fund of £100,000, and the liberal response with which it was met, are too well known to need a detailed account. Suffice it that the rapid decrease in rent due to agricultural depression was intensified by a breach in the sea-wall of the Lincolnshire property, the repair of which cost £8,500.

CHAPTER II.

THE OFFICE OF TREASURER AND MR. HARRISON.

THE Treasurer, being provided with a good house, stabling, coals, etc., and usually residing in the Hospital, naturally became the most important figure there. He held the purse-strings—subject, of course, to the approval of the Governors—and all important matters requiring instant decision were referred to him. We do not learn, however, that any Treasurer of Guy's ever so completely realised and exercised his power as Benjamin Harrison, the younger, who succeeded his father as Treasurer in 1797. Benjamin Harrison, the elder (1734-97), the second son of Sir Thomas Harrison, chamberlain of the City of London, who received knighthood in 1752, was Treasurer of Guy's from 1785 to 1797.

Benjamin Harrison, the younger, was born at West Ham on July 29th, 1771, and had lived twelve years at Guy's with his father, when the latter died. Young Harrison, though only twenty-six, must have already given proofs of unusual energy, seeing that he was elected Treasurer at so early an age. He found many things needing reform. Cleaning had been neglected, lavatories were in a wretched state, the nurses were of a very inferior type. He set to work with vigour, and soon every department of the Hospital felt the impress of his firm hand. The Governors were not slow to

appreciate his valuable services, and as early as 1808 the report of a sub-committee, read by Mr. Paice, one of the auditors, speaks most highly of Mr. Harrison's administration, expressing their warm appreciation of his services and their wish to obtain a portrait of him for the Hospital. The report went on to say that the prosperity of Guy's was never so great before, and that this was mainly due to Mr. Harrison's uniform attention and impartiality. He had struggled through many difficulties to purchase land adjoining the Hospital. By judicious contrivance and unostentatious frugality, he had provided useful accommodation for the medical and surgical staff, and also for the comfort of the patients. He had also advanced for many years £7,000 to £10,000 to the Hospital funds, while there existed impediments to the sale of land. It was resolved "that a sub-committee be appointed to obtain a portrait of Mr. Harrison"; the same is now let in the panelling of the Governors' Court Room.

But it is as the founder of the separate Medical School of Guy's that Harrison deserves chiefly to be remembered. However powerfully Sir Astley Cooper aided in this work, nothing could have been done, nothing was done, without Harrison's active initiative, participation, or consent. To have accomplished this so perfectly and so speedily proves him to have been a most able administrator, but he could not have performed so great a task unless he had had complete authority put into his hands. His was a kind of paternal government; he filled the various offices with persons whom he could trust, and took a lively interest in the welfare of each. Those who were not in his favour styled the government despotic and arbitrary, and he soon obtained the epithet of "King" Harrison. The position he took may be seen in Cruikshank's caricatures, which adorn the walls of one of the rooms of the Medico-Chirurgical Society,

where he is seen sitting on his throne and his subjects prostrating themselves in the most abject attitudes before him. He was supreme in everything, appointing not only the medical staff, but also the nurses and porters, and he supervised the purchase of all materials used in the Hospital. His despotic sway continued until his retirement, and his power was absolute.

As showing the position which Mr. Harrison took, we quote from a letter in the *Lancet*, which begins:—"Now pray, good Mr. Editor, step with me for a little into the Boro', that we may see how the campaign went on in that quarter. The Boro' King won more victories in a few short months than other potentates whom we know or have read of. He rode triumphant at every post, carrying all before him. With one hand he smote Grainger, with the other he demolished St. Thomas's. By Jove, 'twas grandly done!" Another letter tells him he ought to withdraw from the governorship of St. Thomas's, for the interest of the institution was antagonistic to that of Guy's, and concluded by saying, "For more than a quarter of a century you have had the sole direction of Guy's Hospital; you have been often known to declare that the success of Guy's School is as dear to you as the apple of your eye," etc., etc.

All the important facts respecting the foundation of the Hospital and the position of Mr. Harrison as Treasurer may be found in the Report of the Charity Commissioners who sat in 1837. That Report says that the existence of the schools, independently of the profit which the medical officers receive from them, is highly beneficial to the charity, by making the officers of the establishment feel that under the scrutiny of competent judges among the pupils their reputation is constantly at stake. With regard to the clinical pupils also, it is remarked that, besides the good resulting to medical science, it is obvious that the

objects of the charity are greatly promoted by the constant presence of young men whose medical attainments render them more capable of judging of the progress of disorders than ordinary nurses. And speaking of the entire control which Mr. Harrison had over the Hospital and School, the Report states that "he names the lecturers and exercises a sovereign and irresponsible authority in the distribution of the funds arising from the pupils' fees. So large a concession appears to us unjustifiable; not only is the great School of medicine thus wholly delivered up to Mr. Harrison's discretion, but the physicians and surgeons of the Hospital being practically elected from the lecturers in the School, their nomination is virtually surrendered to him." In justice to the Treasurer the Report adds "that his talents and energies have, for above forty years, been devoted to the service of the Hospital, and that the entire course of his administration has been marked by zeal the most active and efficient, as well as by the most scrupulous and disinterested integrity. Not only have his services been gratuitous, but his connection with the Hospital (in the absence of a fund for the assistance of patients on their discharge) has proved to him a constant source of expense, numberless destitute persons having been relieved by his private benevolence. We are far from being prepared to show that the interests of the charity have as yet suffered under the above extraordinary delegation of authority to this gentleman; but a successor equally qualified and willing to make similar sacrifices with him is not likely to be found when it may become necessary."

Harrison resisted and resented this inquiry most strenuously, and was with great difficulty induced to give evidence. It was supposed by the public that abuses would be discovered, but none were made out. Harrison was very masterful. The students had little

contact with him, and when they did it was not always pleasant.

Harrison's sister married a Mr. Cripps, of Cirencester, and whilst visiting there Harrison became acquainted with Dr. Jenner; whence it came about that Jenner read one of his earliest papers on vaccination before the Physical Society of Guy's. Afterwards he adjourned to St. Thomas's to vaccinate one of Mr. Cline's patients, the operation being performed on the leg. Harrison became a strong advocate of vaccination.

Besides his hospital work, Harrison had sufficient occupation of a public kind. He was for many years chairman of the Exchequer Loan Board, and during his term of office sanctioned loans to the amount of £14,000,000 for local purposes, etc. He was also Deputy Governor of the Hudson's Bay Company and of the South Sea Company; and was selected as one of the three Appeal Commissioners for the City of London on the first imposition of the income tax. In addition to all this, he had a bottle manufactory at Newcastle-on-Tyne. He was both F.R.S. and F.S.A. Mention has already been made of his collection of Bibles and other works printed and published by Thomas Guy, and of their present location in Archbishop Howley's library at Canterbury. It seems strange that he did not leave this collection to Guy's Hospital; but probably he thought the Bibles would be of value and interest to his son, afterwards Archdeacon of Maidstone and one of the Old Testament revisers. He retired from the treasurership in 1848, after more than fifty years' service, and died at Clapham on May 18th, 1856, in his eighty-fifth year. During his later years of office he acted very much under the influence of Dr. (afterwards Sir William) Gull. He made offices for Gull without consulting anybody.

Harrison's bearing, with high-arched brows and forehead, indicated great firmness of character; yet it must

be remembered that, though he ruled despotically for fifty years, he was throughout supported by the Governors acting on the terms of Guy's will. The members of the medical staff were placed on the same footing as all other servants of the Hospital, and could be arbitrarily dismissed at any time. The books of the Hospital show how supreme the Treasurer was, and against his ruling there was no appeal. If there was any insubordination, he would bring the culprit before the Governors and sentence him. There having been some question about hospital fees, the decision was that the Treasurer divided the moneys at his own discretion. Another entry says the committee did not recognise any "rights" of Dr. Cholmeley to lecture. Another that Dr. Back was called before the committee and censured; and also that pupils were only admitted by permission of the Court.

It was this absolute power vested in the hands of the Governors which made the nursing dispute that took place some years ago so little understood by the profession or the public. According to precedent, a new nursing scheme was introduced without any knowledge of the medical staff, and all the old arrangements were arbitrarily altered by the new matron without their being consulted in any way whatever. The staff (who knew not Harrison) naturally resented such an arbitrary display of power in a matter which they considered they had a knowledge of, and about which they ought to be consulted. The Governors stuck to their rights, and requested the heads of the rebellion to resign their appointments; and finally issued their last united manifesto, that they would rule the Hospital according to law, which concluded thus: "The Governors, however, must at the same time record their resolution to maintain in its integrity the power to govern the Hospital intrusted to them by law, and this resolution must be accepted by the medical staff." After this declaration of rights,

common sense and better judgment prevailed, and the medical staff were asked to join the Governors in a committee of management. The matter was then settled.

Soon after Mr. Harrison's retirement, Mr. Dobree was appointed in his stead. During his period of office, the left wing and centre of the new building were erected. This was built out of the money bequeathed by Mr. Hunt, and it has therefore been called Hunt's House. In 1854 Mr. Dobree retired from the treasurership, and was appointed President. Mr. Thomas Turner was elected in his place, and during his period of office the right wing of Hunt's building was completed. In 1876 Mr. Turner resigned, and Mr. E. H. Lushington succeeded. His father, Dr. Lushington, had long been a good friend to Guy's. He had been appointed Governor in 1819, and continued in office until his death, in 1872.

Mr. Hunt of Petersham might be called the second founder of Guy's. He had long been a Governor and much in the confidence of Mr. Harrison. He died in 1828, having bequeathed his residuary estate, amounting to no less than £180,000, to the Hospital, on condition that accommodation should be provided for an additional hundred patients.

This will be a good opportunity to give a list of the Presidents and Treasurers of Guy's from its foundation until the present time:—

PRESIDENTS.

Sir Gregory Page, Bart.	.	.	appointed	1725.
Sir William Clayton	.	.	„	1730.
Moses Raper	.	.	„	1745.
Sir Edward Hulse, Bart.	.	.	„	1748.
Lewis Way	.	.	„	1759.
Robert Marsh	.	.	„	1771.
Thomas Lucas	.	.	„	1775.
Sir Lionel Lyde, Bart.	.	.	„	1784.
Benjamin Way	.	.	„	1791.

Samuel Thornton	appointed	1808.
Mr. Justice Pattison	„	1837.
Charles Barclay	„	1848.
Bonamy Dobree	„	1856.
Sir Lawrence Peel	„	1863.
John Gurney Hoare	„	1867.
Lord Lawrence	„	1875.
Lord Cardwell	„	1877.
H. Hucks Gibbs	„	1880.

TREASURERS.

Charles Joy	appointed	1725.
John Hollister	„	1738.
Dr. Benjamin Avery	„	1742.
Thomas Lucas	„	1764.
George Brough	„	1774.
Benjamin Harrison, senior	„	1785.
Benjamin Harrison, junior	„	1797.
Bonamy Dobree	„	1848.
Major Grove	„	1855.
Thomas Turner	„	1856.
E. H. Lushington	„	1876.

The names of medical men who have been Governors of Guy's are:—Appointed in Guy's will: Drs. Crow, Hulse, Fauquier, and Mead; Dr. Benjamin Avery, elected 1729 (afterwards Treasurer); Dr. Matthew Clarke, 1754; Dr. William Saunders, 1804; Dr. William Babington, 1819; Dr. Franck, 1834; Sir William Gull, Bart., 1887.

CHAPTER III.

DEVELOPMENT OF MEDICAL EDUCATION.

EARLY in the century movements for medical reform arose in the body of the profession itself. At this time there existed a General Practitioners' Society, which was mainly instrumental in the passing of the Apothecaries' Act in 1815. They also brought about still further reforms in 1820, and up to 1833 were unremitting in their endeavours to improve the status of the apothecaries and the medical supervision of the poor. Contentions were then constantly going on between the Apothecaries' Hall and the Scotch colleges as to their respective powers and the rights of the northern graduates to practise in London. Before 1815 there was no check on any one practising, and the Apothecaries' Company therefore conferred a great benefit on the public by not permitting any but an educated man to take their licence. In their address issued in 1830 the Society spoke of the great improvements they had made, as far as circumstances would permit; as they insisted that a knowledge of the natural sciences and of Latin was indispensable, while Greek should be known if possible. The apprenticeship, which had been for seven years, was reduced to five in 1831, two years being spent at a hospital instead.

The different colleges and corporations were, at the beginning of the century, continually urged on to

improve the status of the profession, and about the time of the foundation of Guy's School there was a considerable movement in this direction. Thus in 1825 an obstetric society was founded, not so much to make a study of the subject of obstetrics, as to impress both on the colleges and on the public the importance of this department of medicine. The association wished to act in unison with the three corporate institutions for the more effectual teaching of obstetrics and the examination of students in this subject. These bodies did not sympathise, but gave unsatisfactory answers to the petitioners. In 1827 an appeal was made to the Government "to oblige all persons who present themselves for examination before the three corporate bodies, to procure such information on the subject of midwifery as should give them competency to practise it, and to induce the examiners not to neglect the inquiry into such competency of those who present themselves before them as candidates for admission into their respective bodies." The memorial was received, and the colleges were communicated with. The Apothecaries' Hall accepted its provisions. The College of Physicians said they already examined in diseases of women and children, and that delivery was a surgical operation. The Surgeons said they could not admit practitioners of midwifery into their council, but would require certificates of midwifery for their diploma. Further pressure being put on the College of Physicians, it determined, in the year 1830, that if any one applying for a licence were about to practise midwifery, a special examiner should be appointed. The general object of this obstetric society having been attained, after another year or two the society became extinct. The present Obstetrical Society was founded in 1860.

The foundation of the University of London, and the establishment of University and King's Colleges, did

much to promote medical education. It had been for a long time apparent that a new University, founded on a broad basis, was required for the Metropolis, and especially as regarded the profession of medicine. None of her Majesty's subjects could obtain an English degree without conforming to certain religious tests; and of all the physicians and surgeons in London, only about one hundred were connected with Oxford and Cambridge, whilst the three hundred licentiates of the College of Physicians had obtained their degrees elsewhere. The scheme was supported by the most eminent Liberals of the day, as Brougham, Birkbeck, Grote, Hume, Z. Macaulay, James Mill, Tooke, and others. It was thought that the education of medical students would be systematised, instead of teachers being scattered all over London, and that their status would be raised by larger emoluments. It was not long, however, before a feeling of jealousy against the radical element governing University College arose, and the clergy set about forming a college on Church of England principles. The idea was soon carried into effect, and King's College was established in the east wing of Somerset House. The University College in Gower Street had from the commencement endeavoured to obtain a charter enabling it to give degrees. Failing this, it nevertheless determined in the year 1830 to institute a special examination and a more severe curriculum for those who wished to take a special diploma, designating them masters of medicine and surgery. In consequence of this proposal, meetings were held by representatives of the different medical schools protesting against the London University having a monopoly of giving diplomas. Petitions were sent in to the Privy Council signed by all the teachers of the Metropolis. The latter said they had as much right to give diplomas as "Brougham College"; that the latter had no reason to

call itself a University: it was a misnomer, and they were attempting to issue a sham diploma. The medical staff, headed by Dr. Conolly, defended themselves, urging their right to give certificates to the best men. It was suggested at that time that the College of Physicians might ask for a charter and have the power of conferring degrees.

In consequence of these rivalries, the Government undertook to found a real University of London, to which all the medical schools, including University and King's Colleges, should be affiliated. An annual grant was allowed by Parliament, a chancellor and a senate appointed, and rooms in Somerset House lent for the purposes of examination. The charter was granted on November 28th, 1836, and the objects of the University were stated to be "the advancement of religion and morality and the promotion of useful knowledge," and "to hold forth to all classes and denominations, without any distinction whatsoever, an encouragement for pursuing a regular and liberal course of education"; and the senate were appointed "for the purpose of ascertaining by means of examination the persons who have acquired proficiency in literature, science, and art, by the pursuit of such course of education, and of rewarding them by academical degrees as evidence of their respective attainments and marks of honour proportioned thereunto." This charter was somewhat modified in the following year.

In order to fully understand the state of medical education at the early part of the century, it should be remembered that at the time of the formation of the School at Guy's a large number of smaller schools, quite unconnected with hospitals, existed in all parts of London. Amongst the best known were those at Windmill Street, to which Sir Charles Bell was attached; Marlborough Street, the property of Mr. Brookes;

Aldersgate Street ; Charlotte Street ; Grosvenor Place ; and there were several others. The physicians and surgeons of the hospitals also gave private courses of lectures at their own homes—as, for example, Dr. Blundell. In the Borough there were lectures given in Crosby Row on *materia medica* and chemistry ; on all subjects in Dean Street ; and Dr. Whiting gave lectures at the Surrey Dispensary.

The most famous of all the schools at that time was in Webb Street, Snows Fields. Students were obliged to show certificates of having attended certain courses of lectures, etc., and they could make their own choice of a lecturer, generally considering their own convenience. The means and apparatus of teaching in these private schools were generally slender, the lecturer being content with pickles, dried plants, and drawings. The competition was very keen, and generally a free admission to a neighbouring hospital was given if the student took many courses.

The Webb Street School was for a long time intimately associated with the Borough hospitals. The origin of the school is thus stated by South : “In 1818 Edward Grainger became a pupil at the Borough hospitals ; he came from Birmingham, where his father was a surgeon. He did not, however, pay the large fee to any of the surgeons which generally entitled the student to some future appointment. When, therefore, he wished to join Key as demonstrator of anatomy, he was refused the appointment by Sir A. Cooper as having no right to it. Being highly distinguished as an anatomist, he started for himself by taking a room at a tailor’s shop in St. Saviour’s Churchyard ; this he converted into a dissecting room, and began to teach anatomy.” The attempt proved successful ; he soon obtained thirty pupils, and then opened a more pretentious school in

Webb Street in a building which had once been a chapel, and which, we believe, again reverted to the same use when it ceased to be a medical school. Grainger's early success was due to his obtaining a large amount of subjects by bribing or paying well the resurrection men. In 1820 he built a theatre and got others to join him—notably Dr. Armstrong, who lectured on medicine, Dr. Richard Phillips on chemistry, Dr. Davis on midwifery, and some other well-known men. Grainger became one of the most renowned teachers of the day, but it was not for long. His health gave way, and he died of consumption, at the early age of twenty-seven, in 1824. At the College of Surgeons there is a bust of him by Peter Hollins, F.S.A. Edward was succeeded by his brother, Richard Grainger, who carried on the school with great success until it was closed in 1842.

The fame of Webb Street was also created in part by Dr. Armstrong, who was one of the best lecturers on medicine of the day. He was already known in London by his book on the treatment of fever by bleeding, and, therefore, when he was asked to come from Newcastle his celebrity preceded him. The *Lancet*, in speaking of Webb Street School in 1830, says: "It was founded ten years ago by the late Edward Grainger, a man of splendid intellect, imagination, and industry. He raised his school to an eminence never before attained by any person unaided by an extensive hospital or by patronage. Associated with him was the late Dr. Armstrong, one of the greatest physicians of the time." Dr. Armstrong was born in Durham in 1784 and began practice in Sunderland, and afterwards came to London. It is said that he was rejected at the Royal College of Physicians. He practised in Russell Square, and died of phthisis, in December 1829, at the age of forty-six. He usually had a class of two hundred students, which he drew

from all parts of London, and we have heard Dr. Addison declare that he was indebted for his large materia medica class to Armstrong, who brought so many students to the Borough. His life was written by his colleague, Dr. Boot, who says of him: "The effect which his lectures produced was electric. The energy of his manner, the fine intonation of his voice, the facility and correctness of his diction, the strain of impassioned eloquence which often burst from him, would make even those who could not entirely adopt or appreciate his opinions sensible that he was uttering the deep convictions of his mind; and there was so much of chaste and often of pathetic feeling, so much of the refined sensibilities of his nature blended with his discourse, that those who were compelled to admire his talents felt full confidence in his virtues, and whilst they revered the professor they loved the man."

In 1842 overtures were made to Mr. Grainger to join St. Thomas's. This he did, and Webb Street was closed—being for a short time used as a Roman Catholic chapel, and afterwards pulled down to make room for the exigencies of the railway. Students were transferred to St. Thomas's, and Grainger held the Professorship of Anatomy until 1860, when he retired. Hodgkin had joined St. Thomas's for a time; Martin Barry lectured also, and F. J. Wilks, nephew of Dr. Blundell, on materia medica. Grainger died February 1st, 1865, aged sixty-four.

Few of the private schools survived much longer, for it was becoming evident that the pursuit of favourite lecturers by students all over London led to desultory habits, and also that many of the physicians and surgeons of the hospitals who took upon themselves to have private classes had not the gift of teaching. At this time the University of London was being established, and new methods of study were in vogue. One

of the objects put forth by it was to encourage more uniform teaching and make an end of private courses. A friend of the University (University College), speaking of too many lectures and lecturers, said: "Until lately the mania for lecturing became epidemic, and every one who could get himself recognised forthwith set up as a professor. If he could collect half-a-dozen hearers, between pupils and courteous friends impressed into the service, he thought himself a very fortunate man, but if his numbers fell short he went on notwithstanding. The use of his own parlour cost him nothing, and some notoriety, at all events, if but little profit, was gained by his advertisements in the daily and weekly newspapers. There were no appliances for teaching, and much less was there a hospital."

CHAPTER IV.

THE ANATOMY ACT.

AMONGST the great reforms about the period of the foundation of Guy's School was the passing of the Anatomy Act. At all times the necessity for dissection was clearly seen by surgeons and the more enlightened members of the community, whilst the opposition to it was equally strong amongst the poor and the unenlightened. We find that centuries ago violent contentions went on about the practice of dissection, and anatomists were held up to the execration of the people. A strong hand was required to oppose the public fanaticism. It was due to the insight of Pope Benedict XIV. that Bologna became so celebrated a medical school in the middle of the eighteenth century. Being himself devoted to science, he issued a decree commanding that all patients dying in the Bologna hospitals should be dissected. Great opposition was at first raised against it, but after quiet was restored large classes were formed in the city for teaching anatomy. At the same time, in his wisdom, Pope Benedict decreed that dissection was not to be made one of the penalties attaching to capital punishment. To endeavour to overcome the prejudices against dissection, we read occasionally of persons leaving their bodies to the anatomist, and amongst others one who was celebrated in his day, Dr. Monsey, physician to the Chelsea Hospital. He directed in his will, dated

December 1788, that his body should not be "insulted with any funeral ceremony," but should undergo dissection. In obedience to this, Mr. Forster, surgeon, of Broad Street, City, dissected the body, and delivered a lecture on it to the medical students in the theatre of Guy's Hospital.

In modern times, one of the most celebrated cases of the kind was that of Jeremy Bentham. In the will which he made in 1769, he bequeathed his body for dissection, but he did not die until 1832, when he was eighty-two years of age. Two months before his death he revised the terms of the bequest, thinking that some difficulty might be raised in opposition to his wish. So after leaving his body to his friend Dr. Fordyce, he called to his bedside three friends, and asked them whether their affection for him would enable them to brave any obloquy which might fall on them in carrying his will into effect. After his death his body was taken to Webb Street School of Anatomy, and a lecture delivered over his remains by Dr. Southwood Smith. His skeleton is now in University College, London.

At the time when the present Act was passed, nothing could be more disgraceful than the mode by which bodies were obtained for dissection. Their supply to the medical schools was a regular trade, in which the very lowest of the community were employed, and at whose evil doings the teachers of anatomy connived. They could not help themselves; they required bodies, they paid for those offered, and asked no questions. They could be procured for very little money, although sometimes the prices were enormously raised, so that it was said twelve or fourteen guineas had been given; five or six guineas was not an uncommon price, but three and a half guineas was more usual. In Dublin they could be got for twenty-five shillings, and sometimes ran as low as ten. Consequently there was a constant traffic

between the capitals, the subjects being packed in boxes so that their contents were unknown. The bodies were mostly taken from the graveyards, after burial, by men who went by the name of "resurrectionists." The most revolting stories were formerly extant as to their practices, one of which was in connection with our own Borough School. A noted resurrectionist brought to St. Thomas's the body of a female child about seven years of age, who had died of scrofula. The body in consequence was very distinguishable from any other. One of the students, on entering the dissecting room, at once recognised it as his sister's child; the lecturer on anatomy had then to pacify him, urging him to hush the matter up; and the body was taken out and buried in the grounds of the hospital. In consequence of this traffic the lecturers, their assistants and students, ran great risks.

A dissecting room porter, named Millard, underwent three months' imprisonment for some of his transactions in dealing with bodies, and his grievances were subsequently published to the world by his widow. Two young men were tried for dissecting bodies surreptitiously obtained, and attacks were frequently made on the medical schools by irritated mobs. One of the Dublin schools was in this manner almost totally demolished. The public alarm was at one time so great that a notice was put up outside Guy's, that no one who had died in the hospital would be examined after death. This was a temporary measure to appease public feeling. The following account of some of the resurrection men is taken from J. F. South's *Reminiscences*:—

"Resurrection men professionally—body-snatchers vulgarly—designations of very useful people long lost to and all but entirely forgotten alike by the medical profession and the public: a set of wretched, clever, unprincipled rascals, resulting from professional and public need. When I came to the anatomical class in

October 1813, the supply of subjects was provided by four men, Ben Crouch, Bill Butler, Jack Harnett, and Bill Harnett. The first three usually worked together, the last was rather an eccentric, sometimes working with them and sometimes alone, under which circumstances there were continual feuds. There was also Jack Crouch, a younger brother of Ben, who was a sort of irregular. Of the whole party Ben Crouch was the acknowledged head. He was the son of the carpenter of Guy's Hospital. How long he had been at the profession I do not know—probably many years. He had been in the army, and been tried for robbery. Ben Crouch was a large, coarse, ill-behaved and impudent fellow, with a rough husky voice, not unfrequently drunk, and then more saucy and more boastful than ever. He managed the affairs of the brotherhood, received the money for the subjects, but often cheated them. Bill Butler was a short, very fat man, with bright mischievous eyes, good-tempered, but generally drunk or on the very verge; he followed Ben Crouch like a dog. Jack Harnett was the most disagreeable of the party; he was of good height, carrot-haired, speckled, and very rarely had anything pleasant to say. Bill Harnett was the best of the lot; he was an Irishman, of cheerful and generally respectful manners; he was of slight wiry frame, but very strong and active, and a capital boxer; in one of his quarrels he had two or three of his front teeth knocked out. He drank pretty hard, but was always good-tempered, and was a great favourite with the pupils. Jack Crouch was a little, saucy, silly fellow, who generally, but not always, sided with his brother. . . .

“Such were the worthies by whom, with very few exceptions, all the anatomical schools in London were supplied—in general plentifully—with subjects. Obtaining a subject from the deadhouse was a matter of

great rarity, excepting at one hospital, which supplied its own school, till at last it was reported that the chaplain said he would not read the service over coffins full of stones any longer. . . .

“Their principal source of supply was the London churchyards, and some of the cheap private burial grounds in the poorer parts of London. The sextons of those places which were robbed were usually in the pay of the resurrection men, and they afforded every facility they could for the purpose. A light cart, into which three or four subjects in as many coarse sacks could be crammed, was the ordinary means of transport; but hackney coaches were not unfrequently used for the same purpose. Their mode of conducting business was usually together as a joint stock company, who were under the entire control and direction of the greatest and cleverest rogue of the party.”

One reason which added to the dislike of dissection amongst the public was that it was regarded as a disgrace, being one of the penalties attached to capital punishment. All felons who had died by the hands of the law were handed over to the anatomist, and very often some official of the College of Surgeons proceeded to Newgate to claim the body. When the first Anatomy Bill passed, the clause for the dissection of criminals was retained; but, owing to strong remonstrances by the leading surgeons and anatomists, the clause was removed. The only advantage which accrued was that of getting healthy persons for dissection. One young man was so well proportioned that immediately after execution casts were taken of various parts by an artist sent by the Royal Academy.

What brought matters to a climax was the discovery of the fact that people were being murdered for the sake of the value of their bodies, and great was the consternation produced in the public mind thereby. When

Burke and Hare were convicted in 1829, at Edinburgh, of this practice, they had murdered more than a dozen people. Their habit was to allure beggars and wretched unknown outcasts into their lodgings, smother them, and sell their bodies. Sir W. Fergusson was a demonstrator of anatomy at Edinburgh at the time when these atrocities were committed. About the same time it was believed that the practice existed in London, although there was no evidence to show that the case which brought the prisoners to the gallows was not the first. The men in London—Bishop, Williams, and May—were convicted of murdering an Italian boy, and taking the body to King's College for sale. Suspicions were aroused in the mind of Mr. Partridge, the demonstrator of anatomy, and the men were arrested. They had previously taken the body to Guy's, but Davis, the dissecting room porter, would have nothing to do with it.

After this a commission was appointed by Government to investigate the subject of the supply of bodies to the dissecting room, and from their Report the regulations of the Anatomy Act were framed. The Report is a very interesting one, and, were it not for the ghastly nature of the subject, very amusing, especially the examination of Sir A. Cooper, whose statements as to the risks and adventures of those engaged in the trade both shocked and terrified the members of the commission. It commenced by a *résumé* of the history of dissection, and stated that by a statute of Henry VIII. protection was given to those who practised it; but up to the time when William Hunter taught anatomy he was obliged to put up with one or at most with two subjects for a course of lectures, and as regards operative surgery, the lower animals were employed. At the time when the commission sat, at the end of the year 1828, there were about eight hundred students in London, and out of these only five hundred dissected. It was considered right

that every student should have three subjects—two for learning anatomy and another for modes of operating. When Hunter built his theatre in 1763, there were various modes of obtaining bodies, most of them illegal, but no punishment accrued until the decision of one of the judges pronounced these methods to be a misdemeanour. This put great obstacles in the way of prosecuting dissection, and consequently a large number of students went to Paris to learn anatomy. At the time of the Report it was said that two hundred English students were generally in that capital. The committee advised that the same plan should be adopted in this country as in France, viz., that all persons dying in hospitals, if not claimed twenty-four hours after death, may be sent for dissection, and the same to apply to pauper institutions; the distribution to be confided to a state official. It was thought better to make it only permissive on the part of the governors of these institutions to send the unclaimed bodies to the dissecting room. The committee confirmed the wisdom of the law in making executed criminals the subjects for dissection. Against this clause all the leading surgeons of the day petitioned, as this made dissection a penalty and an opprobrium. One of the great causes of the feeling against dissection was that it was a mark of ignominy. The first Bill was withdrawn, although supported by the Duke of Wellington, who was at the head of the Government, but finally passed the House of Lords in 1832. An inspector of anatomy was appointed to make a fair distribution of the bodies, and to see that the enactments were carried out. All the bodies were registered, and the remains buried after a certain time with the ordinary religious rites. When some one in the House inquired the meaning of “remains,” the Bishop of London exclaimed “that which remaineth.” The Anatomy Act did not apply to post-mortem examinations.

It cannot be supposed that so good a measure in the interests of the profession and the public could pass without much cavilling on the part of those who are always ready to oppose any object which has a scientific bearing. It may be instructive, therefore, to see what a daily paper could say in opposition to the Act especially as similar opinions are echoed at the present day. This paper is the *Morning Herald*. "The Anatomy or Dead Body Bill. Putting aside for the present the question as to the generous and noble propriety of the Government of the country taking advantage of the unfortunate and cruelly adding to the dreadful misery of the friendless and forlorn wretch who dies in a workhouse or hospital, the appalling prospect of having his body after death (a period which all look forward to as the season of rest) consigned to be mangled and torn by the knife of the ruthless anatomist, is far from being popular amongst the medical profession, for whose benefit and that of science it is so artfully said to be intended. This most obnoxious measure has in fact emanated from, and is only supported by, the influence of the hospital surgeons of London, solely for the purpose of filling their own pockets by holding out the temptation of a plentiful supply of subjects to pupils who attend their lectures, which they well know none but those connected with large institutions can possibly obtain. This narrow-minded and selfish body are now pushing forward for the purpose of a disgusting gain a measure most cruel and appalling to the wretched and friendless, highly inimical to medical knowledge, and totally at variance with the dictates of morality and religion." The Act has been somewhat modified since its first introduction, and upon the whole has worked well.

CHAPTER V.

WAKLEY AND THE "LANCET."

THE history of Guy's would not be complete without reference to its quarrels with Wakley and the *Lancet*. Wakley was a fearless reformer, and started his journal with the main object of removing hospital abuses. He used a scathing pen, and struck terror, or at least uneasiness, into all those in authority at these institutions. There was plenty of room for his energies, for the administration and appointments were not as they ought to have been. No one, however, was spared, and the whole tone of the journal and the virulence of its language were certainly not parliamentary. His attempt to publish the lectures given at the medical schools, though approved by some, was opposed by others. Abernethy considered the lectures his private property, and brought the matter before the legal tribunals. The editor's mode of speaking of many of the medical officers of Guy's was not calculated to smooth asperities, and retaliation was natural.

An incident then occurred which brought matters to a climax. The reporter of the *Lancet*, Mr. Lambert, a general practitioner in Walworth, gave particulars of a case of lithotomy in which he described how Mr. Bransby Cooper blundered; how the man was tied upon the operating table for an hour, while Mr. B. Cooper was endeavouring to extract the stone, and how the

patient died thirty-six hours afterwards. The report was copied into the daily papers, and Mr. B. Cooper forthwith brought an action against Mr. Wakley for libel. The trial took place in December 1828, before Lord Tenderden, whilst Sir James Scarlett and Mr. F. Pollock were for the plaintiff, and Mr. Brougham and Mr. Kelly for the defendant. A cast was made of the body of a man, with sections showing the parts involved in the operation. These are now in the museum of Guy's. The alleged libel was contained in the report given in the *Lancet* of what the journal called the "Tragedy." It was said that the patient, a countryman, came to London to be under "the great Sir Arstley," and instead of this was put under his "nevey." Several surgeons and pupils who were present gave testimony to Mr. Cooper's competence, and Mr. Harrison, the Treasurer, was examined as to Mr. B. Cooper's fitness when he was elected surgeon in May 1825. The plaintiff obtained a verdict in his favour, and great were the rejoicings at Guy's. The pupils met and presented Mr. Cooper with a silver vase worth £100, and, as might have been expected, the *Lancet* and every one connected with it were excluded from the Hospital. The order was not revoked until many years afterwards, when Mr. Harrison ceased to be Treasurer. St. Thomas's Hospital evinced its friendship for Guy's once more, or perhaps its fears for itself, by joining in the opposition to Wakley; and soon after the report in the *Lancet* appeared, a meeting was held and a resolution come to, signed by Travers, Green, and Tyrell, surgeons to St. Thomas's, to the effect that "It being understood that Mr. James Lambert is employed by the editor of a journal called the *Lancet* to report cases occurring at St. Thomas's and Guy's Hospitals, and a most unprofessional and indecent report of a case of lithotomy at Guy's having appeared in the last number of the

Lancet, the surgeons of this hospital hereby convey to Mr. Lambert their determination to withdraw the courtesy usually shown to pupils in permitting their attendance after the expiration of their term, and desire that he will discontinue his attendance from this date."

The acrimony between the *Lancet* and Guy's continued for a long period, and Wakley lost no opportunity of saying damaging things against the Hospital. For example, he recommended students going to the Borough schools to select the best lecturers at each, but to enter at St. Thomas's for the surgical practice, for it stood far before that of Guy's, and the student had no fear of being expelled for reporting cases. If he entered at St. Thomas's he was entitled to see the practice of Guy's, and should he be expelled from the latter for investigating the cases with the zeal of a scientific inquirer, he might still continue his attendance at St. Thomas's; but should he enter at Guy's and be afterwards expelled, he would lose his money and the opportunity of attending both hospitals. The *Lancet* said the hospital had been notorious since the stone operation, and one patient had become so much alarmed that he decamped and went to St. Thomas's, and then followed this doggerel:—

"When Cooper's nevey cut for stone,
His toils were long and heavy;
This patient greater skill has shown,
For he cut Cooper's nevey!"

And in the same bantering strain they made some puns on the professors' names. They said the stores of anatomical knowledge were to be unlocked by a *Key*; the nature and treatment of fractures and leakages by a *Cooper*; the teeth, the source of beauty of the human face, by a celebrated *Bell*. In the practice of medicine the disorders of the intellect would be reflected by

Dr. Bright; the part relating to the spine by *Dr. Back*. Electricity is called into use when parts are aching (*Aikin*). At that time the journal had not a good word to say for Guy's. It criticised severely the first volume of the "Guy's Hospital Reports," and especially a paper by Bright; and so little did it care to ascertain the truth, that it was not aware that there was a physician at Guy's of the name of Barlow, who wrote a preface to the first volume of the Reports (they knew only of him of Bath). It said: "At present we shall simply say that so low is the ebb of literature at Guy's, that the medical officers have actually been to Bath for an introduction to their book." How different is this from what the same journal has said of the Reports in all subsequent years, when this acrimonious feeling had subsided!

One more quotation to show the animus which prevailed. In speaking of the lecturers the *Lancet* said: "Key and Morgan give surgery. Key has a very animated delivery; Morgan is so rapid that few can follow him. Bright and Addison give medicine; but *Dr. Williams* at St. Thomas's is far superior; for Bright is a heavy conceited person, and Addison a blustering bundle of loquacity. He will lecture for an hour on the causes of catarrh, and the distinction between lepra and psoriasis. Williams fulfils the true office of lecturer, rejects the froth and scum, and presents the truth as far as it is known. Ashwell is also a very second-rate lecturer." The *Lancet* also found fault with the volume on "The Practice of Medicine" written by Drs. Bright and Addison. However, some years before Bransby Cooper's death it published an excellent biography of him, which, though rather too eulogistic, was evidently intended as the *amende honorable*. In October 1829 the *Medical Gazette* was founded to counteract the *Lancet* by the support which was promised it by the

Hospital officials. It was the result of a meeting which took place at Longman's, at which the leading medical men of London were present.

Another instance of the *Lancet's* hostility may be given. Aston Key, in an introductory address in 1829, spoke of giving a prize to his class; and when from some misunderstanding it was not given, a row took place. This was said to have been promoted by a student in the pay of the *Lancet*, who circulated a paper containing a resolution to the effect "that the pupils of Guy's Hospital are particularly solicited to join in expressing their indignation at Mr. Key's ungentlemanly conduct." When Key next appeared in the theatre he was vociferously received, although one man tried to speak and instigate others to do so. It is curious at the present time to think of any such disorderly conduct being possible on the part of students; but to show the excited feelings which existed, Drs. Bright and Addison, as well as Bransby Cooper and Morgan, came to the lecture. When order was restored, Mr. Key in no amiable mood began: "I know, gentlemen, too well the impure source from which this paper has emanated: but my lips shall not be defiled by giving utterance to his name. To one of the agents in this plot, who is present, I say, Let him return to his employer, and say that he found a large and respectable class, who, in spite of solicitations to the contrary, received their lecturer with demonstrations of affection and approval. Let him say that he saw that lecturer stand firm in the consciousness of his own innocence; let him say that he saw him surrounded by his colleagues, men of high honour, who came to support him by their presence; let him tell his employer that the scene of degradation which the author of this paper had anticipated was converted, through the means of that very instrument, into a scene of triumph; and to fill his cup of bitterness

to the brim, let him describe what the result of this conspiracy has been, where the accused is a man of integrity, and where the assembly of his judges possess feelings of honour and manly independence."

The *Lancet* attacked Bright because he did not prosecute Holloway for making use of his name in an advertisement, and it more than insinuated that Bright patronised the quack. The advertisement ran as follows: "Extraordinary cure of a case abandoned at Guy's Hospital, where Sir Bransby Cooper and other surgeons told the patient that the only chance of saving his life was by losing his arm. He therefore called in Dr. Bright, chief physician at Guy's, who on viewing his condition kindly and liberally said: 'I am utterly at a loss what to do for you; but here is half a sovereign. Go to Mr. Holloway and try what effect his pills and ointment will have, as I have frequently witnessed the wonderful effects they have in desperate cases.' This unprejudiced advice was followed, and a perfect cure effected in three weeks by the use alone of Holloway's pills and ointment, after four hospitals had failed. When Dr. Bright was shown the result of his advice and charity, he said: 'I am both astonished and delighted, for I thought if ever I saw you again, it would be without your arm. I can only compare this cure to a charm.'" Bright privately told his friends the advertisement was beneath his notice, and the *Lancet* tried in vain to draw him out.

CHAPTER VI.

DEVELOPMENT OF GUY'S MEDICAL SCHOOL.

GUY'S Hospital was not only intimately associated with St. Thomas's Hospital for many years in the great object of teaching, but being comparatively modern, was founded in every respect on the model of the older institution: we allude to the style of the building, the appointment of its officers, and, in fact, its whole administration. It may be as well, therefore, to present to the reader a short outline of the history of St. Thomas's. We first hear of a house devoted to the poor erected in the beginning of the Norman era, and situated near London Bridge. In the year 1207—or, according to others, 1212—this poorhouse was burned down in a great fire, which consumed a large part of Southwark. It was rebuilt, and is often said to have been founded by Richard, Prior of Bermondsey, who sought alms for its support. The neighbourhood where it was situated afterwards became famous as the starting-point for the pilgrimages to Canterbury. It may be remembered that Chaucer makes his pilgrims start from the Tabard Inn, as their route lay along the road now called Old Kent Road. Thomas à Becket was murdered in 1170, and it appears that the newly built poorhouse was dedicated to St. Thomas the Martyr, and was popularly known as "Bekket's Spyttell." In the reign of Henry VIII. the property was confiscated, in common

with all religious establishments; but in this case, as in some others, the revenues were retained in order to preserve it as a hospital, or, as we find it then called, "Thomas à Becket's Spittil." The charter was given in 1552, and subsequently, in Edward VI.'s reign, a new charter was granted, with use of lands in the neighbourhood, and the Hospital was put under the management of the City authorities. At this time, or shortly afterwards, it was dedicated to St. Thomas the Apostle. Dr. Stone gives some very interesting particulars in his essay in the "St. Thomas's Hospital Reports," vol. i., and amongst those more especially relating to professional matters is a mention of that dire disease "the stone," and of extra payment for "cutting the poor for stone"; even as late as the year 1734, there is mention of "a cutting ward with seven beds, and the cutting room close by where they cut for the stone." In 1782 the constitution of the Hospital was somewhat altered, so that all the Aldermen of the City of London and twelve members of the Common Council were to form a governing Board. Any person, by a payment of £50, became a governor, and he was presented with a green staff when he came into office—a custom which is still kept up. The Hospital remained without much alteration until 1707, when Mr. Guy erected three more wards at his own expense. Shortly afterwards some other wards were made, jutting on St. Thomas's Street; and so the Hospital remained until the foundation of New London Bridge, which, being built on the western side of the old one, necessitated an alteration in the road through the Borough leading to it. In consequence of this, two new wings to the Hospital were built in 1833 facing the street. In 1862 the whole of St. Thomas's was pulled down, to make room for the railway. The Hospital sought temporary habitation in the Surrey Gardens, until the new buildings on the Embankment were completed in 1871.

As early as 1561 we read of young men learning medicine at St. Thomas's, who were called apprentices; for they were supposed to learn their profession from the surgeons, as in other trades. There is a notice in 1703 that no surgeon is to have more than three "cubbs," as these young men were then called. The first notice of lectures is in 1718, when Cheselden lectured on anatomy and surgery. In 1725 Guy's Hospital was opened, and the physicians and surgeons of that institution also took pupils, there being an understanding that the students of one hospital might attend the operations of the other. The letter of Mr. Warner (see p. 88) shows the mode in which students were enabled to learn the practical part of their profession. Each surgeon had apprentices, dressers, and pupils. The apprentices and dressers paid their fees directly to the surgeon, their master, whilst the fees of the pupils generally were divided among the surgeons. The latter were unlimited in number, but the apprentices and dressers were limited to four each. The pupil paid £25, and the dresser £50; the apprentice still more. This system prevailed until quite a recent period, Messrs. Birkett, Callaway, and Poland being the last apprentices; whilst the fees for dressers were not abolished until 1846. Such was the working of the two hospitals in 1727, when the pupils had the opportunity of witnessing the operations at both institutions.

In 1768 a closer connection took place between them, when an agreement was made that the pupils should see the whole surgical practice of both hospitals. The terms "United Hospitals" and "Boro' Hospitals" came into use, and were subsequently adopted by the students both of Guy's and St. Thomas's. They are still perpetuated in the name "United Hospitals' Club." At that time the surgical lectures were given at St. Thomas's, and the medical at Guy's. In the former

were the dissecting room and anatomical theatre, in the latter was the present medical theatre. The names of the staff and lecturers have been already given in Mr. Warner's letter. The regulations were that each physician and surgeon should visit the Hospital once a week, when he should give his directions as to treatment and present those who were cured. The word "present," which is still in use, is supposed to have originated in the custom of patients presenting themselves before the authorities and thanking them for their cure. Bad cases were to be visited daily, as there was no house surgeon. On Saturdays the physicians and surgeons were to meet, and proceed in pairs to visit all their patients. The dressers had "take-in" weeks in rotation, and sent for the surgeon in any emergency. Friday was set apart for operations, when a grand consultation took place, and notices of operations were placarded on the walls. The "united" pupils were allowed to see the dissection of all the morbid bodies. There were not many who availed themselves of the privilege, but it was the duty of the surgery man to acquaint those who wished to attend.

The surgeons kept their own instruments—a practice continued until comparatively recent times. Many now living remember the instrument maker (Laundy, and afterwards Bigg) attending on operation days, standing near the surgeon, and handing him the different tools as he required them. These consequently were kept in the most perfect order.

In former times the dressers carried a tin box containing plaisters, instruments, and bandages, whilst the other pupils crowded round, and at that time took off their hats—a custom which was afterwards given up, but of late renewed. The box which the dresser carried was not unlike a knife-box, and is the subject of a skit which appeared in the *Lancet*, when that journal was

not animated with the best feelings towards the hospitals, and was proposing to start a new college. The dresser was portrayed

“ With every weapon stored for waging war
Against foul ulcers scented from afar ;
Well armed with instrument of rusty steel,
With plaisters, bandages, and linseed meal.
The well-known box to every dresser wed
With heedless haste is thrown upon the bed,
Lighting perchance on some poor devil's toe :
The echoing ward rings with the shrieks of woe.
With feeling heart the dresser turns him round
And slowly sets his box upon the ground.”

It must be evident that a school, connected with one hospital and obtaining its teachers from another, must have been seriously hampered in its work—as, for example, in the case of Sir A. Cooper, whose material from which he drew whilst lecturing at St. Thomas's was at Guy's, and whose specimens taken from one hospital were preserved in the museum of the other. This anomaly would naturally give rise to the question whether these were the property of the institution or the individual lecturer. A collision would be certain to occur.

About the year 1824 differences sprang up between the governors and lecturers, which led eventually to the separation of the schools of the two hospitals. One of the difficulties arose from the transfer of private lectureships to the authority of the governing bodies in the person of the Treasurer. It seems that Sir Astley Cooper had paid Mr. Cline (who had lectured since 1781) £1,000 for a part of the lectureship of anatomy and the use of his museum. It might be mentioned that in 1813 a new museum and lecture room were built at St. Thomas's, to which the Hospital contributed £3,000 and the two lecturers £1,000 each. Sir Astley Cooper had made the museum mainly himself with great labour

and expense, but he left this to St. Thomas's for the benefit of the pupils of the two schools. When he resigned he had the largest surgical class that had ever met in London, and Mr. Key and Mr. Green went on with the lectures. It having been the custom of lecturers to appoint their successors, he wished Bransby Cooper to take part in them. This appointment, however, was not approved by the authorities of St. Thomas's, who put in Mr. South.

Mr. Key and Mr. Bransby Cooper then proposed to give lectures on anatomy at Guy's, and memorialised St. Thomas's to hand over half the museum of Sir A. Cooper, but this the Hospital declined to do. A controversy then ensued, and Mr. J. H. Green published a pamphlet setting forth the doctrine that, although Sir A. Cooper had made the museum and specimens, they were for the good of the Hospital, and could not be regarded as private property. Mr. Green went on to attack him personally, and charged Sir Astley with allowing his lectures to appear in a weekly publication called the *Lancet*, and so endeavouring to raise himself at the expense of his colleagues, who denounced the publication as well as all the surgeons of St. Thomas's. Such-like squabbles were harassing the hospitals, when Mr. Harrison, the Treasurer of Guy's, determined to found a school of his own. Accordingly he pulled down houses in Sutton Street, and prepared the ground for a dissecting room, an anatomical theatre, and a museum. The money, £7,000, was advanced as a loan to the School, to be paid back in annual instalments. The interest was taken from the pupils' fees until 1839, when the money was paid back out of the Hunt legacy, Mr. Hunt approving of the arrangement. The School was soon finished, and on June 21st, 1826, the Treasurer reported "all the School buildings ready and occupied." We believe that St. Thomas's eventually paid to Sir A.

Cooper a sum of money for his museum, and this he handed over to Mr. Harrison as a contribution towards the expenses of the new building. This building remained until 1850, when a new dissecting room was built, the older room forming part of the museum.

It may be as well to mention the practice, which existed from the earliest time of private medical lecturing, of lecturers selling the goodwill of their lectures, with all specimens, drawings, etc., illustrating the courses, to their successors. Even when the lectures came to be delivered in the hospital lecture rooms, the practice was kept up. We believe no premium was paid to Dr. Saunders by Dr. Babington, but the latter did not receive a full share of the emoluments of their joint lectures. Dr. Babington, when he obtained the assistance of Dr. Curry, gave him half the proceeds of the lectures. Dr. Cholmeley stated that he purchased Curry's share for £200. Later he asked Dr. Bright to pay him £700 for his share in the lectures on medicine. This coming to the Treasurer's ears, he strongly objected; but at length his opposition was withdrawn, on condition that Dr. Bright should not again dispose of the lectures, and should take all risk of loss by the transaction. Dr. Curry succeeded Dr. Babington in the evening lectures on *materia medica*, paying no premium. When Cholmeley succeeded Curry in the medical lectures (then including *materia medica*), he offered the latter to Dr. Back for £300. Back declined the offer, which was then accepted by Dr. Addison, with the Treasurer's sanction, and at the same time he promised not again to dispose of the lectures. This was disputed by Dr. Addison, who said he always expected about £500 to be given to him when he retired from the lectureship, which he had intended to offer as a prize to the School. A most acrimonious dispute took place, and Addison declined to go to any more Governors' dinners. Dr. Cholmeley

seems to have come off rather badly in this matter. He was censured by the Governors for having represented the Treasurer as his co-partner in the lectures, and also for having claimed the right to lecture. The Governors highly disapproved of his transactions, and directed that he should no longer lecture. Matters were smoothed in 1826 by Dr. Cholmeley apologising.

The opening of Guy's Medical School in 1825 was an immediate success. This was owing, no doubt, in part to the prestige of Sir A. Cooper, for having been his dresser was a passport to practice in any part of the country. With the rise of Guy's, St. Thomas's began to decline; but although the two schools were now separate, the privilege of the pupils of one seeing the practice of the other still remained. The names of Green, Elliotson, and others could not preserve the prestige of St. Thomas's, and these men were only too willing to accept professorships at University and King's Colleges. There was a great attempt at a revival by taking over Grainger and his school from Webb Street in 1842, and obtaining the services of Marshall Hall, Gregory, and other distinguished men; but the School of St. Thomas's never revived until it was transplanted to the Albert Embankment in 1871.

The slender bond of union still existing between the two hospitals, in the permission of students of one hospital to see the practice of the other, was finally ruptured by an untoward circumstance which took place in December 1836. A notice had appeared as usual on the walls that three operations were to take place at St. Thomas's. Consequently a crowd of student went across the road, where their tickets were demanded by the porter, and those without them were not admitted. Further, two dressers wished to avail themselves of the privilege of their office by standing within the operating area. This was disallowed by the St. Thomas's dressers,

who thrust them out. A row immediately commenced between the students of the two hospitals; the surgeons could not quell the disturbance, and the operations were put aside for the day. Mr. South called together all the St. Thomas's men, whilst Guy's and Grainger's men were collected in the outer square. It was thought that a fight would take place, but the police were called in, and nine Guy's men were taken to the police-office in Union Street, where they were charged and formally committed for trial. At the next assizes they were reprimanded and bound over to keep the peace. Then the authorities also took sides, and besides a meeting of the students called to defray the expenses of those who had been prosecuted, the staff of Guy's held a meeting in April 1837 and passed the following resolution: "We, the undersigned officers and teachers in the School of Guy's Hospital, hereby assure the gentlemen composing the classes of our sense of the great attention and uniform propriety of conduct evinced by them on all occasions, and express our unqualified opinion, notwithstanding the late untoward circumstance, that nothing has occurred to deprive them of our confidence and regard." Then follow the signatures of Astley Cooper, Key, Morgan, Bransby Cooper, Callaway, Bell, Cock, Aikin, W. King, Johnson, Stocker, Hilton, and also Drs. Cholmeley, Back, Bright, Addison, Ashwell, Hodgkin, A. S. Taylor, Golding Bird, and Barlow.

The Chaplain gave a separate testimonial:—"As Chaplain of Guy's Hospital I have read lectures on moral philosophy to as many of the students of the Medical School as had leisure and inclination to attend, and have uniformly received from them the most respectful attention. I have also had opportunities of observing the deportment of the students generally, which has always seemed to me most becoming and orderly."—Signed, FREDERICK DENISON MAURICE.

The Steward, or Superintendent, as he would now be called, also gave his certificate:—"As Steward of Guy's Hospital I have the best means of knowing the students, and from that have an unqualified feeling of regard to them for their orderly, gentlemanlike conduct, together with their strict observance of all the regulations of the establishment."—Signed, JAMES BROWELL.

St. Thomas's was not backward in asserting its rights, for at the same time the Governors passed a resolution that the pupils of Guy's be no longer permitted to attend the surgical practice and operations of St. Thomas's, and added: "In coming to this conclusion the committee desire to express their regret that the union of the two hospitals, which existed for a long period of time beneficially alike for the schools of both and for the public advantage to the year 1825, should then have been dissolved by the authorities of Guy's without consultation with, or the consent of, the Governors of this hospital."

A notice was also put up at Guy's:—"In consequence of the strong feeling which has been excited by the late occurrence at St. Thomas's Hospital, it is particularly requested that the gentlemen who have entered to the practice of this hospital will for the present refrain from exercising their privilege of attending the operations or surgical practice of St. Thomas's."—Steward's Office, Guy's Hospital, *December 29th, 1836.*

The same year was also remarkable for an incident which is unique in the history of student life, never having occurred before or since. We think, therefore, it is worthy of being placed on record. It was nothing less than a student striking his examiners when he failed to pass. The candidate, Mr. Penruddock, made his appearance at one of the tables of the Apothecaries' Hall, and when he was informed that he had been rejected, he made an attack on two or three of the

examiners with a life-preserver. He was taken before the magistrates and committed for trial on the capital charge, but was acquitted. The case was taken up by other London students, who very naturally maintained that he had been much bullied.

Mr. Harrison's object was to make the School of Guy's as perfect as possible, and having his hands free, he was able to see his ideas carried out in all particulars. To provide practical instruction in the treatment of diseases of the eye, he built an infirmary for such cases, the first we believe erected in connection with any of the general hospitals, and a course of ophthalmic lectures was also established. The site of the eye infirmary was nearly opposite that of the present electrical department. It consisted of two wards, one of which contained fourteen beds for males, and the other ten beds for females. Associated with it was a large ophthalmic out-patient department. From the Hospital admission books it appears that this infirmary was opened at the beginning of 1828. A certain number of beds were assigned to the diseases of women, and a special ward was made for children. An old house standing by the side of the eye infirmary was adapted for this purpose. The adjacent ward for the diseases of women, called Mary's Ward, was opened in September 1831; while in November 1835 additional beds for the same class of cases were set apart in Petersham House. A lying-in charity was founded by the Treasurer in October 1833 for the purpose of providing poor women with medical attendance and medicines at their own habitations during their confinement. This institution was placed under the control of a physician with two assistants, and during the first seven years of its existence 4,664 women were attended by pupils attached to the department, who gained thus an adequate knowledge of midwifery. In October 1836 an apartment was appropriated for the purpose of sub-

mitting patients to electrical treatment, and was attended by out-patients as well as those from the various wards. For teaching purposes the museum was built, an artist engaged to make drawings, and a modeller appointed to produce illustrations in wax of healthy anatomy and some of the most striking diseases. Finally good dissecting and post-mortem rooms were built.

At the time the school was opened Drs. Cholmeley and Bright lectured on medicine; Cholmeley and Addison on materia medica; Blundell on physiology and midwifery; Allen, Aikin, and Bostock on chemistry; Bell on the teeth; Bransby Cooper on anatomy; and Key and Morgan on surgery.

The Hospital and neighbourhood, since the writer first knew Guy's, have undergone a great alteration. Where the Medical Block now stands was a row of small houses, and opposite them, on the present park, were the temporary wards made with Hunt's money.

The Treasurer's garden at the back of his house contained many medicinal plants, although the larger botanical garden for the use of students was on the other side of Snows Fields, and is at present the site of St. Stephen's Church and lodging-houses. Maze Pond consisted of streets of houses, and at the corner was a well-known chapel. Many eminent dissenting ministers have occupied its pulpit, and from time to time have had services there for medical students. The Rev. Thomas Binney preached a sermon there in 1832, and we remember the Rev. Joseph Hinton, the father of James Hinton, also giving us a discourse. Nothing but a map of the neighbourhood at the beginning of the century could show the number of streets which have disappeared, and with these the lodging-houses where former students dwelt.

We might also mention that where the more newly built houses exist in St. Thomas's Street, between the Hospital and Borough, there stood only a few years ago the Parish School, with Mr. Stainer as master. Behind this was the Hospital burial ground; the last interment which took place there was that of Mr. Westbrook, for many years librarian. Adjacent to this is the piece of garden behind the St. Thomas's Street houses, with its wall jutting on the King's Head Yard, Borough. Here formerly stood a house and shop occupied by Cox, a medical publisher, and subsequently held by Churchill, who afterwards went to the West End and became the leading medical publisher of the day. When he left, the ground was converted into a garden. The local medical bookseller for many years afterwards was Jackson in King Street, close to the Hospital gates.

The alterations in the Hospital grounds themselves have been considerable. When the School was established, Sutton Street was taken in and some houses pulled down for the erection of the museum. On the opposite side, where the new wing now stands, the small houses remained; and these were used for various offices connected with the School—one for comparative anatomy, another for the microscope (just coming into use), another for the artists and modeller. Here also was the lying-in charity, the eye infirmary, and the children's ward. At the side was a gate leading to Maze Pond, the nearest way to the "Ship and Shovel"; so that between it and the dissecting room a continuous stream of "pots of half-and-half" might be seen to pass during the working hours of the day. The present clinical house was used for lunatics, the form of the building and the windows being arranged as cells for the insane. Between this building and the museum were three wards converted from hop warehouses, and opened when Hunt left his magnificent legacy to enlarge the Hospital.

Another ward was Petersham, still remaining, though a part has been removed for the present post-mortem room, pathological laboratory, and dentists' rooms. This ward was put to special uses; at one time it was used for diseases of women, then for children, etc. The old post-mortem room was near the medical theatre and chemical laboratory, behind the library. Adjacent were the brewhouse and bakehouse. The offices now used by the Superintendent were the apothecaries shops. The clinical wards were "Job" and "Lydia, the adjoining ends of which formed a large room, called the clinical room, the way into which was by a flight of steps leading from the quadrangle between the library and "Cornelius" ward. The out-patients' rooms were those occupied by the casualty room, near the porter's lodge and the end of the present accident ward.

In the "Guy's Hospital Reports" for 1844 there is a ground plan of the clinical wards just mentioned, with this description: "These wards consist of a male and female ward; the former containing twenty-four, and the latter eighteen beds. Between them is a spacious room for the meeting of the physicians and pupils, and the registry of the cases." In the plan a flight of stairs is depicted at the back of this room, which led to a clinical laboratory for the examination of morbid secretions, blood, etc.

Soon after Mr. Dobree was appointed Treasurer he resolved to pull down the temporary wards, erected in pursuance of Hunt's will, and build substantial wards with the money. The small houses opposite the museum were accordingly removed, and the present central ventilating tower, with grand staircase and southern wing, were erected. A new apothecaries' shop was built, together with numerous rooms for seeing out-patients, etc., on the ground floor. This was in 1852. In the year 1871, under the treasurership of Mr. Turner, the

north wing was built. It was made to accommodate the eye infirmary, and a long room at the back was filled with the anatomical wax models, as alterations were at the same time being made in the old museum. No new children's ward was built, it being thought for many reasons more advisable to place three or four cribs in each of the medical and surgical wards.

It should be mentioned to the credit of Mr. Thomas Turner that he, like Mr. Harrison, quite realised the fact that the Hospital and School ought to work with one interest, and he fully sympathised with all the *esprit de corps* which naturally springs up in a society of men of one profession. It was therefore with a true professional instinct that he named the new wards in Hunt's building after Cooper, Addison, and Bright; and saw also that a proper memorial stone should be placed in the chapel in memory of Sir A. Cooper. He offered prizes to the students, and did all that lay in his power to assist the School whilst promoting the welfare of the Hospital. He saw, indeed, that the interests of the two were one, and whatever was done for the benefit of the Hospital assisted the School; and also that if any department were made especially for teaching purposes, such as the lying-in charity, or for disease of eye, ear, or skin, or dentistry, it was also for the good of the poor in the neighbourhood.

CHAPTER VII.

CREATION OF DIFFERENT INSTITUTIONS.

IN speaking of the foundation of the Medical School we must dwell more fully upon some of those features which were chiefly instrumental in gaining for it celebrity. We allude to the Pathological Museum, renowned for its rich collection of specimens, to the Clinical Report Society for the advancement of clinical teaching, and to the "Guy's Hospital Reports," which gained for the Hospital a world-wide reputation.

The *Guy's Museum* dates from the last century, for there were a considerable number of preparations in existence in 1804, as shown by the catalogue of that date. To these numerous additions were made in 1806 by Mr. Travers. At that time post-mortem inspections were held only on special cases, and therefore but few specimens could be preserved. In order to obtain a post-mortem examination a special application had to be made on a printed form by the medical officer, after this fashion:—

"A patient, in —— Ward, being now dead, I request permission for the body to be inspected, considering it to be an important case, from which the profession may derive much satisfactory information.

"(Signed) ALEX. MARCET.

"January 15th, 1814.

"To the Steward of Guy's Hospital."

Another is signed James Laird, acting assistant physician for Dr. Curry, January 1814. Another by Dr. Cholmeley, for the inspection of a lunatic who was admitted in 1765, having been in the Hospital forty-eight years. We have others signed by Mr. Lucas, Dr. Back, and Mr. Callaway. A new and improved system commenced in 1814, when members of the staff were appointed to make the inspections, and these were generally the assistant surgeons, as Key, Callaway, etc. They wrote out their reports and delivered them to the steward. We may mention that the inspection of all cases for the sake of teaching students morbid anatomy is quite a recent custom, for we remember in our studentship (about 1842) that the physician or surgeon was asked if he wished for an inspection of some patient who was dead, and he frequently replied in the negative, that the case was one of no especial interest. The first person specially employed to make the inspections was Mr. Dodd, who added considerably to the small collection of specimens which already existed, besides keeping a record of the cases. He also took casts of some interesting cases. This was the nucleus of the new museum which was opened in 1825, and of which Dr. Hodgkin was appointed curator. When he printed his catalogue in 1829 the specimens amounted to three thousand in number. It was also enriched by the collection of Mr. Joseph Fox, made to illustrate the structure and diseases of the teeth. It is interesting to note how anything remarkable was put aside, and thus it has happened that we have now preserved in our museum some capital specimens of diseases whose nature was not revealed until they had reposed many years on our shelves. We may mention, for example, a piece of muscle containing white specks, which proved to be the first preserved specimen of "*trichina spiralis*." Portions of brain and liver preserved as tuberculous masses are now recognised

as syphilitic ; organs were put up which were likened to bacon, and which are now called lardaceous ; besides specimens of enlarged glands and spleen, which Hodgkin seems first to have observed as a peculiar form of disease. At that time there were placed in the museum preparations made by Sir A. Cooper of the vessels after ligature of the aorta ; and side by side with these are specimens of obliterated aortæ which had been found in various human necropsies. The museum has also an enormous skull taken from a hydrocephalic young man ; the stomach, with its contents, of a knife-eater ; and the skull of an ancient Briton, taken from a tumulus at Uley Bury, in Gloucestershire.

At the time of the formation of the museum the services of an artist, Mr. C. J. Canton, were obtained to make drawings and diagrams, the accuracy and artistic character of which may be seen by reference to the museum, although his fame chiefly rests on the illustrations made to accompany Dr. Bright's "Medical Reports." Mr. Towne was also employed to make wax models. Of him Dr. Hodgkin said that "he had the signal merit of having both created his art for himself and arrived almost at such proficiency in it that his works, already very numerous, rival, if they do not surpass, those of the best and most distinguished masters of Florence and Bologna." It might be here mentioned that the object in former times of making a post-mortem examination was to verify or not the diagnosis of the physician or surgeon. The study of pathological anatomy as a science had scarcely commenced. Until quite recently no examination took place without the presence of the medical officer to whom the case belonged, and he it was who made his comments on the case, more especially with regard to diagnosis. The method is still pursued, but in no regular or systematic manner, the physician or surgeon being often content to let the

demonstrator inform him of the exact nature of the morbid changes ; and so much reliance is placed on the positive facts which he discloses, that no reluctance is felt, as in former times, in allowing the diagnoses to be read out and commented on to the students during the absence of the medical officer.

The *Physical Society* has already been spoken of (p. 97). It was at one time the most flourishing institution of the kind in London ; but owing to the formation of other societies in more fashionable parts of the town, it began to wane, and finally ceased to exist in 1852. There was not only the Medico-Chirurgical Society and the Medical Society, but the Hunterian, in the city, and a South London Society, founded in 1832, which, however, lived only twenty years.

The *Pupils' Physical Society*, however, continued to flourish, and it has endeavoured to carry on the good traditions of its parent. The library of the old society has now also become the property of the School. Several of the papers read there have been of the most excellent quality. We may refer to one by Mr. John Anderson in 1835 on "Embryology," which was considered worthy of publication. In this paper he alludes to the persistence of branchial fissures giving rise to fistulæ in the neck. Another paper by Mr. Blackburn on "Excision of the Joints" was, we believe, the first systematic essay on the subject, and forms the basis of the article in "Cooper's Dictionary." Since this there have been many papers worthy of publication. The Society is managed by the students, the presidents being the senior men.

As the Medical Society of London was coeval with the Physical Society, and so many of its members were Guy's men, it may be of interest to allude to it. This Society was established in 1773, largely by the efforts of Fothergill and Lettsom. Reference has been made to the celebrated picture of a meeting of the Society,

which is placed over the President's chair. It is by Samuel Medley, maternal grandfather of Sir Henry Thompson.

Medley had come up to London in 1800 to seek his fortune, and painted the portrait of Dr. Sims, then the President of the Medical Society. This work was so successful that Dr. Sims commissioned Medley to paint a picture of a meeting of the Society. Although the grouping is considered to be faulty (partly due to attempts to meet the members' tastes), the likenesses are excellent. Twenty-five fellows are grouped round a large table in the middle of the room. Dr. Sims is represented with the presidential cocked hat on his head, which was worn till about 1832. Edward Jenner and William Woodville are there. But the interest for us lies in the portraits of Drs. Saunders, William Babington, Haighton, and Relph, of Guy's, and also of John Aikin. Another lecturer at Guy's is there—Dr. Robert John Thornton, lecturer on medical botany at the Hospital, and physician to the Marylebone Dispensary.

Clinical Teaching and the Clinical Report Society.—It is interesting to find that from almost the foundation of the Hospital there was an effort to make it useful for teaching and scientific purposes. Thus we read in an advertisement that Dr. Saunders lectured in 1772 on the theory and practice of medicine; and also that “clinical lectures are delivered at Guy's Hospital on the cases of patients, by means of which the student may enjoy every advantage that actual practice can afford in the study of his profession.”

In 1798, just on the borders of this century, the physicians and surgeons of Guy's thought that reports of some of their cases should be published, and a volume was brought forth entitled “Medical Reports and Researches,” edited by Sir A. Cooper, Dr. Haighton, and Dr. Babington. They consisted mostly of papers which

had been read before a private medical society. The volume was published by Cox, St. Thomas's Street, Borough, 1798. It contained papers by Sir A. Cooper, and an account of his experiments of tying the thoracic duct in the neck, in which he found as a consequence immense distension of the lacteals and extravasation of chyle into the abdomen. There is also a case by Dr. Haighton of tic-douloureux of the superior maxillary nerve. He first treated the patient by electricity. "Having placed her upon an insulated chair, I drew several very strong sparks from the part by means of a very powerful machine." It gave her no relief, and he therefore determined to divide the nerve. He cut it through to the bone, and the pain immediately ceased. Nine years had elapsed since the operation, and there had been no return of the pain, but there was a partial numbness of the lips and cheek. The volume also contains an account of the Cæsarian operation, and experiments by Dr. Babington, who tried to inoculate animals from the saliva of two mad dogs, but failed. The private medical society spoken of is, probably, that alluded to by Mr. Travers when he says, "Sir A. Cooper instigated me to the formation of a Clinical Society, which flourished for many years at Guy's Hospital under my auspices. It was confined to the pupils, the demonstrators and seniors being chosen presidents. I officiated as secretary. We used to read interesting cases occurring in the Hospital, and discuss them freely and the treatment adopted."

The Clinical Report Society of Guy's, the first of its kind, requires a special notice. We may remark that in 1828 a regular method of systematic case-taking was established by Dr. Addison in connection with his clinical lectures; but it was not until 1836 that the above Society was founded and all the machinery arranged by Mr. Blackburn. The Society was started and supported by

the students. A certain number were allotted to each physician and surgeon, and it was their duty to report the cases; once a week they met together and described the new cases which had been admitted, each clerk having about fifteen. They were written out on forms which were afterwards collected and bound together. There was a medical and a surgical secretary who superintended the reporting, and a paid under-secretary or clerk who kept the books. There was a half-yearly meeting of the Society, at which one of the staff took the chair. A history of the formation of the Society will be found in the early numbers of the "Guy's Hospital Reports," where also may be found numerous published annual reports. In looking through the medical journals we often meet with notices of the meetings, as, for example: "April 21st, 1841. Tenth meeting of Guy's Clinical Report Society; Bransby Cooper in the chair. Dr. Birkett read the report; and, as usual at the close of each session, the honorary certificates stamped with the great seal of the Hospital were awarded to the gentlemen whose reports were considered the most perfect. They were awarded to Mr. J. R. Bedford and Mr. D'Auvergne."

We read again: "January 30th, 1846. Nineteenth general meeting; Dr. Babington in the chair. Hon. Secretaries, Dr. Allen Williams and Mr. Poland. During the last six months, eight hundred cases have been reported by thirty-six students"; and the report speaks of the Society having been established ten years, and owing its origin and success to the energy and perseverance of the pupils. Through its agency many valuable cases were reported.

This Clinical Society existed for many years, until the time came when it was made obligatory for all students to report cases. The voluntary association ceased, and the method hitherto in vogue became

incorporated with the regular education undertaken by the School. While it existed it did an enormous amount of good, and stimulated the great majority of students to join the Society and take clinical reports. We may mention that there existed for a short time an obstetric society at the Hospital. It was formed in 1836, with Drs. Ashwell, Tweedie, and Lever as directors. The members met once a week and discussed cases.

The well-known *Guy's Hospital Reports* started into existence in the year 1836, and their publication has continued up to the present time with great success. They have, therefore, a history of more than half a century. Other hospitals soon attempted to follow the example, but for some reasons not very obvious failed after the issue of two or three volumes to continue the good work. Of late they have been more successful. Nothing, perhaps, has done more to establish the reputation of Guy's Hospital abroad than these Reports. They may be found in the best libraries in Europe and in America, and have been well perused by many of the leading men on the Continent. There can be no doubt of the great value of hospital reports, seeing that they contain well-observed facts which remain true for all time. They can never become obsolete, and, as regards those emanating from Guy's, the money value of the earlier volumes at the present time is greater than the original cost price. It was probably owing to their issue, and the establishment of a number of new departments for teaching, due to the foresight and admirable administration of Mr. Harrison, the Treasurer, that the new School of Guy's so soon came to the front. The publication no doubt represented a certain amount of self-confidence and pride on the part of all those engaged in the work of the institution; for it cannot otherwise be explained how a certain character, of a

not very estimable kind, has always been applied to Guy's men by outsiders. The teachers are quite familiar with the good-natured taunt sometimes openly expressed at the medical societies towards Guy's men that there is nothing of any value in the medical world but what has emanated from their hospital. Whether they deserved the not very flattering epithets applied to them it is difficult to say. By chance we happened to see this alluded to in taking up a *Lancet* of 1862, which contains a review of the Reports for that year. It says: "So long as Guy's Hospital can point to this regular issue of good, practical Reports, amply illustrated and well printed, it may be somewhat excused for that air of self-laudation which it is generally admitted is one of its characteristics. The officials of the Borough institution are supposed to believe that there is nobody like unto them; that they constitute, in fact, *la crème de la crème* of hospital society. Absurd as their idea may be, it is, nevertheless, clear that they can do what the members of no other hospital can—viz., exhibit a respectable annual testimony of the past year's industry, and its results in the field of practical medicine. For many years, too, this has been the case; and although such names as Cooper, Bright, and Addison no longer appear, yet their successors strive to be as practical, as useful, and as diligent as ever." It has been a great gratification to see how the *Lancet*, as well as the other medical journals, has never ceased to give full praise to the efforts of those who year by year contribute to these Reports. Thus, opening by accident the *British Medical Journal* for 1861, we found as usual a eulogistic notice of the Reports. It said: "Another volume of these admirable volumes of the clinical history of disease has appeared. Guy's Hospital may justly be proud of such Reports. They bear witness to the fact that the immense field for observation met with in its

wards is not allowed to run to waste. The volume before us shows also that there is no idler among the workmen in the field there."

The *Guy's Hospital Gazette* must not be forgotten; it is edited and managed by the senior students. It has now existed for twenty years, having had a short interval of abolition during the time of the "nursing dispute," when it became a party organ. It has served the purpose of publishing whole courses of lectures of some members of the staff; also many separate clinical lectures and reports of cases. Its not least valuable and important function is that it has been an organ amongst the students for announcing the various appointments in the Hospital, the hours of meeting of the clubs for athletics, football, cricket, etc. It has also published many clever leading articles on medical subjects, and has not been deficient in poetic contributions. A poem which is essentially medical in its character, and therefore of a kind not to be met with in any ordinary volume of the British poets, we quote as a sample. We are not acquainted with the author, but he may not be displeased to see it figure in a history of Guy's.

FROM "GUY'S HOSPITAL GAZETTE," Dec. 21st, 1872.

" Verbum sap."

'Twas the Janitor's voice, thus I heard him complain :
 "Those lazy young beggars won't catch the first train ;
 They'd rather—astounding it seemeth to me—
 Take ' forty winks ' more, than come hither to be
 Anatomy taught by our Arthur E. D. !
 Yet Anatomy's hard, as they know, to acquire,
 Without knowing it so that when patients they view,
 Their external parts they should seem to see through ;
 And Anatomy's dry, not amusing ' per se,'
 But it's flavoured and seasoned and spiced by A. D.
 With experience, anecdote, joke, jeu d'esprit ;
 Till they'd swallow the dose with such pleasure, d'ye see !
 That they'd wish it repeated—oh more than *t. d.*"

'Twas the Janitor's voice, thus I heard him complain,
 And the cause of his sighing gave me, too, much pain ;
 For I knew the bright student-life, once left behind,
 Little time has the Doctor to study or " grind " ;
 And the surgeon who lacks anatomical lore
 Is the rudderless barque which the blast flings ashore—
 Is the grain almost rootless, which sprouts but to rot—
 Is the tottering tower, whose foundation's forgot !
 The greatest of books bids us " work whilst 'tis day,
 For night cometh," and youth, light, and life fleet away !
Quantum suff.: not a sermon—a word to the wise :
 Learn Anatomy now—opportunity flies,
 And take the advice of

A STUDENT AT GUY'S.

BOOK IV.

PHYSICIANS AND SURGEONS OF NINETEENTH CENTURY.

HAVING now given a general history of the Hospital and the development of the Medical School, we will proceed with the biographies of those members of the staff who have died since the beginning of the present century. It will much facilitate the reader's acquaintance with the dates of their appointment and retirement, if we first of all give a complete list of the physicians and surgeons of Guy's Hospital from its foundation until the present time.

	Assistant.	Full.	Resigned or Died.
Dr. James Jurin . . .	—	1725	1731
„ John Oldfield . . .	—	1725	1748
„ Matthew Clarke . . .	—	1731	1754
„ Charles Feake . . .	—	1744	1762
„ Nicholas Munckley . . .	—	1748	1770
„ William Magie . . .	—	1754	1756
„ Henry Hinckley . . .	—	1756	1779
„ Charlton Wollaston . . .	—	1762	1764
„ Robert Thomlinson . . .	—	1764	1788
„ William Saunders . . .	—	1770	1802
„ James Hervey . . .	—	1779	1802
„ Thomas Skeete . . .	—	1788	1789
„ John Relph . . .	—	1789	1804
„ William Babington . . .	1795	1802	1811
„ James Curry . . .	1802	1802	1819
„ Alexander Marcet . . .	1802	1804	1819
„ James Cholmeley . . .	1804	1811	1837
„ James Laird . . .	1813	1819	1824

	Assistant.	Full	Resigned or Died.
Dr. William Back . . .	1819	1819	1840
„ Richard Bright . . .	1820	1824	1843
„ Thomas Addison . . .	1824	1837	1860
„ Benjamin Guy Babington . . .	1837	1840	1854
„ George Hilaro Barlow . . .	1840	1843	1866
„ Henry Marshall Hughes . . .	1840	1854	1859
„ George Owen Rees . . .	1843	1856	1873
„ Golding Bird . . .	1843	—	1854
„ William Withey Gull . . .	1851	1858	1866
„ Samuel Osborne Habershon . . .	1854	1866	1880
„ Samuel Wilks . . .	1856	1866	1885
„ Frederick William Pavy . . .	1858	1871	1890
„ Walter Moxon . . .	1866	1873	1886
„ Charles Hilton Fagge . . .	1866	1880	1883
„ Philip Henry Pye-Smith . . .	1871	1883	—
„ Frederick Taylor . . .	1873	1885	—
„ James F. Goodhart . . .	1877	1886	—
„ Frederick A. Mahomed . . .	1882	—	1884
„ Robert Edmund Carrington . . .	1884	—	1887
„ William Hale White . . .	1885	1890	—
„ George Newton Pitt . . .	1887	—	—
„ Leonard Charles Wooldridge . . .	1887	—	1889
„ Edwin C. Perry . . .	1887	—	—
„ Lauriston E. Shaw . . .	1889	—	—
„ John W. Washbourn . . .	1890	—	—
Mr. Francis Croft . . .	—	1725	1727
„ Andrew Cooper . . .	—	1725	1732
„ Robert Baker . . .	—	1727	1733
„ Hasel Craddock . . .	—	1732	1736
„ Samuel Sharp . . .	—	1733	1757
„ John Belchier . . .	—	1736	1768
„ James Pierce . . .	—	1744	1745
„ Joseph Warner . . .	—	1745	1790
„ Lewis Way . . .	—	1757	1773
„ James Franck . . .	—	1768	1783
„ William Lucas, sen. . .	—	1773	1799
„ William Cooper . . .	—	1783	1800
„ Thompson Forster . . .	—	1790	1824
„ William Lucas, jun. . .	—	1799	1824
„ Astley P. Cooper . . .	—	1800	1825
„ Charles Aston Key . . .	1821	1824	1849
„ John Morgan . . .	1821	1824	1848

	Assistant.	Full.	Resigned or Died.
Mr. Bransby B. Cooper . . .	1825	1825	1853
„ Thomas Callaway, sen. . .	1825	—	1847
„ Edward Coek . . .	1838	1848	1871
„ John Hilton . . .	1844	1849	1870
„ John Birkett . . .	1849	1853	1875
„ Alfred Poland . . .	1849	1861	1872
„ Thomas Callaway, jun. . .	1853	—	1857
„ John Cooper Forster . . .	1856	1870	1880
„ Thomas Bryant . . .	1857	1871	1888
„ Arthur E. Durham . . .	1861	1872	—
„ Henry G. Howse . . .	1870	1875	—
„ John N. C. Davies-Colley . .	1871	1880	—
„ Richard Clement Lucas . .	1875	1888	—
„ Cuthbert H. Golding Bird . .	1875	—	—
„ Walter H. A. Jacobson . . .	1876	—	—
„ Charters J. Symonds . . .	1882	—	—
„ William Arbuthnot Lane . .	1888	—	—

CHAPTER I.

THE PHYSICIANS WHO HAVE DIED SINCE THE COMMENCEMENT OF THE PRESENT CENTURY.

DR. WILLIAM BABINGTON.

THIS estimable man and excellent physician was born May 21st, 1756, at Portglenone, on the river Bann, in Antrim. He was apprenticed to a practitioner in Londonderry, but completed his education at Guy's Hospital. Through the influence of kind friends, he received in 1777 an appointment from Government as assistant surgeon at Haslar Hospital, and being in the course of his duty ordered thence to attend the prisoners of war at Winchester, among whom a malignant gaol-fever had broken out, he became himself the subject of it, and narrowly escaped with his life. From Haslar he was, after four years' service, recalled to London, and was appointed in 1781 apothecary to Guy's Hospital.

There is an entry in the office books saying that after a short time he had fulfilled the duties so satisfactorily that the Governors ordered him a gratuity of £50. Soon afterwards he was selected to assist Dr. Saunders in his lectures on chemistry. By the advice of his friends he purchased the valuable collection of minerals which had belonged to the Earl of Bute—perhaps the finest which existed at that time in England. On obtaining possession of this purchase, he proceeded to class the minerals and to catalogue them. His attention was thus drawn to the science of mineralogy, and he studied the subject so well that he was able to publish in 1795 a work entitled “A Systematic Arrangement of Minerals, Founded on the Joint Considerations of their Chemical, Physical, and External Characters.” On March 13th, 1795, he took his degree of M.D. at Aberdeen; in the course of the same year he was elected assistant physician to Guy’s Hospital, and in June 1796 became a Licentiate of the College of Physicians. He then commenced practice in Freemason’s Court, Cornhill, and in 1802 was appointed full physician to Guy’s. He had then for some time lectured on chemistry, in conjunction with Mr. Allen, and published “A Syllabus of Chemical Lectures,” which lectureship he now resigned. He removed then to Basinghall Street. His progress as a physician was rapid, and in the course of a few years he was in the possession of a large and lucrative city practice. In 1811 his private engagements had become so numerous that he resigned his appointment at the Hospital.

He still, however, took a great interest in scientific medicine, and assisted much in the support of the Medical Society, with his friend and neighbour Dr. Lettsom. In the well-known picture to which allusion has been made Dr. Babington may be seen standing quite at the back, on the right. In 1807 he again moved to a larger house in Aldermanbury. To this house were

invited a number of gentlemen distinguished for their zeal in the prosecution of mineralogical knowledge. "From such small beginnings," said a subsequent President, "sprang the Geological Society, and among the names of those by whose care and watchfulness it was supported during the early period of its history, that of Dr. Babington must always stand conspicuous." In 1822 he was the President of the Society, the "Transactions" of which contain several papers by him. In order also to promote the advancement of science, Dr. Babington was mainly instrumental in instituting in the neighbourhood of his residence a society called the Hunterian, for the purpose of founding meetings and discussions on medical topics. He also became a member of the Medico-Chirurgical Society on its foundation, and in the first volume of the "Transactions" (1809) will be found a paper by him on the vapour of burning charcoal. He was made a Fellow of the College of Physicians in July 1827, and soon after F.R.S. In 1831 he moved to Devonshire Street, Portland Place. It should also be mentioned that he belonged to another society, where physical training was the attraction; for Dr. Babington was a powerful man, and a good boxer and fencer.

In common with most physicians, he had been much harassed by the epidemic of influenza which began in London in March 1833, and was prevented by the demands made upon him from giving to his own case the repose and care which it required. On April 24th, although ill, he went out, and in the evening presided over a Pharmacopœian committee at his own house. He went to bed exhausted, and on the following day he had all the symptoms of pneumonia, and died on April 29th, 1833, in the seventy-seventh year of his age. His death elicited a universal expression of regret from all ranks of the profession, and the medical press, without

an exception, did itself honour by the eulogies that were penned to his worth. Dr. Munk quotes one of them as follows: "The character of Dr. Babington was probably as nearly without fault as is consistent with human nature. Benevolence was most strikingly depicted on his countenance, and it was also the leading feature of his mind. We allude not to mere sentiment or feeling, but to an active principle of philanthropy, which led him to do all the good he could to others: thus, we know that some of the last visits he ever paid, and at a time when he was himself suffering from the epidemic, were to persons whose circumstances prevented him from accepting any remuneration. No man in our profession was more extensively known, no man was more universally respected, none will be more sincerely regretted." History does not supply us with a physician more loved or more respected than Dr. Babington.

When, soon afterwards, Dr. Monro gave the Harveian oration, he paid a well-merited tribute to the memory of his old friend: "*Sagacitasque admirabilis, quo pluribus stipata virtutibus, eo amabilior; et sive hominis fidem spectatis singularem, si apud suos morum comitatem, sive denique apud omnes probitatem, neque in ullo unquam gratior enituit neque pulchrior.*"

Dr. Bright, in commencing his lectures at the College of Physicians, first spoke of the deceased Fellow: "He had such a sweet simplicity of character and so profound humility, that whilst thousands sought his aid as a pearl of inestimable price, he seemed unconscious of his own pre-eminence. He had such benevolence of heart as few have witnessed, an instinctive dread of inflicting pain and delight in doing good. He had so trained his mind to kindness, that a quick answer or an ill-tempered word was never heard to escape his lips. Sorrow always found sympathy in his heart, his hand was ever open to relieve, and the register of heaven alone contains his

daily acts of professional charity. In him was to be found an excellent example of that wholesome and yet comparatively rare combination of knowledge which unites our professional pursuits with the study of the natural sciences, which connects the physician with the philosopher; and thus he found time to gain a well-merited reputation not only as a chemist, but mineralogist and geologist, at a time when these were in their infancy. Such were a few of the characteristics of this truly great man, this almost perfect physician, who was an honour to our College and an ornament to our profession. No man ever passed more hours in the conscientious discharge of duty; no man, by his personal exertion, ever did more good. The comeliness of virtue will always be felt and acknowledged by all whose estimation is worth the good man's desire. With regard to our departed friend this has proved the case; for no man was ever more extensively beloved, no man's example has had more weight, to no one are we more indebted for supporting and exciting amongst us a high tone of moral feeling. Such is the man whom the good delight to praise, such the physician whom we deplore, and as long as the record of our profession shall exist, so long will his name be passed down as a bright glory on its pages."

Sir A. Cooper, speaking of his former colleague Dr. Babington, said: "He was the most disinterested of creatures, and the most delightful of men; I never knew so good a man. He had learned physic as apothecary at Guy's, and it was said that they had spoiled a good apothecary in trying to make him a physician. He was subject to frequent headaches, which deprived him of the power of pursuing his profession for a day or two at a time, and he told me the disease was incurable as far as he could learn from his own experience and that of others."

Dr. Babington's remains were interred in the family vault at St. Mary-the-Virgin, Aldermanbury, and a handsome monument by Behnes, with a full-length figure of the doctor in the academic gown of his degree, was erected by public subscription in St. Paul's Cathedral. The inscription recording his virtues and professional excellence is from the pen of Dr. Paris. Dr. Barlow, in his address to the students, after speaking of Sir A. Cooper, went on to say: "Go to the Cathedral of St. Paul's, the great national mausoleum, and there behold the monument of a not less distinguished man who, by diligent cultivation indeed of science, but by the no less diligent application of it to the advancement of medicine and the benefit of mankind, acquired the universal esteem and confidence of the whole community, and was so venerated by his professional brethren that they came forward at his death to erect the monument to his memory, lest posterity should lose the benefit of his bright example."

The bust of Dr. Babington in the library of the College of Physicians was presented to the College through their chairman, Dr. Paris, by the committee for raising the monument to his memory in St. Paul's.

The writer has in his possession a portrait in pastel which used to hang in the study of the late Benjamin Babington, and was regarded by him as a good likeness of his father. It was done by a well-known artist of the day, John Raphael Smith, in the year 1804. He holds in his left hand some mineral, and on the table are a blow-pipe, lamp, and capsule.

DR. CURRY.

JAMES CURRY was born in the north of Ireland, and graduated in Edinburgh in 1784. He first practised at Northampton, and then came to London, being

appointed assistant physician to Guy's in 1802. He was soon afterwards made full physician, and went to reside in Bridge Street, Blackfriars. He was one of the most distinguished physicians which the Hospital had had, being a man of good learning and mental capacity. We have before us a portrait of him done in pastel by Mr. J. Raphael Smith in 1804. He is a good-looking man with fine features, and beaming with intelligence. Dressed in wig, white neckcloth, and thick-rimmed spectacles, he has a remarkably "knowing" look. When Dr. Cholmeley succeeded him and published an outline of a course of lectures, he constantly quoted Curry, saying that the "doctrines of a physician of such pre-eminence, of such indefatigable zeal and ardour, of such acuteness of mind and brilliancy of talent, so great truthfulness of observation, should not be permitted to die with him." Dr. Curry was especially known by his partiality for liver disorders, declaring that they lay at the bottom of all diseases, and therefore calomel should be a universal treatment. Sir Astley Cooper said: "With Curry there was only one organ discussed—the liver; and only one medicine to be prescribed—calomel." He could not be corrected, for if one of his patients died and was examined, and Dr. Curry was told that no disease of the liver was found, he replied that he had cured it. Bransby Cooper says that a report prevailed that Dr. Curry sprinkled calomel on the meat of the sandwiches which he ate for luncheon, for he always believed he was labouring under a disease of the liver. South, in his Memoirs, says that when he went first to the Borough hospitals, Babington and Curry lectured at Guy's. Dr. Curry was a very different man from Dr. Babington, being a man of very extensive reading and observant habits. He handled his subjects thoroughly, discussed various theories of fevers, was fierce and uncompromising in his criticism of others,

but the whole of his treatment consisted of calomel, so that he was nicknamed "Calomel Curry." Dr. Cholmeley, who had great faith in him, confirms this, and even says that Curry believed acute hydrocephalus was owing to a disturbance of the liver; also that the proximate cause of hypochondriasis consisted in a slight and irregular state of the hepatic function. He also said that in many cases it was of no use giving quinine until the liver had been "emulged." In the library may be found a book entitled "Outline of Course of Lectures on the Practice of Medicine, delivered in the Medical School of Guy's Hospital, by William Babington, M.D., F.R.S., and James Curry, M.D., F.A.S., Physician to the Hospital, 1802-6," dedicated to Dr. Saunders, M.D., F.R.S., the first Institutor and still the kind friend and adviser of the Medical School of Guy's Hospital.

Bransby Cooper, in speaking of Curry, says he was a most eloquent lecturer and public speaker; indeed, his diction was always elegant and powerful. He resided several years with Dr. Babington, being an Irishman and known to his family. No two men were more unlike—the one all meekness, simplicity, and benevolence of disposition; the other irascible, peevish, and overbearing, but yet possessing an honesty of purpose, a strictness and integrity of conduct which could not but create an esteem towards him. He was a most eccentric person in some of his habits, one of the most peculiar of which was an almost monomaniacal tendency to visit auctions. Although penurious in some respects, he would purchase at these places quantities of books which he would never unpack, electrical apparatus, microscopes, globes, folios of prints, etc., and these, crowded together, would occupy parts of every room in his house. His form was diminutive, his frame attenuated, and his countenance indicated a temper soured by ill-health and habitual dissatisfaction. He

was frequently consulting Dr. Babington about the state of his health and about his worldly affairs. In spite of the general feeling as to Curry's liking for calomel, his work in which he advocated it was fairly reasoned out. It was entitled "Examination of the Prejudices commonly entertained against Mercury as beneficially Applicable to the greater number of Liver Complaints, and to Various other Forms of Disease, as well as to Syphilis," 1809. Several years before he had written a book entitled "Observations on Apparent Death from Drowning and Suffocation, with an Account of the Means to be Employed for Recovery." This was written at the desire of the Northamptonshire Preservation Society, and published at Kettering in 1792. A second edition appeared some years afterwards, for the use of the Royal Humane Society, and dedicated to the patron, the Duke of Kent.

DR. MARCET.

ALEXANDER JOHN GASPARD MARCET* was the son of a Swiss merchant, and born at Geneva about 1770. During the revolutionary period of 1793 he left Switzerland with M. de Saussure, the naturalist, and came to England, but returned to Geneva in 1794. Having publicly opposed the popular party, he was thrown into prison, soon after his return, together with M. de la Rive. They concerted a plan for escaping, and for pursuing their studies in Great Britain. Soon afterwards their friends procured the change of their sentence to five years' banishment. They went to Edinburgh in 1794, where they both graduated M.D. in 1797. Dr. Marcet then came to London, settled in St. Mary Axe, and married the daughter of a wealthy Swiss merchant,

* We are mainly indebted for this history to Dr. Munk's "Roll of the College of Physicians."

named Haldimand. He became Licentiate of the College of Physicians in 1799, and was appointed physician to the Carey Street and Finsbury Dispensaries. In 1807 he joined William Allen in delivering the lectures on chemistry at Guy's Hospital, and in 1809 he left for a time to take charge of the troops at Portsmouth which had just returned from Walcheren. In 1801 we find him reading a paper at the Medical Society on the "Use of Bismuth in Stomach Affections," and soon after joining himself with Dr. Saunders and Astley Cooper to found the Medico-Chirurgical Society, to whose "Transactions" he contributed many papers. In 1804 he was elected physician to Guy's Hospital, and remained in office until 1819, when he resigned. He was also elected F.R.S. and a Fellow of many learned societies on the Continent. In 1814 he returned to Geneva on the occasion of the declaration of independence of the city, and was warmly welcomed. He is said to have lectured there about the year 1820 with his friend M. de la Rive. In 1821 he returned to London, and then visited Scotland. He was preparing to go back to Switzerland, when he died of gout in the stomach on October 19th, 1822. His reputation is chiefly that of a good experimental chemist, as shown by his numerous papers in the "Philosophical Transactions" and other scientific journals. His only extended work was "An Essay on the Chemical History and Medical Treatment of Calculous Diseases." In this work are to be found, described and figured, many of the calculi now preserved in the museum of Guy's, and amongst these may specially be mentioned a beautiful bluish-green cystic oxide calculus, and a small calculus made up of a hitherto undescribed substance, which Dr. Marcet called xanthine. The present distinguished physician, Dr. Marcet, F.R.S., is the son of the subject of this memoir.

DR. CHOLMELEY.

HENRY JAMES CHOLMELEY was a native of Lincolnshire, and born in 1777. He was sent to Westminster School, and afterwards to Oxford, where he took degrees in arts and medicine. He was made Fellow of the College of Physicians in 1810. He died at his house in New Bridge Street, Blackfriars, in June 1837, aged sixty years.

Dr. Cholmeley was elected physician to the Hospital in 1811, and retained the office for many years. He gave the lectures on medicine, and in 1820 he published, with Babington, a book entitled "Outlines of a Course of Lectures on the Practice of Medicine." It was dedicated to Mr. Harrison as a tribute for the patronage bestowed by him on the school of medicine, and was written more especially to perpetuate the doctrines and teaching of his predecessor, Dr. Curry. We have always heard the name of Dr. Cholmeley spoken of by Mr. Stocker with great respect, especially as a good practical physician. His favourite medicine was the white mixture (the carbonate and sulphate of magnesia), and thus it was always known when Cholmeley had been round his wards by the commotion produced by the patients in getting in and out of bed. The usual form for stating that a patient was to go on or proceed with his medicine was to place the letter P on his card, meaning "pergat." One day, on the doctor going his rounds, and after seeing a woman who was taking his favourite medicine, he gave the order "pergat," whereon the latter exclaimed, "I will take no more of that nasty 'purgate.'" Like most of his contemporaries, he despised the stethoscope, and would have nothing to do with the new-fangled innovation. Surprise, therefore, was in every one's countenance when he one day came into the Hospital flourishing a

stethoscope ; he said he had bought one of the fashionable instruments, and, proceeding to the ward, placed it on the table, at the same time inserting a flower into the top of it and exclaiming "What a capital bouquet holder!" On leaving, he took it up and repeated the process in the next ward. It is somewhat amusing to inspect the medical journals at that time, and read the controversies which took place as to the use and value of the stethoscope. Many of them were serious discussions, others were of the bantering kind, and intended to throw ridicule on the instrument or to regard it as a method of quackery. For example, in the *Medical Gazette* for 1828 we read: "There is the stethoscope ready to soothe and to give the patient an easy and gentle decline ; let him but once feel its soft and gentle touch stealing over the seat of decay, and by a sort of magic influence drawing to itself the venom that lurks within, and he will rise like a giant refreshed." A Frenchman at that time related how he was first induced to listen to the sounds of the heart. One day, when he was taking leave of his mother, she laid his head upon her bosom and wept in an agony of maternal grief at parting with him, but her philosophic son was otherwise employed the while. He was struck with the distinct manner in which he heard the beating of the heart and the convulsive sobs of her breathing. He listened to her every sigh as illustrating the principles of acoustics : this, he assured his readers, was the origin of auscultation. We read in Sir Astley Cooper's Life that for some unknown reason Dr. Cholmeley was jealous of Sir Astley, and declared that the new School was fostered by him for personal motives. Sir A. Cooper, hearing of this, wrote thus to a friend: "Dr. Cholmeley, of Guy's, has had the impudence to charge me with acting interestedly in this affair. As soon as I heard of the charge against me, I had no hesitation

in making him retract his words or meet me. I therefore sent Mr. Morgan to him to tell him he must publicly withdraw his accusation in the theatre of the Hospital or meet me hostilely; and he fixed upon a Mr. Power to do what he thought right for him. Mr. Power said he thought Dr. Cholmeley was in the wrong and ought publicly to retract what he had said, to Mr. Morgan's satisfaction. Bransby read his recantation in the theatre, and thus a duel was prevented."

DR. LAIRD.

JAMES LAIRD. — There are no traditions whatever at Guy's Hospital concerning Dr. Laird, and therefore his must have been an uneventful life. The following is taken from Dr. Munk's "Roll": "He was born in Jamaica, and received his medical education at Edinburgh, where he graduated doctor of medicine June 24th, 1803. He was admitted a Licentiate of the College of Physicians March 31st, 1806, and was elected assistant physician to Guy's Hospital November 11th, 1813, and full physician in 1819. On January 14th, 1824, he resigned his office from ill health, and at the same time withdrew from the practice of his profession and quitted London. Eventually he settled at Bognor, and died about 1840."

DR. BACK.

WILLIAM BACK was not known as a scientific physician, nor was he connected with the teaching department of the School. He was always spoken of by Mr. Stocker and others who knew him as a good, practical physician, who did his work well. He occupied a house in St. Thomas's Street, and he had a good practice in the south of London. He is remembered by many as driving in an open carriage, sitting very upright, with a cape over his shoulders. He had a thin austere face

and a Roman nose. We do not know whether he was married, but it was said that the only living things to be seen in the house were his man-servant, housekeeper, and tame canary. He was a graduate of Edinburgh University, became a Licentiate of the College of Physicians in 1814, and was elected physician to Guy's in 1819. He subsequently went to live at Clapham, but came every morning to his consulting rooms in the Borough. He died at Clapham Park, November 6th, 1856, aged seventy-four.

DR. BRIGHT.

RICHARD BRIGHT was born at Bristol in September 1789. His father was a member of the wealthy banking firm of Ames, Bright, and Cove, and his elder brother, he being the third, subsequently represented Bristol in three parliaments. He was educated at Bristol, and in 1808 entered at Edinburgh University and commenced the study of medicine.

In 1810 Dr. Bright with Dr. (afterwards Sir Henry) Holland accompanied Sir George Mackenzie in his journey through Iceland, and contributed notes on botany and zoology, as well as other portions, to Mackenzie's "Travels in Iceland." Mackenzie acknowledges Bright's cheerful and ready exertion and undeviating good humour in the many cross accidents that befell the party. Several times the two medical friends were in imminent danger, and we cannot but be thankful that these lights of medicine were spared to do their life-work. Returning from Iceland, Bright's clinical work was commenced at Guy's Hospital, where he lived in the house of a resident officer for two years, a foretaste of the forty years' residence which he practically made within its walls. Astley Cooper was then in his best form, and young Bright was at once attracted to pathology and post-

mortem observation. At this early date he made a drawing of a granular kidney, one of the morbid conditions which he was afterwards to do so much to elucidate. In 1812-13 Bright was again a student at Edinburgh, and he graduated on September 13th, 1813, producing a thesis on contagious erysipelas. With the idea of graduating at Cambridge, he entered at Peterhouse, where his brother was a lay-fellow, but he only resided two terms, finding his studies impeded by college discipline. In 1814 Bright was one of the crowd of English voyagers upon the Continent, and made himself conversant with French and German, attending professional lectures, especially at Berlin and Vienna. In the spring of 1815 he travelled considerably in Hungary, and the result of his observations, for he was emphatically a true observer, was given to the world in his large quarto volume of "Travels from Vienna through Lower Hungary."

Meanwhile Dr. Bright, in the winter of 1814, had been studying cutaneous diseases under Dr. Bateman at a dispensary. On his return home through Belgium, about a fortnight after Waterloo, he saw many interesting cases of disease among the sick and wounded from the late contending armies. In December 1816 he was admitted a Licentiate of the London College of Physicians, and was soon after elected assistant physician to the London Fever Hospital, paying the frequent price of a severe attack of fever, which almost cost him his life. From 1820 we may date Bright's full entry upon his professional career, for he now took a house in Bloomsbury Square for private practice. His election the same year to the assistant physiciancy at Guy's Hospital led him to give up the Fever Hospital, and concentrate his attention on the work at Guy's. He became speedily noted for his diligent attention in the wards, and for tracing the causes of his patients' symptoms in the post-mortem room when they unhappily arrived there. For

many years he spent six hours a day in his beloved scene of investigation, and long afterwards, when private practice absorbed more of his time, he longingly looked back upon the past years of cheerful research and successful toil. His progress, well prepared for, was now rapid. In 1821 he was elected F.R.S.; in 1822 he began to lecture on botany and materia medica; and in 1824 he became physician to Guy's and lectured on medicine, in conjunction at first with Dr. Cholmeley, later taking the whole course himself. Some years afterwards Dr. Addison became associated in this lectureship, and the two famous men for many years upheld and raised the fame of Guy's by their copartnership. According to the annual custom of the College of Physicians to elect a Fellow from the Licentiates, Sir H. Hallford elected Bright, July 1832, with universal applause.

In 1827 Bright published his "Reports of Medical Cases," which at once made his name famous. These consisted of three quarto volumes, containing beautifully coloured plates painted by hand at a great expense. This work was too costly to permit further editions, and a copy of the original one is now of great value both on account of its history as well as its intrinsic merits. These Reports contained cases of cerebral disease and liver disease, but above all a full account of the morbid conditions of the kidney with which the author's name will for ever be associated. Bright further developed this subject in his Gulstonian lectures in 1833, and in a paper in conjunction with Dr. Barlow in the "Guy's Hospital Reports." In these lectures Bright spoke as follows: "I enlarge a little upon this topic—the indication of disease derived from an albuminous condition of the urine—for I am fully convinced that, however great may be the difficulties which present themselves in explaining the dependence of different symptoms and tracing

the links by which they are united, it is a fact that much important disease arises in connection with those derangements of the kidneys which lead to the admixture of albumen with the urine, a connection which had not until very lately been in the least suspected, and that while it has been the habit of practitioners to read in every sallow or leucophlegmatic countenance an indication of some derangement of the liver, the spleen, or perhaps the uterus, the real cause of the symptoms often has been overlooked; and even the anatomist has overlooked the most confirmed organic changes, and until the last five or six years there are scarcely three recorded instances of a disease which, now that it has been pointed out, fails not to show itself with the course of every month amongst the casualties of almost every hospital in the British dominions." This extract shows how thoroughly novel and original was Bright's discovery, but if any proof of it be wanting we may refer to the reviews of the time. One of them in the *Lancet* says: "Dr. Bright thinks that too little attention has been paid to disease of the kidney. To this point we call the attention of our readers, and hope that those physicians who are morbid anatomists will never open the body of a person who has died of dropsy without a careful examination of the internal structure of the kidney."

It is strange, indeed, that dropsy should have existed so long and its cause been undiscovered, and that renal disease as we now understand it should have been almost unknown. For more than a century before Bright's work was published, the occurrence of albumen in the urine of dropsical persons had been known, and cases had been noted where convulsions and blood-poisoning had occurred when the kidneys were found small and granular after death. Morgagni had described this character of kidney, and Dr. Blackhall had written a treatise on dropsy in 1813, but though he found the urine albuminous he

rarely went to the post-mortem room and examined the kidneys, which indeed, if inspections had been made, might often at that time have remained untouched. It was not, however, until Bright published his Reports that renal disease was considered an important malady. He first showed how to recognise it, and then described several varieties. He enforced the fact that, although in dropsy disease of the kidney was found, it was often met with, though under a very different form, where no dropsy whatever existed. He showed how in renal disease there was a failure in withdrawing from the system the urea and other products of waste, causing the blood to become poisonous, and often producing convulsions and inflammations at a distance from the kidneys.

It might be here mentioned that Bright's apparatus for testing was of a very primitive kind, being nothing more than a candle and spoon—in fact, the only instruments in use at the time when the writer entered Guy's. Bright describes the method in these words: "One of the most ready means of detecting albumen is the application of heat, by taking a small quantity of urine in a spoon and holding it over the flame of a candle. If albumen be present, you perceive before the fluid reaches the boiling point that it becomes opaque, sometimes presenting a milky appearance at the edge of the spoon, which extends inwards till it meets in the centre and then breaks into a white curd." He goes on to speak of the presence of phosphates causing opacity and the means of distinguishing them. He gives also other tests for albumen, such as oxymuriate of mercury.

Although Bright published nothing more in connection with renal disease, he still pursued his researches into the nature of the changes which take place in the kidney. It may be remarked that, at that time, the microscope was only just coming into use. In the same year in which he left the Hospital, 1842, he wrote an

interesting letter to the *Medical Gazette*, in which he says that, in connection with Mr. Robinson and Mr. Toynbee, he had been making investigations into the morbid anatomy of the kidney, and during the last few years had examined the injected kidneys of a hundred individuals. He says: "I have been able to trace out the gradual changes which the structure of the kidney undergoes during the successive changes of the complaint, and by the aid of engravings shall be able to show that some of the most interesting features in the morbid anatomy of the disease are to be found in the condition of the corpora Malpighiana."

There was scarcely a disease of the body to which Bright did not pay attention, as we may find by referring to his large work and to the "Guy's Hospital Reports." The monographs on abdominal tumours were collected together, and published in a volume by the New Sydenham Society. This is a proof of their ever present value. Probably the diseases in which he felt most interest were those of the brain, and a perusal of his cases will show the wonderful penetration he had into their nature, or rather the indefatigable industry he used in tracing them to their source. He also wrote good papers on sclerosis, hydrocephalus, apoplexy, etc.; but we will refer merely to his keen observations with reference to what is now called localisation of function. In his article on "Epilepsy from Local Disease," he says one means of diagnosis is "the degree of consciousness which is observed to be retained during the fits. The epileptic character seemed to point to the membranes and surface of the brain as the parts most affected; for of this connection I have pretty well satisfied myself by an extensive induction of facts and the circumstance of the right hand having suffered more than the right leg, and the speech having been affected directed my views to the posterior rather

than the anterior portion of the left hemisphere." In another place he says: "As far as I have been able to infer from my own observation, I should say that the organic causes of epilepsy connected immediately with the brain are more frequently such as affect its surface than such as are deep-seated in its substance. Slow changes producing a thickened condition of the membranes will not infrequently be found attendant upon epileptic attacks. Tumours pressing on the surface or amalgamated with the cineritious substance will also be found in cases of epilepsy." Bright published many more original and important papers, such as "Acute Atrophy of the Liver." His case was one of the first observed, and is accompanied by a drawing. He also read a paper at the Medico - Chirurgical Society in 1832, entitled "Cases and Observations connected with Disease of the Pancreas and Duodenum." It was written with special reference to the peculiar matter of the nature of adipocere, which he had observed in the excrement of three cases of disease of the pancreas.

What one is struck with in reading Bright's writings is that his powers of observation were almost phenomenal; for, as most men find it easier to theorise than to see facts, Bright's mind was peculiar in his ability to photograph objects without altogether seeing their meaning. Thus, in perusing his great work, there is nothing to indicate that Bright attached more importance to his cases of disease of the kidney than those of disease of the brain or other organs. He described his cases and there left them; thus, for example, his case of bronze skin, with destruction of the suprarenal capsules (now in the museum), is detailed without any comments. In this way he described and portrayed a pigmented brain in miasmatic melanæmia, condensation of the lung in whooping cough, the echinococci in hydatids

of the liver, and several other morbid conditions now well recognised.

In his early years, Dr. Bright's practice was not very extensive. He was disinclined to use any adventitious aids to popular reputation, and was content to pursue his scientific investigations. His publications on renal disease gradually attracted general attention, and the profession found him a most reliable and valuable consultant; so that in later years he commanded a first-class practice. He was, however, in no way a specialist. He retired from Guy's in 1843, and was made consulting physician. He had for some time resided at Saville Row, where he died on December 16th, 1858. The post mortem revealed disease of the aortic valves and an enlarged heart. The kidneys were healthy. This is here mentioned, as it has often been said that Bright died of the disease which he had made his own, as is usual with medical men. This was not the case in the present instance. He was buried at Kensal Green, and in St. James's Church, Piccadilly, there is a mural tablet to his memory. He married, first, the third daughter of Dr. William Babington—his only son by this marriage died young; and, secondly, a daughter of Mr. Benjamin Follett and a sister of Sir William Follett, who, with a family of three sons and two daughters, survived him. Of the sons, one was Dr. Bright, of Cannes; and another, the Rev. James Frauck Bright, the well-known historian and master of University College, Oxford.

Bright is described as having had a remarkably even temper and cheerful disposition, most considerate towards the failings of others, but severe in the discipline of his own mind. He was sincerely religious both in doctrine and in practice, and of so pure a mind that he never was heard to utter a sentiment or to relate an anecdote that was not fit to be heard by the merest child or the

most refined female. He was an affectionate husband and an excellent father, not only taking the most lively interest in the welfare of his children and in their pursuits, but never so happy as when he had them around him. He was perhaps better known abroad throughout the civilised world than any other British physician of modern times, and in his own country was particularly sought after by his professional brethren in cases of difficult diagnosis. His eminent position was fairly, though tardily, won by his thoroughly practical writings and great discoveries, and was sustained by his amiable manners, by his uniformly honourable conduct to his professional brethren, by his sound judgment and knowledge of disease, and by the pains which he took in investigating the most minute particulars of every case which was brought before him.

Dr. Barlow, in the preface to Bright's "Memoirs on Abdominal Tumours," remarks: "There has been no English physician—perhaps it may be said none of any other country—since the time of Harvey who has effected so great a revolution in our habits of thought and methods of investigating morbid phenomena and tracing the etiology of disease as the late Dr. Richard Bright. To those who have received the knowledge of the connection of dropsy, albuminous urine, and disease of the kidney, among the first rudiments of medicine, the facts which establish that connection may appear so simple and easily ascertained that the amount of labour, the accuracy of the observation, and the rigid adherence to the inductive method which characterised the whole of Bright's researches, may hardly have been suspected, still less adequately appreciated."

At the time of Bright's death the following eulogium to the memory of the great physician appeared in the *Lancet*: "The sudden and unexpected demise of Dr.

Bright has created a deep impression of grief and regret, such as only a sense of irretrievable loss could occasion. In him all feel that the medical profession of England has lost one of the most original, observant, and philosophic minds that have ever contributed to the glory and the usefulness of the body. A man of peculiar independence of thought, of high morale, and untiring energy, he has contributed more than, perhaps, any other to form the medical opinion of his day. With the acute application of truth which with him was almost an instinct, he was foremost to perceive that the progress of medical science must now greatly depend upon the successful study of pathological changes; and by the singular devotion to pathological investigation which characterised his career, he was at once enabled to accomplish investigations which have immortalised his name, while he gave a beneficial impulse to the whole science. The life-history of Richard Bright is one of unswerving energy of purpose and increasing labour."

DR. ADDISON.

THOMAS ADDISON was born in April 1793 at Long Benton, near Newcastle. He was descended from a family of yeomen who had resided for centuries at Lanercost, in Cumberland. In the Priory churchyard is seen the tomb of his uncle, Dr. Samuel Addison. His forefathers resided at the Banks, an elevated spot from which can be seen Carlisle and the country around; below it is the river Irthing, separating Lanercost from the Castle of Naworth. His father, through his wife's family, had an interest in a grocery and flour business at Long Benton, and here by chance Addison was born. It was by accident of birth he was a Northumbrian, but in blood and origin he always regarded himself as Cumbrian. It was at the Banks

at Lanercost where all Addison's interest was centred, and here his father died in 1823, and his mother in 1840. He often spoke of the place, with its delightful and romantic scenery; and being the site of the old Roman wall, many monuments and inscriptions were found there.

Addison received his chief education at Newcastle, where he obtained a masterly knowledge of Latin, and from there he went direct to Edinburgh to commence his medical studies. He took his degree in 1815, and then came to London to enter upon the practice of his profession. He first, however, obtained the appointment of house surgeon to the Lock Hospital, and this gave him a great interest in the specific disease there treated, on which he always considered himself an authority. He then went to live in Skinner Street, Snow Hill, and joined the Public Dispensary, where he studied skin diseases under Dr. Bateman. He consequently acquired a great knowledge of cutaneous diseases, and had he wished to take up a special line of practice, would no doubt soon have become famous in this department. As it was he was frequently consulted in obscure cases, and he was probably the first physician in London to give occasional clinical lectures on diseases of the skin. He became a Licentiate of the College in December 1819, but was not a Fellow until 1838.

He then moved to Hatton Garden, where he earned fifty pounds in his first year, in his second and third about a hundred, and this went on slowly augmenting. In 1820 he went to study at Guy's Hospital, but whether he entered himself as an ordinary student or not is uncertain. Very soon he attracted the attention of Mr. Harrison, the Treasurer, who appointed him assistant physician in 1824. This showed the Treasurer's discernment, for Addison had not been an original pupil, like the majority of the other

members of the staff. We see again how a beneficent despotism acted for the welfare of the Hospital. There were other candidates for the appointment, and amongst them we believe Dr. Seymour, well known for his good West End practice. He worked up great interest on his own behalf amongst the Governors, and actually got a recommendation from the King, William IV. Harrison, however, asserted the power which had been virtually vested in him by the Governors, and elected Addison. Showing the estimation in which Addison was held, Dr. Seymour sent his son some years afterwards to Guy's, in order to study under his former rival. In 1827 Addison was appointed lecturer on *materia medica*. Here his attractive powers were made evident by the large class he drew around him at a period when medical students entered for individual courses of lectures, and did not take, as a rule, the whole of their instruction at one school. He must have received between £700 and £800 from these lectures in some years. It was then felt that he was the man to sustain and increase the fame of Guy's.

In 1829 Addison published, in conjunction with John Morgan, surgeon to Guy's, an essay on "The Operation of Poisonous Agents on the Living Body." Strange to say, this was the first serious investigation in England into the phenomena of general poisoning. The authors believed that a direct influence on the nerve filaments distributed to the blood-vessels accounted for the rapid effects of some of these poisons. In 1830 Addison published a pamphlet on certain disorders of females, vigorously combating some received notions and objecting to the system of depletion. This well-written and interesting essay still deserves perusal.

In 1837 Addison was appointed full physician. He was then living in Spring Gardens, near Bransby Cooper. He was at the same time appointed joint lecturer with

Dr. Bright on medicine. They agreed to write a book on the "Elements of the Practice of Medicine," of which the first volume only appeared, and this was written by Addison. Valuable monographs came from his rich experience, especially on diseases of the lungs, in which he took particular interest. His essays on the "Anatomy of the Lung and Pneumonia," in 1837 and 1840, appeared in the "Medico-Chirurgical Transactions" and in the "Guy's Hospital Reports." Therein he demonstrated the mode of termination of the bronchial tubes in the air-cells, and how these were closely packed together; it being a mistake, therefore, to regard pneumonia as an inflammation of an imaginary parenchyma lying amongst them. He showed that the real seat of the inflammatory process was the air-cells themselves. In his paper in 1843, which he read before the Physical Society, he says: "There are probably some who remember the time and occasion when in this society, and in opposition to all existing authorities, I ventured to call in question the long-cherished notion that pneumonia had its seat in a supposed parenchyma of the lungs, and that the products of pneumonic inflammation were poured into the parenchyma. Since that time I have had the satisfaction of witnessing a gradual but comparatively rapid renunciation of the latter views, and the adoption of those advanced in this society so many years ago—viz., that pneumonia has its original and essential seat in the air-cells of the lung, and that the ordinary pneumonic deposits are poured into these cells. It is nevertheless true that some of our most recent authorities are opposed to this opinion, and maintain that the pneumonic deposits are poured into an interstitial tissue; a conclusion which I find myself unable to reconcile with either the healthy or the morbid anatomy of the lungs." Dr. Hodgkin had already accepted this view, and said "he agreed with

his friend Dr. Addison as to the seat of the disease to which the term pneumonia is applied ; that the major part of the deposit which occasions the increased weight and solidity of the lung is unquestionably poured into the cavities within which the inspired air is received—that is to say, into the air-cells themselves.” Showing the originality of these views, we may mention that a reviewer of Dr. Barlow’s “Manual of Medicine,” in 1856, said : “Dr. Barlow defines pneumonia to be *inflammation of the air-cells of the lungs*, a definition not only calculated to give erroneous ideas to the student, but certainly not correct. True pneumonia nearly all authorities we thought were now agreed in regarding as an inflammation of the *interstitial tissue* or parenchyma of the lungs, a view all but definitely settled by the experiments of Gendrin.”

As regards the chronic destructive diseases of the lungs, or phthisis, Addison was the great instigator and supporter of the view that the disorganising changes were due to inflammatory processes, whether tubercle was present or not, and that these changes were not due to the softening of tubercle, according to Laennec and his school. These doctrines were subsequently strongly upheld by Niemeyer, the translator of whose book on phthisis, Dr. Bäumlcr, says : “The views insisted on by Professor Niemeyer have almost to their whole extent been confirmed by the results of recent investigations. But the renewed study of the whole question has led also to more just appreciation of the works of former observers. In this country the labours of Thomas Addison, which had almost been forgotten, and which had remained entirely unknown on the Continent, have been brought to light again, and show that already at a period when Laennec’s teaching had just commenced to dominate over the pathology of lung diseases, an independent observer arrived at and firmly held the opinion which

in more recent times was established by Reinhardt, Virchow, and his disciples, and which forms the keynote of these lectures—namely that, to use Addison's own words, 'inflammation constitutes the great instrument of destruction in every form of phthisis.'” Addison also contributed valuable papers to Guy's Hospital Reports on the diagnosis of chest diseases; also an original paper, with Dr. Gull, on “Viligoidea”; and another on “Disorders of the Brain connected with Diseased Kidneys.” Although he wrote little on skin diseases, he was ever studying dermatology in order to perfect the collection of wax models made by Towne.

The achievement of Addison which will ever immortalise his name was his discovery of a disease of the suprarenal capsules, which slowly proves fatal by exhaustion accompanied by a general discoloration of the skin. This discovery has often been spoken of either as a kind of guess or due to some peculiar inspiration with which Addison was endowed; but so far from either of these suggestions being true, his memoir on the subject was the result of years of observation and painstaking. His book appeared in 1855 with a few but well-marked cases, so that by a candid and logical mind his conclusion could not be gainsaid. It may be mentioned that five years before this publication he read a paper on the subject at the South London Medical Society, a short account of which may be found in the *Medical Gazette* of March 15th, 1849. After giving a clinical history of the cases, the report goes on: “In three cases only was there an inspection of the body after death, and *in all of them was found a diseased condition of the suprarenal capsules.** In two of the cases no disease could be found in any other part of the body. Dr. Addison inquired if this could be merely accidental. It might be so, but he thought

* The italics are in the original.

not ; and making every allowance for the bias and prejudice inseparable from the hope or vanity of original discovery, he confessed that he felt it very difficult to be persuaded that it was so. On the contrary, he could not help entertaining a very strong impression that these hitherto mysterious bodies—the suprarenal capsules—might be directly or indirectly concerned in sanguification, and that a diseased condition of them, structural or functional, might interfere with the elaboration of the body generally, or of the red particles more especially. At all events, he considered that the time had arrived when he felt himself warranted in directing the attention of the profession to these curious facts.” Addison subsequently suggested that it might be the implication of the sympathetic nerves which produced the symptoms ; or, in his own words, “ We know that these organs are situated in the immediate vicinity and in contact with the solar plexus and the semilunar ganglia, and receive from them a large supply of nerves ; and who could tell what influence the contact of these diseased organs might have on these great nerve-centres, and what share that secondary effect might have on the general health and on the production of the symptoms presented ? ” Addison had not so precise an idea of the very special nature of the disease as we now have, for he associated it with “ idiopathic anæmia,” and he believed any disease which involved the structure of the organs might be productive of the symptoms. He himself styled the disease “ melasma suprarenale ” ; the term “ bronzed skin ” also came into use, and the term “ cutis ænea ” may be found in Oliver Wendell Holmes’s “ Poet at the Breakfast Table.” Addison’s discovery was by no means universally accepted. Large treatises in Germany and France were written in disproof of its existence. In England specimens were exhibited for years at the societies, and discussions took place upon them before

doubts ceased to be thrown upon its reality. Two or three papers read before the Medico-Chirurgical Society were not approved for publication, so that no record can be found in the "Transactions" of this remarkable discovery. Addison was deeply hurt at this, as he had not long before been president of the society. At Edinburgh, Hughes Bennett and other professors would not acknowledge the disease, but explained it away. It was different, however, in France, where Trousseau gave it the name of "Addison's Disease." The professor, after speaking of the propriety of calling diseases after the names of the discoverers, goes on to say: "C'est encore pour obéir à ce sentiment d'équité que je vous propose aujourd'hui d'imposer à la maladie dont un individu couché au No. 5 de notre Salle Sainte-Agnes nous a offert un remarquable exemple, le nom du médecin anglais qui l'a découverte. Ce médecin est le Docteur Addison, le collaborateur de Bright, le doyen des professeurs du Guy's Hospital à Londres, et depuis longtemps connu parmi nous par les travaux dont il a enrichi la science. Je propose donc d'appeler *Maladie d'Addison* cette singulière cachexie spécialement caractérisée par un discoloration ou plutôt par un coloration particulière, par la *teinte bronzée* que prennent les téguments et qui a valu à la maladie la denomination de *bronze disease*, sous laquelle le docteur Addison l'a désignée."

Upon the writings just mentioned will Addison's name in future years rest, but during his lifetime they contributed little to the reputation which he then enjoyed. This, which was very great, was entirely owing to the personal influence which he exerted on his pupils and others who came in contact with him. His original work on chest disease did not appeal to students, and his memoir on suprarenal disease did not appear until near the close of his career. The personal power which he possessed was the secret of his position, much superior

to what Bright could ever claim, and equal, if not greater, than that of Sir Astley Cooper. For many years he was the leading light of Guy's, so that every Guy's man during the thirty or forty years of his teaching, was a disciple of Addison, holding his name in the greatest reverence, and regarding his authority as the best guide in the practice of the profession. Addison was not learned in the history of medicine; whatever he said was his own, and his sayings were eminently practical. He was dogmatic in his teaching, and thus the pupils accepted as pure gospel every word which flowed from his lips. The force of his words was enhanced by his mode of delivery and by the presence of the man himself. Addison was of good height and well made, stood erect, with coat buttoned up very high, over which hung his guard and eyeglass. He wore a black stock with scarcely visible shirt collar, and this further elevated his head. He had a well-proportioned, good head, with dark hair and side whiskers, large bushy eyebrows and smallish dark eyes, nose thick, as were also the lips which enclosed his firmly knit mouth. His features were not refined, but belonged to a powerful mind, and showed no trace of any kind of sentiment. His penetrating glance seemed to look through you, and his whole demeanour was that of a leader of men, enhanced by his somewhat martial attitude.

It is not surprising that the students worshipped him, and feared him rather than loved him; in fact, many thought him unapproachable, and never became closely attached to him. Many a student felt aggrieved, when bidding farewell to his master, that he failed in reciprocating the pupil's painful feeling of separation. It can also be well understood how his practice but slowly advanced, and also the force of his remark that he depended on the profession for his patients, for the public would have let him starve. He certainly had

none of the sympathetic nature of the Babingtons, and belonged rather to the type of doctor who is ever trying to discover the derangement in a piece of machinery, rather than the one who regards his patient as a suffering, sensitive human being who has got out of the lines of health. It must be remembered that the dark and swarthy countenance of Addison denoted the melancholic temperament, and that it was only to some of his nearest friends that he disclosed some of the secrets of his life, his awful fits of despondency associated with some fearful circumstances which made him wonder that he was still alive to tell the tale. He declared that he was a misunderstood man, when he had been walking the streets at night to get rid of his depression. And it is very possible that in professional intercourse his disposition presented peculiarities often misrepresented by the observer: the latter might see what appeared to him a rudeness, a certain bluntness of expression conveying to him the idea of a haughtiness, or at least of Addison's assumption of superiority; so that he parted with him impressed with the dignity of his bearing, a full appreciation of the accurate and well-sifted opinion which he had obtained, but at the same time carrying with him the notion that, judging from Addison's apparently unapproachable manner and what seemed to him *hauteur*, he was a man of large esteem. This was misleading, and, as Addison himself declared, was a cloak for his nervousness. We know that to the last degree his mind was susceptible, and that, although wearing the outward garb of resolution, he was beyond most other men too liable to sink under trial. We lay some stress upon this peculiarity, for the purpose of vindicating his character from the reproach of being unamiable, with which he has been charged.

In a medical journal published some years ago there

appeared some scurrilous articles on some of our leading medical men, and, amongst others, Addison. The sketch may be regarded as a caricature, and written by one who intended to be hostile, but yet the exaggerated language will tend to show the impression which he first made. The writer says of Addison, "He is a fine, dashing, big, burly, bustling man, proud and pompous as a parish beadle in his robes of office. Dark, and of sallow complexion, an intelligent countenance and noble forehead, he is what the ladies would pronounce a fine man. He has mentally and physically a tall idea of himself. Every sentence is polished, is powerful; he prefers the grandiloquent. Slow and studied are his opening sentences, studied the regularity of his intonations. The advantages of his tall and graceful person are artfully employed to add to the favourable impression; his attitudes, tones, and manner are studied and systematic." We quote this because it gives fairly enough some of the characteristics of the man, but it will never be admitted by those who knew him best that these were assumed, or that he posed for effect. No one could ever fairly charge him with being anything but natural. In his professional life no character on record has presented in a higher degree the sterling, hard qualities of true professional honesty. We have never heard a single instance in which a word of disparagement against a professional brother escaped him. We remember that an unfortunate rupture occurred between him and another professor at Guy's, and on a certain occasion this gentleman's name was mentioned disparagingly by a person present. Addison at once stopped him by saying, "He is my colleague." That Addison was not deficient in kindness of heart or generosity of disposition, the writer can testify. One day, whilst Addison was going round the wards, he was requested to see a young man in the south of London. He answered that it was rather

out of his beat, and that Dr. Barlow, who practised in the neighbourhood, should be asked to go. It was then told him that the young man was a student, when he immediately said he would visit him. His first belief was that it was an ordinary remunerative patient, which of course the student was not. On another occasion, meeting an old student who had commenced to practise as a physician, Addison congratulated him on being made a Fellow of the College. His old pupil answered that, owing to temporary pecuniary difficulties, he was afraid he could not accept it. Addison took him by the arm, led him into the museum, took out a cheque, filled it up for fifty guineas, handed it to the young man, and would not wait for any written receipt or acknowledgment.

As a teacher, it is difficult to conceive a better. His lectures were of a very superior order, extempore, couched in good language, which amounted sometimes to real eloquence. The clinical lectures were most excellent, as he never failed to thoroughly unfold the case which he was discussing, and so, arguing both from positive and negative reasons, he placed the diagnosis on a sure foundation. His examination of the patient was of the most complete character; possessing unusually vigorous perceptive powers, being shrewd and sagacious beyond the average of men, the patient before him was scanned with a penetrating glance from which few diseases could escape detection. He never reasoned from a half-discovered fact, but would remain at the bedside with a dogged determination to track out the disease to its very source for a period which constantly wearied the class and his attendant friends. This laborious inquiry was also somewhat augmented by the fact that Addison was slightly deaf in one ear, so that he was constantly passing from one side of the bed to the other, in order that he might make use

of his best organ. This he did use with surpassing skill in auscultation of the heart and lungs. He felt vexed if he could not thoroughly make out a case, and would return to it day after day to perfect his diagnosis. He was accustomed to tell his class that when returning from the Hospital, or from a visit to a private patient, he revolved in his mind every possible condition to account for the symptoms. He was doing this once during the sleeping hours of the night, and was pondering over a case in the wards, when he remembered he had not examined the patient for hernia. There was no rest under such a thought, so he rose and dressed himself, took a cab, and went straight to the Hospital. Great was the surprise of the sister of the Clinical Ward to see Addison enter the ward in the middle of the night. If Addison could lay his finger on the seat of the disease, his victory was attained and his painstaking satisfactorily rewarded. To those who knew him best, his power of searching into the complex framework of the body and dragging the hidden malady to light appeared unrivalled; but we fear that the one great object being accomplished, the same energetic power was not devoted to its alleviation or cure. If he did not see his way to the use of a drug he would not give it, and thus committed an unpardonable fault in the eyes of his patients. We remember a medical man who had never met Addison, but wishing to do so owing to his growing fame called him in to an obscure case of abdominal disease. The doctor spent a long time in unravelling it, and pronounced it to be cancerous disease of the peritoneum. He discussed it with the patient's medical attendant, saw the friends, and was departing, when he was called back and reminded that he had not written a prescription. Addison asked the medical man what he was giving, and he said "magnesia mixture"; to

which Addison replied, "A very good medicine; go on with it."

Dr. Addison did not marry till some years after he was fifty. His wife was the widow of W. W. Hauxwell, Esq. The wedding took place in Lanercost Church, in September 1847. Mrs. Addison, who had two children by her first husband, survived Dr. Addison twelve years.

In the spring of 1860 Addison was compelled to retire from his hospital duties by a threatening of brain disease. He had recently removed from Spring Gardens to Berkeley Square, and then went to Brighton, for the benefit of his health. Here he died, June 29th, 1860, aged sixty-seven, and was buried at Lanercost on July 5th. A marble tablet in the chapel of Guy's Hospital records his merits, and one of the wards of the Hospital is named after him "Addison Ward." A portrait exists of him when quite a young man; it probably was not a good likeness, as very little of the characteristic features of Addison is seen. The bust in the museum, by Towne, is remarkably true, and portrays Addison's face and expression admirably. It was placed there by his colleagues in 1852. A few months before his death he paid his last annual visit to his ancestral home, and there he was met by his old friend Dr. Lonsdale, who afterwards wrote as follows: "I cannot help recalling my last day with Addison at Banks House, on the eve of his departure for London in September 1859. It was Sunday, the atmosphere clear and balmy, and the sun descending, when we walked upon the lawn in front of the family residence. Looking from this high position—one of the most picturesque and extensive views in Cumberland—Addison regarded it with intense delight, and, as if prophetically impressed with its being the *omega* of his home joys, exclaimed, 'What can be more heavenly than this!'"

DR. BABINGTON, JUN.

BENJAMIN GUY BABINGTON was one of the several sons of Dr. William Babington. He was born in 1794, and educated at the Charterhouse. On leaving there he entered the Royal Navy as midshipman, and was present at the battle of Copenhagen. He retired from the service and went to the East India College at Haileybury, and so passed into the Indian service, obtaining an appointment in the Madras Presidency in 1812. He soon became an accomplished Oriental scholar, and published an Indian grammar. After spending some years in the East his health began to suffer, and he returned to England. He went to Guy's Hospital, determined to follow his father's profession, and at the same time entered at Pembroke College, Cambridge. In 1825 he took his degree, and in 1831 became Fellow of the College of Physicians. His favourite subject was chemistry, and this he applied to the analysis of the blood and animal fluids. In a paper contained in Vol. XVI. of the "Medico-Chirurgical Transactions," he made the first analysis of the blood into red corpuscles and liquor sanguinis; the latter term, being quite original, at once came into use. He also wrote an article on "Morbid States of the Blood" in Todd's "Encyclopædia." He took a great interest in cholera, having seen much of this disease in the East. He gave a capital description of it, and more especially of the secondary fever and exanthem which sometimes accompanies it. He was one of the first who described this rash; some good wax models displaying its character may be found in the museum. He subsequently translated Hecker's work on "The Epidemics of the Middle Ages." On the death of Dr. Cholmeley in 1837, he was appointed assistant physician to Guy's, Dr. Hodgkin being also a com-

petitor ; and in 1840 he became full physician. Several papers of great interest by him may be found in the "Guy's Hospital Reports" on epilepsy and chorea. When the Epidemiological Society was founded, Dr. Babington was elected first President, and gave an excellent address, which was subsequently published. In 1865 he was a member of the "Contagious Diseases Act" Commission.

Dr. Babington was not only a highly intellectual man, but he was endowed with a remarkable facility in the use of his hands, so that in everything he was a good manipulator. He could draw and paint well, besides being a good sculptor. He also invented many and curious instruments for all kinds of purposes. Amongst others, he invented an instrument for seeing the throat. This was a small mirror attached to a wire and placed in the throat, and in order to throw a light upon it whilst the patient lay in bed with his back to the window, he used a small looking-glass. In connection with this instrument Dr. Hodgkin writes that, at the meeting of the Hunterian Society in March 1828, "Dr. Babington submitted to the society a curious instrument for the examination of parts within the fauces not admitting of inspection by unaided sight. It consisted of an oblong piece of looking-glass set in silver wire, with a long shank. The reflecting portion is placed against the palate, whilst the tongue is held down by a spatula, when the epiglottis and upper part of the larynx become visible in the glass. A strong light is required, and the instrument should be dipped in water, so as to have a film of fluid upon it when used, or the halitus of the breath renders it cloudy. The doctor proposes to call it *glottiscope*." Dr. Hodgkin also refers to it in a lecture as "the *speculum laryngis*, or *laryngiscope*, invented by my friend Dr. Babington in 1829."

Dr. Babington was a tall, dark, powerful-looking man, with a profusion of black hair. Although possessed of a great sense of humour and fun, he had not the vivacity of his father, who showed at once his Irish origin. He was more quiet and reflective, but he inherited all the good qualities of his father, such as his modesty, his kindness, his amiability. He had had a better education, and therefore his acquirements were greater, whilst he was not inferior in the goodness of his heart and benevolence. To what extent these virtues went can never be known, as his practice was large, and he made many visits quite unrequited by fees. After his death, Sir Thomas Watson made a eulogistic speech upon him, and more especially dwelt upon his manipulative skill: "Excelling in those things that require perfection of the senses, accuracy of eye, agility of limb, delicacy of touch, he was in sportsman's phrase a good shot, a skilful billiard player, and no mean modeller; nor were the higher gifts of poetry and music unknown to him, as he published an anonymous volume of verses, translated from different languages." One who knew him well wrote as follows: "Dr. Babington was universally beloved, for a more amiable and genial temper than he possessed could not be imagined. He was overflowing with fun and good humour, and his benevolence was carried to a fault. In common with his father, he had the most generous spirit. Every poor person received his commiseration. Like his father, he gave an immense amount of gratuitous advice, not at his own home ostentatiously, but by his kind visits to the needy. Like his father, he would remit fees if he discovered he had been impoverishing his patient. Although so large and unknown an amount of unrewarded advice is given by our profession, yet Dr. Babington's virtues in this respect were so remarkable that they formed a striking trait in his character, and his friends could no doubt

show that he had failed to enrich himself by his benevolence, and too often, perhaps, through the niggardness of those whom he benefited. In this respect he deserves a memorial, if it were for nothing else than his kindness of heart." It was not an uncommon thing to see some poor person waiting for Dr. Babington's arrival at the Hospital. He would then take him or her aside into a private room, and presently he would be seen emerging with a bottle to get filled with medicine from the dispensary.

His humour once cost him the subsequent friendship of a very able man, and the occurrence took place the first time we went round the wards with Dr. Babington. The patient was a chlorotic girl suffering from numerous ailments, the most striking of which was erythema nodosum. The student (a novice, and a very serious man) said, "How much of that, sir, depends on the stomach?" Whereupon Dr. Babington measured about an inch with his forefingers and said, "So much."

In 1854 Dr. Babington resigned his appointment at Guy's. This was partly due to an unpleasant disagreement between the authorities and the School, some new rules having been made restricting the students' entry to the Hospital to certain hours, and other harsh measures of which Dr. Babington disapproved. These were, however, soon afterwards abrogated. For some long time he had been troubled with vesical and renal troubles, and from these he died at his residence in George Street, Hanover Square, on April 8th, 1866, in the seventy-third year of his age, and was buried at Hanwell. His wife was Miss Fayle, who died before him, leaving three sons.

DR. BARLOW.

GEORGE HILARO BARLOW was the son of a clergyman living near Exeter, and was born in 1806. He was named after Sir Hilaro Barlow, a former chief of one of the Indian Presidencies. He commenced life in the navy, but, not liking the sea, he determined to enter the medical profession. His father therefore sent him to Trinity College, Cambridge, where he graduated in arts and medicine in 1829. He came to Guy's in 1830, and took his final degree in medicine in 1840. He was then appointed assistant physician, and became full physician in 1843.

Dr. Barlow being short in stature had nothing of the commanding appearance of his colleagues Addison and Babington; his manner, too, was retiring. His countenance, however, showed great power and intelligence; he had a large head and expansive forehead, with pleasing features, so that he soon won over those towards whom he had shown at first an apparent coldness. He was soon seen, indeed, to be a philosopher and a man of great intelligence and judgment, so that if he had had a little more "go" in him he would have surpassed many of his contemporaries in public fame; but he was modest to a fault. As a physician he was most careful and painstaking, but by no means held the current opinions of the day on many questions of pathology and treatment. This was especially the case in the matter of diseases of the heart, about which he held many original opinions. Several of his papers on this subject may be found in the "Guy's Hospital Reports," and are well worth perusal; some have reference to the causes and diagnosis of murmurs, others to enlargement of the heart in connection with Bright's disease. In his Gulstonian Lectures he described in a very philosophical

manner the association of a small chest with corresponding changes in the heart and lungs ; these showed how in the commencement of his career he could take a large and comprehensive view of morbid processes. He wrote also a most scientific article on the pulse, and another on the effects of pericardial adhesions ; also a very important paper on the laws regulating the development of tubercle, his conclusion being that its growth was in relation to the functional activity of the organs. Dr. Barlow was the first editor of the "Guy's Hospital Reports," and introduced the volume by a most philosophically written preface on the true method of studying medicine. He was also one of the first promoters of the Clinical Report Society, and became its President. He gave a learned and scholarly introductory lecture in the session of 1843. He was long associated with Bright in his work on the kidneys, and, with him, reported a large number of cases, together with most important clinical observations. These are to be found in the Reports for 1836.

When Mr. Churchill was seeking for an accomplished and experienced physician to write a manual of medicine, he selected Dr. Barlow. In this work is to be found a great store of knowledge and learning, but perhaps scarcely dogmatic or elementary enough to make it a good teaching book for students. It can be easily imagined that he had nothing like the following of Addison, whose dashing style and readiness attracted the mass of students ; Barlow, however, in his quiet and retiring manner, had a select and small class composed of the *élite* of the School. The superior men, anxious to work and gain knowledge, always sought out Barlow, as in him they found a congenial mind with whom they could converse over some of the more abstruse subjects in medicine. The majority naturally preferred Addison's *ex cathedra* style, writing down his remarks

in their note-books, never questioning their absolute truth; whilst the few preferred discussing points with Barlow, for whom they soon had the most profound admiration, when they discovered his learning, his judgment and his moral worth.

Dr. Barlow's consulting rooms were in Union Street, Borough, and his private residence at Sydenham. He had a considerable practice in the south of London, being much respected by the medical men in the neighbourhood for his high professional bearing and conduct. It would no doubt have been still larger had it not been for his wavering and hesitating manner, so that, although he would thoroughly investigate a case and talk it over with great judgment, he would hesitate as to the exact diagnosis, for the object of determining which he had been called in, and in the same way would hesitate to give a name to the complaint, which is always a desideratum to the patient's friends. Those who knew Barlow will call to mind his characteristic attitude, standing rubbing his hands, or rather continually folding them one over the other in a nervous manner, whilst he expressed his views on the case. This was often a scholastic exercise, and not appreciated by doctor or patient: the one wanting a definite diagnosis, and the other a name.

A friend, writing of him at the time of his death, said only a limited number of persons were cognisant of Barlow's merits. He was an example of integrity, of honour, and of all that a consultant should be; it would be difficult to find a more irreproachable character. His chief feature was thoughtfulness, called by most indecision. He could argue closely to the point, and so much the worse, thought some, for the subject, for when to a narrow intellect it had been all plain and clear, it came out of Dr. Barlow's hands with so many new bearings that it appeared as if he had

rendered it difficult and complex, and in this manner resulted that expression of his character which was considered by some indecision. No man could argue a subtle question better; he would see it in all its aspects, and thus ever failed in expressing a positive opinion on difficult subjects such as is so often delivered us by more hasty men. No better instance could be given of his turn of mind than the paper he read before the Hunterian Society on the pathology of cholera—a more thoughtful and more closely argued essay than the majority which have appeared on the subject, and perhaps for this reason unread and forgotten. He was the exact opposite of a hasty man, and his slowness of drawing conclusions corresponded with his physical constitution; he was of a languid temperament, was liable to dyspepsia and its attendant nervous affections, with a tendency to gout. On leaving the Hospital one afternoon to return home by train, he took cold, which resulted in acute pneumonía, and proved fatal in a few days. He died October 16th, 1866, aged sixty years, and was buried at Forest Hill. To the last he preserved the sweetness of his disposition, for he was never known to let fall a harsh expression or improper word. Placid and calm he pursued the even tenor of his way, a perfect gentleman in his manner and bearing to others, “wearing the white flower of a blameless life.” He married the niece of Dr. Babington, and she survived him some years. His eldest son was a clergyman, since deceased, and there were several other sons and daughters.

DR. HUGHES.

HENRY MARSHALL HUGHES was born at Ashford, in Kent, in the year 1805, and was articled to Mr. Prance, of Maidstone. He entered Guy's as a student in 1827,

passed the College and Hall, and then proceeded to Glasgow to obtain the doctor's degree. This he took in 1832. He then became a member of the College of Physicians, and commenced practice in the Borough. He obtained the appointment of physician to the Surrey Dispensary in 1836, and on the retirement of Dr. Back in 1840 was elected assistant physician to Guy's Hospital; in 1854, on the retirement of Dr. Babington, he became full physician. Dr. Hughes was devoted to his profession, and was a most indefatigable worker. At the time he commenced his medical studies the stethoscope was only coming into use. He became an ardent cultivator of auscultation, and was soon an authority on diseases of the lungs and heart. Several papers on these subjects were read before the Physical Society. He was certainly one of the best-informed men of his time as regards the physical examination of the chest when he was elected assistant physician; to this he owed the greater part of his consulting practice. He naturally wrote a book on the subject, which was entitled "Clinical Introduction to the Practice of Auscultation, and other Modes of Physical Diagnosis." This was very good at the time it was published, although long since superseded. Many medical men now living can testify to Hughes' enthusiasm whenever he had a good case of chest disease in the wards, and how persevering he was in making sure that the students thoroughly understood the merits of the diagnosis. Should there be any hesitation, he would take hold of the student's head and force it down on the patient's chest, until he felt satisfied that a particular sound was heard. He was thus regarded as one of the best clinical teachers at Guy's, and indeed he had few equals in the pains he bestowed on his patients and the students. Beside articles on chest diseases, he wrote a capital digest of a large number of cases of chorea, a paper which is still consulted in

reference to statistics. He also read a good paper on a peculiar form of fever then raging in the neighbourhood, and especially amongst the Irish who were coming to London to escape the famine. This was indeed the "relapsing fever," then unknown to him by that name.

In appearance Hughes was rather small and slightly built, his manner was very quick and irritable, and he talked usually in a high shrill voice. This irritability was in part due to a great affliction, which he had almost all his life—a chronic universal eczema. It varied in intensity—at times being so bad that he was obliged to be invalided. He took various remedies, but all without success. Arsenic he pronounced as perfectly useless. To his patients with similar complaints he gave pitch pills, and an external application of tar ointment: this he declared was the best treatment. His long service as assistant physician was a constant annoyance to him; so that he could not hide his delight when he was made full physician in 1854. He started at once a new carriage. In this year he was Censor, having been a Fellow of the College since 1844. Owing to his affliction he remained unmarried, and no doubt his solitary life made him a little more irritable and peculiar. He was always regarded as a little eccentric, both in person and manner. He was given to a light necktie and dress coat, with very short lavender-coloured trousers, showing white stockings and shoes; he walked quickly, was fussy in his habits, and argued points of diagnosis with his colleagues, and especially with Addison, in an irritable and excitable manner, making gesticulations all the while. This description is not intended to be ill-natured, but as characteristic of the man, for Hughes was generally liked and much esteemed for his integrity and high professional conduct. When at the height of success, his skin disease became more intense, he developed purpura, and died of hæmatemesis on October

21st, 1853, at the age of fifty-three. A friend writing of him then said: "If it be of any comfort to his aged father, who survives him and is now at the age of eighty-two, and to his large circle of relatives and friends, let them dwell upon the knowledge that he has passed through life as a Christian gentleman; that as a physician he stood high in his profession, and adorned the same; that he lived and died esteemed by his colleagues, beloved by his friends, admired by his pupils, and regretted by all."

DR. GOLDING BIRD.

GOLDING BIRD was the son of a gentleman holding office in the Inland Revenue Department, and was born at Downham Market, December 9th, 1814. He was educated at Wallingford in the house of a clergyman, and there obtained a considerable knowledge of botany, together with much other learning. He entered Guy's as a medical student in the year 1832, where his intelligence and industry obtained for him numerous prizes, as well as the Apothecaries' Company's medal for botany. He took this Company's licence when he was twenty-one years of age, and at the same time (1836) was appointed lecturer on natural philosophy at the Hospital. In 1838 he took his M.A. and M.D. degrees at St. Andrews, became physician to the Finsbury Dispensary, and lecturer on the practice of physic at the Aldersgate School of Medicine. In 1840 he became Licentiate of the Royal College of Physicians, and four years later was elected Fellow. In 1843 he was appointed assistant physician to Guy's Hospital. In 1839 he had brought out "Elements of Natural Philosophy," a work which had a wide circulation and went through many editions, the last being edited by Mr. Brooke. He gave lectures at the College of Physicians on the blood, and on electricity and

galvanism, and about the same time was elected Fellow of the Royal Society.

He began practice in the house of his father in Wellington Square, and afterwards moved to Myddleton Square. Some years later he removed to his final residence in Russell Square. Personally, Golding Bird was a man of middle height, and of a singularly delicate conformation: no man could have worked harder under such trying physical disabilities. When young he had rheumatic fever with endocarditis, and often spat blood. He was always more or less crippled from chronic rheumatism, so that he alighted slowly from his carriage, and then shuffled along in a stooping posture as if in pain. But with all this constant suffering his energy and power of work never left him; for besides all the subjects just mentioned on which he had written, he now undertook to analyse all the calculi in the museum, and soon after published his well-known book on "Urinary Diseases." He communicated several papers on these affections to the medical journals, and considerable controversy went on in connection with the various conditions he had described, more especially the presence of oxalates in nervous or hypochondriacal persons. He also published many papers in the "Guy's Hospital Reports," amongst the most original being one on the treatment of disease by electricity, for Bird was the founder of the electrical department of Guy's Hospital. He was mainly instrumental in rescuing the subject from the domain of quackery, and placing it on a scientific basis. He invented a new galvanic cell and coil, and discussed with much acuteness and originality the power of the battery in healing an ulcer, a subject further elaborated by his son, the present surgeon to Guy's. As much discussion has of late taken place with respect to the invention of the flexible stethoscope, it may be mentioned that Bird gives an account of the

instrument in the *Medical Gazette* for December 5th, 1840. We well remember the instrument. It was about eighteen inches long, with a cup-shaped piece at one end to apply to the chest, whilst the other was inserted in the ear. Bird would sit in his chair seeing out-patients, and placing the funnel end over the chest, he would hold it there whilst he passed the other end to the students standing round, and by this means all heard the same sound. It was a most convenient instrument for Bird himself, as it prevented him from stooping or making much movement of his stiffened limbs. A question arose as to his priority in the invention of this instrument, and Dr. Burne, of the Westminster Hospital, maintained that he had used a similar one for years. It is probable that such an instrument might have been made, although this was unknown to Golding Bird, for we find in the *Lancet* for August 1829—more than sixty years ago—an account of a flexible stethoscope by Dr. Comins, of Edinburgh, and also a suggestion for a double one, but he does not say that he had actually used the latter. Golding Bird, after giving up the natural philosophy course, assisted Mr. Johnson in his botanical lectures, and subsequently succeeded Addison in materia medica. He was a capital lecturer, being fluent and impressive, as well as using good and graceful language. Dr. Clarke says that at the Medical Society he was a prominent and effective speaker. He never knew any man who could at once bring out his knowledge to bear upon the point in dispute as Bird could. It was a remarkable gift, and gave him great power and influence in debate.

We cannot do better, in setting forth the character of Dr. Golding Bird, than quote from the biography given in the *Lancet*, and from a short account written by Dr. Balfour, of Edinburgh, on his personal and religious life. Speaking of his work at the Hospital and of his practice, it is said: "A path was thus opened for his indomitable

energy ; he left nothing unheeded, no hour unemployed. Each day had its appointed work : the early morning saw him attending to the sick poor who thronged to his house, his private professional engagements and literary labours engaged him until evening, and many hours of the night, and too often the entire night, were passed in unbroken study. Soon his reputation extended ; success never stayed but only stimulated labour ; he worked on, and the effect of so much mental toil soon became apparent. The youthful aspect which for some brief time barred his advance into practice, was quickly replaced by the first indication of that failing health which in a few short years was to carry him to an early tomb. It was at that time that he was, on walking home from Guy's one night, attacked with slight hæmoptysis, and although he never afterwards presented any symptoms of pulmonary disease, yet from that time he always looked upon his health as too feeble to promise length of years. The conviction never depressed him, but probably caused him to devote every hour of his life to the still harder pursuit of medical knowledge. He never went into society, scarcely ever allowed himself a week's repose, but when the signs of an exhausted brain became too evident to be overlooked, his only relaxation was a temporary attention to the lighter studies of botany, natural history, and electricity. But such resources were insufficient ; they relieved his mind by change of thought, but they did not bring it repose. His already weak constitution became more enfeebled, and in this powerless state he was after slight exposure to cold attacked with acute rheumatism, complicated with endocarditis. His convalescence was slow, and long interrupted by frequent attacks of palpitation. As soon as he could do so, he again adopted his old course of work. His practice daily increased, until, in 1850, he was obliged to leave Myddleton Square, his reception rooms

being too small to contain the patients who flocked to him for assistance. He removed to Russell Square, and his engagements continued to increase, until in the last year, when compelled by illness to retire from practice, his income was little less than £6,000 a year. During this time he had given lectures at the College of Physicians, published three editions of his 'Natural Philosophy,' composed his work on 'Urinary Deposits,' and all this before he had attained his thirty-ninth year. Robust health had scarcely been adequate to labour such as this, and his feeble powers gave frequent and certain indications of rapid exhaustion. Often during the last three years he had been compelled to seek repose by visits to the country, notably to Tenby, where he interested himself in all the objects of nature around him; but no sooner did he find himself free from suffering than he at once returned to London and to labour. He was obliged soon to retire from the Hospital, and finally left practice in June 1854, and took a small estate near Tunbridge Wells. After a time he became better, but he always carried with him the expression of physical suffering shown by his attenuated frame and shrunken, bent form. The action of his heart became distressing by regurgitant disease of the aortic valves. Then hæmaturia occurred, and an impacted calculus with pyelitis were the next links in the chain which dragged him to the grave. He died in October 1854."

The author of his biography in the "National Dictionary" speaks of Golding Bird as a remarkable instance of intellectual precocity. His foible was perhaps ambition, which led him to overstrain his powers in the twofold object to obtain a large practice and also to make a name in science.

Dr. Balfour says: "Lastly, we must speak of him as one not only eminent in science, but eminent in piety. Religion with him was not a holiday garment to be

exhibited on great occasions, to be publicly displayed or degraded by subserving to professional advancement. It influenced him through life, and when his health yielded beneath the pressure of bodily suffering, it so sustained and comforted him that no word of complaint, no murmur either in sickness or on his bed of death ever escaped him. Words of thankfulness and hope, of reliance on divine mercy, proved the contentment of a mind which remained undisturbed and happy to the last moment of life."

Golding Bird was deeply interested in the religious welfare of the students; he called them together at his house, and thus was formed, we believe, "The Christian Medical Association."

CHAPTER II.

THE PHYSICIANS WHO HAVE DIED SINCE THE COMMENCEMENT OF THE PRESENT CENTURY (continued).

AFTER the decease of Golding Bird, thirty years elapsed before another death took place on the medical side of the Hospital staff; but during the last few years the history of Guy's shows a continued loss. Not only have such masters as Owen Rees and Gull disappeared from the list of the consulting staff, but some of the most brilliant and solid men Guy's has ever produced have been cut off while in the plenitude of their intellectual powers. In the following pages we attempt to tell the tale, but no record can express the grief that fell upon colleagues and students, old and young, as physician after physician passed away. Fortunately the recuperative energy of the School has proved able to survive these repeated shocks, and to call to its aid fresh talent, which bids fair to fully sustain its traditional reputation.

DR. OWEN REES.

GEORGE OWEN REES was born at Smyrna in November 1813, where his father was British consul, being also a Levantine merchant, and married to an Italian lady. Owing to the circumstances of his birth, Owen Rees knew something of Greek and Italian, besides being a fair French scholar. On Mr. Rees' return to London,

he met with great business losses, and went to live in the Clapham Road, in which neighbourhood Owen went to school. It may be noted that his uncle, belonging to the firm of Longman, Rees, and Co., rendered him assistance in his education. Subsequently the family of Rees moved to Guilford Street, Russell Square, and here in after years the son commenced practice.

In 1829 he entered at Guy's Hospital as an apprentice to Mr. Richard Stocker, the apothecary. In 1836 Rees went to Paris, and afterwards to Glasgow, where he graduated in the year 1837. The Rees family, it may be stated, were Unitarians, and many of their most intimate friends belonged to this body, whilst Owen's mother was a Roman Catholic. There can be little doubt that, owing to his father's failure, a very heavy pressure was put upon him in the care of the family, and it is thought by many of his friends that it was this burden which caused him to remain unmarried. His mother, sisters, and a brother lived with him for many years. All these are now dead, leaving, we believe, only one surviving member of the family, Josiah, the present Chief Justice of Bermuda. After he took his degree, Rees commenced practice in Guilford Street. He subsequently removed to Cork Street, and finally to Albemarle Street.

After entering at Guy's it was soon seen that Rees' bent was towards scientific work, and especially chemistry. At this time animal chemistry was in its infancy, and therefore what he did was both important and original. He attracted the attention of Dr. Bright, who requested his assistance in the analysis of the secretions in diseases of the kidneys, and in this way a life-long friendship arose between them. The analyses which he then made were quantitative as well as qualitative, demonstrating the actual amount of albumen and urea poured out in a given quantity of secretion. He proved the presence of

the latter substance in the blood in many cases, a fact which created much interest at the time, as may be seen by the controversy which took place on the subject between him and two other rising young men, Mr. Brett and Mr. Golding Bird. The correspondence may be found in the *Medical Gazette* for 1833. In 1836 he published a little book entitled "Analysis of the Blood and Urine in Health and Disease," then quite a new branch of inquiry deserving the attention of the student. In it he described the methods employed in the analysis, and how fibrin and the red globules were separated and examined.

In a paper published in the "Guy's Hospital Reports" for 1838, he showed how sugar could be obtained from diabetic blood, for hitherto its presence had been doubted; and in 1841 he, together with Mr. Samuel Lane, made some very careful microscopical and chemical observations on the blood-corpuscle. He subsequently prosecuted his researches as regards urea, and discovered its presence not only in the blood, but in the milk and other secretions. In many cases, however, of Bright's disease he failed to find urea in the blood, and could discover none in the subjects of puerperal convulsions, where Lever had previously found the urine albuminous.

In February 1842 a paper was presented to the Royal Society by Dr. Roget, secretary, on behalf of Dr. Rees, entitled "On the Chemical Analysis of the Contents of the Thoracic Duct in the Human Subject." The fluid, which amounted to six drachms, was obtained from a criminal executed at Newgate, an hour after his death, and Dr. Rees made a chemical and microscopical examination of it. The paper will be found in the "Transactions" of the Society.

It may be here mentioned that in the year 1842 Rees was physician to the Northern Dispensary, and in 1843

was appointed assistant physician to Guy's Hospital, and in the following year was elected Fellow of the College of Physicians.

In the Gulstonian Lectures for 1845 Rees again took up the subject of the blood. He described the nucleus of the red corpuscle as seen in some of the lower animals, and suggested that the white corpuscle had a close relationship to the lymph and pus globule. In his various lectures Rees lays great weight on what he calls animal extractives, which are found in the urine after the usual ingredients have been separated.

In the year 1847 Dr. Rees communicated a paper to the Royal Society "On the Function of the Red Corpuscles of the Blood, and on the Process of Arterialisation." His theory was that the corpuscles of the venous blood contained fat in combination with phosphorus, and this was acted on by the oxygen.

Dr. Rees also wrote in the year 1850 a treatise on the nature and treatment of disease of the kidneys connected with albuminous urine, and in 1850-51 he gave the Lettsomian Lectures at the Medical Society. Another work, "Calculous Disease and its Consequences," consisted for the most part of his Croonian Lectures for 1856. He therein endeavoured to disprove the existence of the diatheses as given by Prout founded on an excess of particular ingredients in the urine. In his work on calculous diseases he alludes to the cystic oxide or cystic calculus discovered by Wollaston, and refers to the beautiful specimen in the museum of Guy's, semi-crystalline in structure and of a greenish hue. This body Dr. Wollaston called cystic because it was formed in the bladder, and oxide because it was soluble both in acids and alkalies; but Rees considered the name objectionable, and adopted the term cystine. In the year 1856 he became full physician to the Hospital.

In the "Guy's Hospital Reports" will be found

numerous papers by Owen Rees relating to the chemical analyses of various organic substances, amongst others the fluid of a milky ascites which he pronounced to be chyle ; also an analysis of the bones in mollities ossium, where he found the animal matter in large excess over the earthy.

It is well known that Rees proposed the treatment of acute rheumatism by lemon-juice, and gave it in very large quantities. He was able to show very favourable results in numerous cases, but unfortunately for its reputation a like success can be found to accompany various other remedies. Rees wrote the articles on lymph, chyle and milk in Todd and Bowman's "Cyclopædia of Anatomy and Physiology," and these remained authoritative for many years. His chemical knowledge was not only employed for clinical work, but was occasionally required for public purposes. Rees was thus constantly associated with Dr. Alfred Taylor in important criminal investigations—notably in the trial of Palmer for the murder of Cook by strychnine in May 1856. He also joined Taylor in editing Pereira's large work on *materia medica*.

Having now made mention of his scientific work, we may turn to more personal matters. Amongst Rees' oldest friends was Dr. Roget, secretary to the Royal Society, author of the "Thesaurus of English Words and Phrases" and of the "Bridgewater Treatise," who now proposed him for the Fellowship, to which he was elected on February 2nd, in the year 1843, for the good work he had done in animal chemistry. He was then brought under the notice of Sir Benjamin Brodie, who was subsequently President. This distinguished surgeon, being asked to name a young scientific physician to take charge of the new prison at Pentonville, as many hygienic questions referring to food, exercise, clothing, solitary confinement, had to be

investigated, immediately named Rees, who held the appointment for many years. It was his experience at this place which gave him his marked facility in "spotting a gaol-bird" when he came as a patient to the Hospital. Rees thus became acquainted with the other members of the Brodie family, as well as with Mr. Charles Hawkins, Sir Benjamin's biographer. In the year 1859 Rees was appointed Censor of the College of Physicians, and Senior Censor in 1863. At Guy's Hospital he lectured on the Practice of Medicine from the year 1856 to 1873. In this year he resigned his physicianship.

Personally Owen Rees was small in stature and slightly built. He was agile and active, and in his prime could do a good day's shooting. His delicate-looking frame, however, caused him to be regarded by his friends in London as fragile, and not able to cope physically with the rough usages of the outside world. There was a certain amount of truth in the belief, for he would not of late years walk if he could drive; but this might be due in part to the fear of soiling his clothes, for he was very fastidious in his person, and would never have entered a drawing-room in soiled boots. He always dressed well, it might be said smartly, and in his younger days was called a "dandy." He was given as a rule to light trousers, bright waistcoat and necktie, with drab overcoat. His boots always presented a bright polish, and his hat preserved a marvellous freshness. This last article of attire produced the most marked impression of Rees on the mind of a gentleman who happened one day to be visiting the wards of the Hospital with him. He says he shall never forget the awful imprecations poured on the head of an unfortunate patient who happened to touch Rees' hat. These particulars of the outward man are mentioned on the principle that the vestments in a manner characterise

the individual. His clothing showed that he was always moving in the upper and more refined circles. One never heard Rees relate his experiences, as so many physicians do, amongst the courts and alleys of St. Giles or Clare Market, and similar wretched districts. The out-patients at the Hospital were quite low enough for Rees, and to these he was not attracted. It was no doubt owing to his highly sensitive nature that he had an antipathy to all things disagreeable. He had a horror of bad smells, and though his professional duties obliged him to come in contact with them, he avoided them as much as possible. He naturally disliked the post-mortem room, and if a clinical case required his inspection of the body, his visit would be short and sometimes not extend beyond the door, where he would stand for a few moments with ears open but with fingers to nose. After his visits to the Hospital, however, a change of coat and a good washing of hands in the sister's room, first with oatmeal and then with plain water, would soon fit him for a good appearance in the outer world. His spare habit made him very susceptible to cold, so that in winter he always wore a fur-lined coat, and wrapping himself up in this he would sink into the corner of his carriage and be lost to view. The green brougham, however, was always recognisable, as well as the green livery and rubicund face of the coachman. Rees said he never could lecture unless the thermometer reached a certain height, and lately the lecture room attendant has confessed that when the thermometer ran low he would warm it up with his hand or a lamp to raise it to the doctor's standard.

Owen Rees was a well-educated man; he was a fair classic, and had a good knowledge of modern languages. He had picked up some colloquial Greek, but never studied it, so that in after years, when he tried to speak it, a friend observed that his pronunciation was

good, but his grammar was execrable. His acquaintance with chemistry and natural philosophy was in his younger days much beyond the average. He had an aversion to low and ignorant persons, and always cultivated good society. He was fond of pictures, did a little painting himself, and made the acquaintance of many artists at the Athenæum. Although learned he was not pedantic, and had no respect for a man who had no common sense. He once said, in an audible whisper, of a gentleman who was making a long speech, "That man is the most learned fool of my acquaintance." With all his sensitiveness and irritability, he was not a passionate man, unless his ire was roused by some unprofessional act of a brother practitioner. His wrath then seemed to have no bounds, judging from the voluminous vocabulary of unpleasant words which would flow from his lips. He was naturally kind-hearted, and being a thorough gentleman in his feelings, would never do any act to offend another person. We have never heard of Rees behaving in any but the most courteous manner to all his professional brethren. This explains what he meant when the word "etiquette" was once mentioned in his presence, and he denounced the word and assigned it to everlasting perdition, saying he never understood its meaning. He intended no doubt to express the opinion that if true gentlemanly feelings exist in one's breast, no rules are required to regulate the conduct. This was quite true as regards himself, for his own innate sentiments towards others were sufficient to guide him in the path of rectitude and honour. That this was fully appreciated by others is evidenced by the fact that his name was often mentioned as a probable future President of the College.

Outwardly light, airy, and brisk, Rees was the same in his mental attitude. Although he had severe family troubles, he tried to take life easily and gaily. After

seeing his private patients at home, he would proceed to the Hospital, where he was most regular in his attendance, but was probably too rapid in his rounds. In the session would come his lectures, which he was never known to prolong, but would rather take advantage of the striking of the clock (which was always too fast) to bring them abruptly to an end. In the afternoon he visited his private patients among the upper classes, and then returned home to dinner. After this his rule was to proceed to the Athenæum Club, where he might be found every evening, in the smoking-room, enjoying his cigar. He was often the life of the circle, as his conversation was at times brilliant. If ever there was a question as to some movement, Rees was twitted with the remark that "he would do the right thing." This was apropos of his speech to a well-known offensive person, who was canvassing for his election into the club. When asking Rees for his vote, the latter said, "My dear sir, be sure I shall do the right thing"; whereupon the candidate let it be everywhere known that Rees was his friend.

Though convivial and a gourmet he was a small eater; he was particular in his food and his wine, also in the character of the cigar which he invariably smoked. He was a member of the St. Alban's Club, one composed of the *élite* of the profession, and here as at other societies he was always greeted with welcome. His merry laugh, his repartee and humorous speeches were always delightful, for Rees was essentially a humorous man. This was seen in his expression,—his long face and long upper lip told it before he spoke. His memory was good, and he had a fund of good stories, besides being always ready for any occasion that might arise. When a well-known obstetric physician came to London to practise, a dinner of greeting was given to him, and

Rees on behalf of the company held out the right hand of fellowship. He wound up his discourse by declaring that the guest would find himself quite at home, for they would greet him in language with which he was most familiar, "Welcome, little stranger!" On another occasion, when dining with him, the conversation turned on aristocratic connections and high birth, when Rees defied any one in the room to be able to boast of as noble a family as himself. He then related how in remote times a Welsh ancestor of his was beheaded. The company yielded the palm to Rees, all agreeing that such a mode of punishment indisputably proved his title to nobility. Owen Rees' father, we might add, came from Pontardawe, Glamorganshire.

From what has been said of Owen Rees, his character and habits, it may be imagined that a doctor's life was not congenial to him. This feeling he often expressed, and many of his friends remember his lamenting his father's wish that he should enter the medical profession. His own inclination was towards the Bar.

In the beginning of 1886 Dr. Owen Rees was seized with a slight attack of left hemiplegia, but he soon recovered, and took a short holiday in the country. He afterwards relapsed into a very weak condition, and during the last year of his life seldom went out; his appetite was of the smallest, and he became excessively emaciated. His old friends and colleagues—Messrs. Brodie, Aikin, Pollock, and Cock—as often as he came to town, constantly visited him; but it was the son and married daughter of his old friend Mr. Spurgin to whom he was indebted for all his last comforts. Mrs. Simond took him to her house after he left Albemarle Street, and it was at Mr. Spurgin's house at Watford, where he had gone only a few days before on a visit, that he had a fatal attack of

apoplexy on May 27th, 1889, when he was in his seventy-sixth year. He was buried in the family grave at Abney Park Cemetery.

SIR WILLIAM WITHEY GULL, BART.

A remarkable man, in some respects the counterpart of Sir Astley Cooper, his equal in the confidence he inspired in his patients and in the confidence he had in himself, unsurpassed for the skill with which he played alike upon the minds of patients and patients' friends, possessed of a fortune hitherto unheard of in the annals of medicine, whose career was one which is all the more striking from the comparatively humble circumstances out of which he arose.

William Withey Gull was born at Colchester, on the last day of 1816, and it was soon after his birth that his parents removed to Thorpe-le-Soken, where his childhood was spent. His father, who was a barge-owner and wharfinger on the river Lea, in Essex, died when William was ten years old. The village school afforded his first scholastic experience; but his mother's care, aided afterwards by the instruction of the Rev. Shadrach Seaman, gave him his real start in life. It is perhaps not surprising, when we consider his father's avocation, that young Gull should have wished to go to sea, but circumstances occurred which determined his course towards the medical profession. His classical training was greatly helped forward by the Rev. Mr. Browell, rector of the neighbouring village of Beaumont; but Gull has often been heard to say that his real education was given to him by his mother, to whose careful training he owed much of his future success. This is confirmed by a relative of the rector, who remembers well Gull's mother, declaring that she was one of nature's gentlewomen, and had a sweet

face and manner. She used to come to Beaumont Church constantly in Quaker-like costume, driven in a cart by one of the two very nice daughters who accompanied her, and the rector had a great regard for them. What first brought Gull and Mr. Harrison, the Treasurer of Guy's Hospital, together, is not very clear, but it is most probable that, as the Rev. Mr. Browell was nephew of Mr. Harrison, it was in one of his visits to Beaumont that Mr. Harrison first heard of Gull. The story which Mr. Shattock, the old hospital clerk, used to tell, was that Mr. Harrison went down to Beaumont to see his nephew, and that on alighting from the coach he was directed by young Gull by a near path to the village. Mr. Harrison being much struck by the youth's intelligence, made further inquiries about him when arriving at the rectory. Another story was that Gull was simply sent up by Mr. Browell to his uncle with a letter of introduction to procure him a situation.

However this may be, Gull came to London in 1834, and was sent by Mr. Harrison to Mr. Abbott's School in Grange Road, Bermondsey (Mr. Abbott was the well-known friend and correspondent of Faraday), as an usher. He is well remembered by Dr. Daniel Hooper, who was a pupil at the school, and who says Gull was then about eighteen. He often went to Guy's to see his patron and attend lectures on chemistry and elementary subjects, besides reading Celsius and Gregory, the books prescribed for medical students. Mr. Abbott afterwards went to Lewes, taking Gull and his scholars with him. He was there a short time, and then came up to Guy's to enter as a regular student, in 1837, under the patronage of Mr. Harrison, who then used the words so often quoted by Gull in later years: "I can help you if you will help yourself." Gull at once began to display that remarkable intelligence, assiduity,

and power of work which were his great characteristics through the whole of his life. He gained prizes, as will be seen by the Hospital records, in ophthalmic surgery, midwifery, and other subjects. In 1841 he became M.R.C.S., and in the same year he took his degree of M.B. at the University of London, obtaining honours in medicine, surgery, and physiology. In 1846 he proceeded to the M.D., and was awarded the gold medal for his commentary on medicine. About this time he had rooms fitted up in a house at the corner of King Street (now Newcomen Street), where the porter's lodge stands. He acted as tutor, and held various subordinate appointments to which small salaries were attached, which enabled him to live. Then he was assistant to Mr. Stocker; therefore one of his duties was to go round the wards daily and see the urgent cases. In this manner was laid the foundation of that great experience which he was afterwards seen to possess. He was also made physician to the Lunatic Ward, and appointed to the post of librarian. In 1843 he gave some lectures on natural philosophy, in succession to Dr. Golding Bird. The Treasurer subsequently offered him the house in St. Thomas's Street, at the corner of the quadrangle, afterwards occupied by the chaplain, and here he commenced to practise. From the very beginning his manner was winning, for a medical man in the Borough, who by chance called him in to see a patient, never afterwards deserted him, because, as the medical man told the writer, Gull always gave satisfaction. In this house he married, in 1848, the daughter of Colonel Lacy. Dr. Gull had scarcely recovered from the shock he experienced at the death of a previous *fiancée*, whose father was so attached to him that he left him a considerable legacy, when an old friend and fellow-student, Dr. Lacy, invited him to his wedding. Gull went reluctantly,

but there met Dr. Lacy's sister and his future bride. When he left the Borough he moved to Finsbury Square, and there Mrs. Gull had several children. Two or three died of diphtheria, to the great grief of their parents, leaving a son and daughter,—the former the present Sir Cameron Gull, Bart., and the latter married to Dr. Acland, son of Sir George Acland, of Oxford.

Hitherto there had been no lecturer on physiology at Guy's, the subject being associated with anatomy, but in 1846 Gull was appointed to the chair, and held it for ten years. He was also chosen Fullerian Professor at the Royal Institution, in the years 1847-9. In 1848 he became a Fellow of the Royal College of Physicians, in 1851 was appointed assistant physician to the Hospital, and in 1858 full physician. In 1856 he left the chair of physiology to join Dr. Rees in the course of practice of medicine. It may also be mentioned that Gull was the first graduate appointed on the Senate of the University of London, and from 1871 to 1883 sat in the Medical Council. At this Board he was opposed to the Apothecaries' Company taking rank amongst the qualifying bodies of the country. He admitted that it had done the work well which had been entrusted to it; but now that the Colleges of Physicians and Surgeons had combined to give a complete qualification, the Apothecaries' Company should drop out, or, as he expressed himself in his usual aphoristic manner, "The road to medical knowledge is through the Hunterian Museum, and not through an apothecary's shop." He was also made F.R.S. and LL.D. of Oxford and Cambridge.

The principal event of Gull's life was his attendance on the Prince of Wales during his severe attack of typhoid fever. It has been more than once said in biographies of Gull that he was called in owing to his having made a special study of typhoid. In all

probability the mistake was made from the fact of Sir W. Jenner being an authority on the subject. The truth is that the Prince of Wales, being taken ill at Sandringham, sent for his local doctor, Mr. Lowe, and then telegraphed for Sir Oscar Clayton. The latter sent for Dr. Gull, and shortly afterwards Sir William Jenner was also summoned. It is well known that we are indebted to the latter for the first clear exposition of the disease, and its characteristic distinctions from typhus. At Guy's the two diseases were associated under one name—common continued fever—and in this light were lectured upon by Bright and Addison. The other physicians also held to the same view; so when Jenner's papers first appeared they were criticised by Gull adversely, and it was not for some time that he admitted their correctness. After the Prince's recovery Gull was created a baronet and appointed his physician and Physician Extraordinary to the Queen.

Amongst Gull's medical works, one of his earliest and most important efforts was the Report on Cholera, in conjunction with Dr. Baly. This contains a large amount of valuable information relating to the pathology and treatment of the disease. His other contributions to medicine are mostly in the "Guy's Hospital Reports," the most valuable and original of which are those on diseases of the spinal cord. It was constantly lamented that Gull did not pursue this work, as the pathology of the cord was then only in its infancy; and it is remarkable to see the care with which Gull must have made the sections displaying degenerative changes in the several tracts before microtomes and staining agents were in vogue. The work which is perhaps best known to the medical world is that which he undertook with the late Dr. H. G. Sutton, in order to show that morbus Brightii is not a local and primary disease

of the kidney, but one of a more general nature and having its pathology mainly in degeneration of the vascular system, to which they gave the name "arterio-capillary fibrosis." Another subject which caused much discussion in the profession, and was propounded by the same authors, was the expectant treatment of acute rheumatism. This was called "Gull's treatment of rheumatic fever by mint water," in consequence of its being the only thing in the pharmacopœia which the patients took. Being dissatisfied with the treatment of this disease by so many remedies, he wished to try the effect of abstinence from all medicines, and to satisfy the patients' minds he ordered mint water.

From whatever point of view Gull is regarded, he remains one of the foremost men of mark of his time. When in practice, there was no one whose opinion was sought for with greater eagerness, and when obtained more relied upon, than Gull's. This was due to his extensive and thorough acquaintance with every subject in medicine, gained by his indefatigable industry when a young man, aided by his natural acumen, which gave him wonderful powers of penetration. Yet this was not sufficient to ensure him success, as these qualities were possessed by Addison and others; but he had besides a personal power or influence over his fellow-creatures such as few men can lay claim to. This belonged to him, and was a part of his nature, quite irrespective of his professional surroundings. At his own dinner-table he would command the attention of the whole company by some clever little speech, and we have heard a young lady declare that when Gull was on a visit at her house, her conversation with him was the most striking event in her life. It was so with the pupils, who eagerly followed his words and were much impressed with his sayings. Not many years ago, we heard an old student of Guy's descant on his beautiful lectures, and especially

those on fever. On being questioned as to what Gull said which most struck him, he said he could not remember anything in particular, but he would come to London any day to hear Gull reiterate the words in very slow measure, "Now typhoid, gentlemen." With his patients this influence was unbounded; many went to see him to have a talk for whom he never prescribed medicine. When once they had seen him they remained steadfast, and seldom repaired elsewhere. When Gull left the bedside of his patient and said in measured tones, "You will get well," it was like a message from above.

It is well known that many popular doctors have possessed this personal power without having any pretence to much medical knowledge. But Gull not only had all the characteristics which render a man popular, but at the same time had a thorough and comprehensive acquaintance with medicine as a basis for his action. We often meet with the thoroughly scientific man who may pass through life almost unknown, and another man, with the most superficial knowledge, gain a great name by his personal manner. Gull possessed both the science and the art, and thus carried all before him.

Gull was much amused one day, going down St. Thomas's Street, on being addressed as the Rev. Mr. Spurgeon, although the resemblance between the two men was not very evident. Of late years, the general remark was his likeness to the first Napoleon. His dark hair was combed straight over his brow, beneath which shone his expressive eyes, and below his firmly closed lips. It is noteworthy that these two men had in their different spheres a remarkable personal power over their fellows. This natural gift of Gull's strengthened with years, but whether in any way cultivated has always been a matter of opinion, and perhaps he himself could not have settled the question. As a matter of fact, it was this remarkable power, to which a great part of

his success was owing, that was also the cause of all the professional troubles which fell to his lot. Whether intentional or not, his superiority, which made itself felt by patients, often contrasted strongly with the manners of others, and the contrast was not altogether congenial to those professional brethren who were on an equal footing with himself. It was not often perceived by general practitioners, to whom he was always courteous, nor by pupils, who adored him. From his habit of speaking authoritatively, he would forget that others possessed an *amour propre* besides himself, and thus some very trivial act or word might lead to most painful results. In a well-known case, which long occupied the professional and public mind, the cause of the quarrel seemed of the most trivial character. It was nothing more than that Gull asserted, before a coroner's jury, his ready discernment of the nature of the case, and forgot to associate the name of his colleague in the diagnosis; and yet no one was more distressed than Gull, during the investigation of the charge of unprofessional conduct made against him, to have it thought that he had any enmity against his friend, declaring that he would do anything to serve him. Gull was indeed paying a penalty for his own greatness, which made him a little egotistic, and which had the effect sometimes of placing others in an inferior light. It was this egotism, repeated on other occasions, which brought upon him the few professional troubles which he had in his otherwise most successful career. Trivial as these appear now, the events spoken of became public property, and therefore cannot be overlooked in writing the history of Sir William Gull.

His force of character is that which a biographer most dwells upon, and the following story may be given in illustration. The circumstances are well remembered by the writer, but the particulars were given to him at the time by Dr. Bealey, late of Harrogate, who accompanied

Gull on the expedition which we are about to relate. When he was assistant physician, and interested in Addison's discovery, a young man (Charles W.) was admitted into the Hospital with all the symptoms of suprarenal disease. As he was gradually getting feebler, and it was evident that he would not live long, he was taken home to his father's house, some distance from London. Gull kept himself informed, through a local practitioner, of the further history of the case, and when he heard of the young man's death set out one morning with his friend to make a post-mortem examination. On entering the house and stating the object of his visit, he was at once met by a repulse, and was absolutely refused permission by the father to make an inspection. Gull talked in his most persuasive manner, but without effect. He then sat down, as if determined not to leave the house. After an interval he spoke to the man, saying he should feel sorry if the latter broke his word, seeing it was clear that he was sworn to a refusal. Under these circumstances Gull said he would ask his permission no more, but go upstairs and do the little operation he wanted. The man said nothing to him, but told an old woman who was present to follow the doctors upstairs to see that they took nothing away. After the usual incision, the capsules were taken out and found to be characteristically diseased; whereupon Gull took out a bottle from his pocket and put them into it. The old woman looked at him with amazement and said, "You are surely not going to take that away; what will Mr. W. say?" Gull looked at her and replied, "He will say nothing; I came down here on purpose to fetch this away. I shall not tell Mr. W., and surely you will never be so foolish as to do so." She looked aghast, spoke not a word, took her fee, and Gull returned to town with his well-earned prize. The preparation and history are in the museum.

Gull took the widest and most comprehensive view of the medical man's function. It was his duty to look into the patient's organisation and temperament to discover the cause of the ailment, and treat the case accordingly. He had the greatest hatred of the charlatanism which has a remedy for every malady, and therefore was conscientiously opposed to the homœopathic system of affirming the existence of a medicine for every symptom. He once showed the writer a note-book in which cases were recorded, and he said how strangely this would be regarded by any one who did not unravel its meaning. For example, "Name, Mr. —; disease, loss of favourite dog; treatment, Isthmus of Suez." The explanation was, that a gentleman of no occupation came to him complaining of his wretched state of health, and Gull soon found on conversation that his mind had been much worried by the loss of his favourite dog. Gull saw he wanted some distraction, and as just at that time all the world was hastening to Suez to inaugurate the opening of the Canal, he advised his patient to go there. But it was not penetration only which Gull possessed, but endurance. It was ever being remarked with what deliberate care he went over every case, as if that particular one was his sole charge for the day. On the occasion of a consultation, he was asked into the drawing-room prior to his entry to the bedroom of the patient, who was not quite prepared for the doctor's visit. After waiting some little time, he took out his watch and looked at it. A lady present remarked, "Sir William, you are in a hurry!" To which he replied, "No, madam; I am not in a hurry, but I cannot wait." Of the same kind, also, is the following: on being accosted as the "fashionable physician," he replied, "No, the physician in fashion."

Stories are extant referring to Gull's discernment and epigrammatic speeches. As regards the former, he had

great power in distinguishing real disease from the imaginary and hysterical ailments. A lady (Mrs. A.), a highly neurotic woman, had been known to Gull for many years as subject to a great variety of nervous troubles. On one occasion, when very ill in the country, she had all the doctors in the neighbourhood to see her, when at last Gull was sent for to explain the case. After seeing her he said to the other doctors present, "I know Mrs. A. well; there is nothing the matter with her, but at present she is Mrs. A. multiplied by four." His dealing with this class of persons was most excellent, and in one case gained the confidence of a hypochondriac where every other physician had failed. The patient, like all of his class, wished doctors to believe in his different ailments, and at the same time would have been alarmed if he had been informed that there was anything the matter with him. Gull at once saw his frame of mind and said, "You are a healthy man out of health." He asked the writer why other doctors could not have told him that before.

A young man belonging to the upper classes, and whose intemperance was marked on his face, failed in consequence to get his life insured at a particular office. He was indignant, and wished to know the cause of the refusal. He said he had long known Sir W. Gull, and was sure he could get a good certificate from him. He then brought from Sir William the following form thus filled up: "Life good, but might be injuriously affected by the use of stimulants, if his habits should become or continue intemperate"; and a certificate as follows: "I beg to state that I this day made a medical examination of Mr. A. C., and excepting a disordered condition of stomach and liver, which may be corrected and its recurrence prevented by a strictly abstemious regimen, Mr. C. is free from disease."

His caution, too, is shown in his reply to the Duchess

of Cambridge, when she asked him what his politics were, and he said, the same as the Queen's—"colourless."

A lady much out of health, and having palpitation of the heart, believed she had disease of this organ, and consulted various physicians accordingly; at the same time telling them of the unheard-of trials and worries she had undergone. They were all agreed that she had nothing the matter with the organ on which her whole thoughts were concentrated. She was dissatisfied, and determined to go to Gull. On her return home she said he at once perceived her ailment, for he said to her, "Madam, you have a tired heart." There was also a great sense of humour in many of Gull's sayings. A friend related one day, with great gusto, the particulars of a consultation with Gull over the case of a very old dowager in her second childhood. In a mumbling voice, owing to her being toothless and having nothing but gums to show, she inquired what she should do about eating and drinking. Gull whispered in his friend's ear, "Shall we order her a wet nurse?"

Gull was very fond of old and quaint literature, also of the poetry of former days. At one time he was full of George Herbert, and at another time of his contemporary, Vaughan. We met him once when he was in the Miltonic vein, and the quotation he made in reference to a lady friend was most apposite. She had died in childbed, and there was a question as to the skill displayed in her medical treatment, when Gull exclaimed:—

"But whether by mischance or blame,
Atropos for Lucina came."

Although Gull's was an eminently scientific mind, he was fond of discussing philosophical questions; he never felt content with what is the materialistic view

of the world around us, and he would dip into the mystery of things and always maintain there was much beyond our ken. He first felt an interest in mental philosophy and metaphysics when reading for the M.D. degree, and at that time was in the habit of holding long conversations with the Rev. F. D. Maurice, the chaplain. His wide and philosophical treatment of medicine and the allied sciences may be seen in two very noteworthy essays—the address at the British Medical Association and the Harveian Oration. In writing to his friend Dr. Hooper, he refers to the death of Moxon, and adds: “We look through a glass. Spencer and Maudsley are earnest students, but they and all of us are apt to think our views are equal to the whole realities, but they are only equal to what they are equal. I can only teach as one of the older scholars in this great school. To me life in all its phases seems but a revelation of more than it seems, and demonstratively so when I see that the moral law dominates the physiological laws. Hence suicide; hence the law of duty and the high sacrifice of life to it; hence heroes and martyrs; hence the backbone of daily life in the home and in the work. I would rather believe in Moses and the Prophets than in the demonstrations of science and logic as thus far exhibited.”

Sir W. Gull had had two or three short illnesses before the one which was the commencement of his fatal malady, but at this time he was well and enjoying himself in Scotland, near Killiecrankie, when he was seized with slight paralysis of the right side and aphasia. This was in October 1887. He recovered in great measure and returned to London, where he remained for some months comparatively well. Friends who then saw him did not discern much difference in his looks and manner, but he said he felt another man, and gave

up his practice. He subsequently had three epileptiform attacks, from which he rapidly recovered, but on January 29th, 1890, he was suddenly seized with an apoplectic attack, fell into a state of coma, and gradually passed away.

He was buried, according to his wish, at Thorpe-le-Soken, in the churchyard of his native village, beside his father and mother, on February 3rd, 1890; and was followed to the grave by the President of the College of Surgeons, Sir James Paget, Sir Henry Acland, and numerous friends and old pupils. He left a fortune of £344,000, unprecedented in the history of medicine.

His son, Sir Cameron Gull, wishing to perpetuate his memory at Guy's, has founded a studentship of pathology which is worth about £150 per annum.

DR. HABERSHON.

SAMUEL OSBORNE HABERSHON was born at Rotherham in 1825, where his father was an ironfounder; and was educated at Brampton and at Ongar, in Essex. After leaving school he was articled to Mr. Pye-Smith, of Billiter Square, in the City, and during his pupilage attended lectures on botany at the London Hospital Medical School, gaining a silver medal as first prize at the end of the session. Habershon entered at Guy's in the year 1842. He was at once distinguished as a young man of remarkable application and industry, but it was scarcely known with what resolution and method he applied himself until he went up for the first M.B. examination at the University of London, when he came out first in all subjects, with two exhibitions and three gold medals. When he subsequently set to work at more professional subjects, it was with like success, for at the second M.B. examination in 1848 he gained two more gold medals, with

the scholarship in medicine. In the following year he went with Dr. Wilks to Paris, in order to see the practice at the French hospitals, and whilst there saw the famous physiologist Bernard perform for the first time his experiment on the rabbit for the production of artificial diabetes. Their stay was short, owing to the presence of cholera in Paris, and on his return Habershon was seeking for a practice when Mr. Aston Key fell a victim to the prevailing epidemic of cholera. Promotion then took place amongst the junior members of the staff, leaving a vacancy in the dissecting room, which was naturally offered to Habershon as the most distinguished student of the School. This demonstratorship he held for five years in conjunction with the younger Callaway. In 1851 he took the degree of M.D., and after two years became demonstrator of morbid anatomy and curator of the museum. At that time he also became physician to the City Dispensary, but was obliged to resign it after two years. He had, however, so endeared himself to the patients and others that a handsome testimonial was given to him. He had already started in practice in Finsbury Circus. In 1854 he was elected assistant physician to Guy's, and then left his former appointments for the chair of *materia medica*. In 1866 he became full physician. From the year 1873 he gave the course of medical lectures in conjunction with Dr. Wilks, and in these as well as clinical lectures he went steadily on instructing the students until the year 1879, when, in consequence of disagreements with the governors of the Hospital, the senior physician and surgeon were requested to resign. Shortly afterwards a reconciliation took place, and the request was withdrawn; but both Dr. Habershon and Mr. Cooper Forster felt deeply what had occurred, and determined to resign when their clinical lectures came to an end in November 1880.

Here we may quote from Dr. Goodhart's brief reference to this subject in the "Guy's Hospital Reports" for 1889: "The resignation of Dr. Habershon and Mr. Cooper Forster was not only unhappy in the occasion of its announcement, but an error of judgment for which they obtained a good deal of credit with many to which they were not entitled. It is no unkindness to say that neither Dr. Habershon nor Mr. Cooper Forster, good men as they were in their respective lines, was versatile in his gifts; and they were but little suited for steering themselves or others through a time so critical for Guy's Hospital and its medical school as was 1879-80." In this we fully agree. The occasion of the announcement referred to was after an arrangement had been made by which a large influence in the Hospital internal administration had been secured for the medical staff, and all bade fair to work well. It was not true, as the profession insisted on believing, that Dr. Habershon and Mr. Forster adhered to a position originally taken by the staff whilst all their colleagues forsook it, and that their resignation was a result of the steadfastness of the latter: they, equally with their colleagues, accepted the governors' plan of a mixed board of hospital government. It was subsequent to this, and after the new management was in operation, that they resigned their appointments, as they originally intended when their forced resignation was cancelled. It must not be overlooked that Dr. Habershon was highly sensitive to any apparent attempt to introduce a High Church organisation under the guise of a nursing institute.

At the College of Physicians Dr. Habershon received all the honours it could confer. In 1856 he was made a Fellow; afterwards he became Censor, then Senior Censor, Lumleian Lecturer, Harveian Orator, and finally he was elected to fill the newly created office

of Vice-President. He was President of the Medical Society of London in 1873, and in 1880 President of the Metropolitan Branch of the British Medical Association. His lectures as well as his writings showed his character for accuracy and painstaking. As a student he was one of the most indefatigable and industrious men that ever entered the walls of Guy's; he was never known to trifle away a moment, and his power of application was remarkable. He would devote hour after hour to the driest subjects, and would then ask to be questioned upon them to see if his answers were perfect. It was herein that probably lay the secret of his success. Many students are satisfied with getting up the subjects for examination, but do not submit themselves to continual tests of their knowledge. Dr. Habershon requested Dr. Swayne Taylor to examine him on chemistry, Mr. Hilton on anatomy, Mr. Johnson on botany, and Sir W. Gull on materia medica, at a time when such a proceeding was novel, and thus he was better prepared than most students for his university examinations. In after life his knowledge of disease was most accurate, and he would spare no time nor trouble at the bedside in unravelling an intricate case. He was also most excellent in treatment, for he always felt conscientiously responsible for the welfare of his patient, leaving nothing undone that could possibly benefit him in the way of medicine, diet, and attention. It may be believed, therefore, that the greatest trust was placed in him by his patients, and his practice became very large. His especial attention had been drawn to affections of the stomach, and on these he wrote several papers in the "Guy's Hospital Reports," and communicated others to the medical societies. He wrote a book on diseases of the abdomen in the year 1857, and this went through several editions. In connection with his particular subject it may be mentioned that, taking into consideration

the fact that several patients had lived many years with perforations of the stomach, he suggested that an artificial opening might be made in that organ, for the purposes of feeding in all cases of impassable stricture of the œsophagus. Shortly after a man came into the Hospital with this condition, and he requested Mr. Cooper Forster to consider the propriety of performing this operation of gastrostomy. This was done with temporary success in 1858 for the first time in England. Habershon was one of the first who undertook to investigate the morbid changes in the secretory structure of the stomach, a subject of most difficult inquiry, and his papers may be found in the "Guy's Hospital Reports." All his writings, if not especially interesting, were sound, cautious, and worthy of careful consideration. After leaving the City, he resided for a short time in Harley Street, and subsequently went to Brook Street on the death of Dr. Brinton.

As regards Habershon's personal character, it stands beyond all praise by any biographer. All his time not devoted to practice was given to the benefit of others. Possessed by deep religious feelings, he never forgot the spiritual side of man's nature, and therefore in the wards, by conversation or by means of books, he was ever regarding the higher welfare of his patients as well as their bodily infirmities. Towards the students likewise he considered he had other duties besides imparting to them professional knowledge, and he therefore took all opportunities at his own house and elsewhere of conferring with them upon the highest themes. This was done with so much earnestness and steadfastness that no one ever for a moment doubted Habershon's sincerity. He was attached to many religious institutions for the care of the poor, and not only personally worked with them but contributed money largely. An old pupil said of him, "He was always a very great favourite

with the students of his hospital, and was looked up to as a careful and painstaking clinical teacher, and on going round the wards he had always a large and appreciative following. Very many of them esteemed and loved him, because they felt that he had always their best interests at heart; and when, as one of the originators of the Christian Medical Association, he invited to his house on Sunday afternoons the students of Guy's and St. Thomas's Hospitals, they were so impressed with his sincere and heartfelt words, so free from anything like cant, that they could not but feel that he was a true friend, interested in their welfare for this world and the next."

Dr. Habershon always had the appearance of a delicate man, stooping as he walked, so that it was often remarked when he was young that he looked as if he would fall into a consumption. He had had one or two severe illnesses when he was seized, about two years before his death, with hæmatemesis. From this he recovered, but gastric symptoms, due to a chronic ulcer, subsequently supervened, with return of the hæmorrhage. From this he died on August 22nd, 1889, leaving one son, Dr. Herbert Habershon, and three daughters.

DR. MOXON.

The following account of this remarkable man is, except where indicated, condensed (by permission) from the notice of him by Mr. Clement Lucas, in the "Guy's Hospital Reports," vol. xlv.

One of a large family, Walter Moxon was born on June 27th, 1836, at Middleton, co. Cork, but both his parents were English. He died on July 21st, 1886, having thus just completed his fiftieth year. His father was employed in the civil service, and migrating to London, became chief accountant of inland revenue,

and one of the original founders of the civil service co-operative system of trading. His mother was a fair maid of Kent, a lady of tender heart, strong faith, and true virtue, who by her gentle teaching and loving nature exerted a powerful and lasting influence over her family. To this son her memory was in itself a religion. He frequently visited her tomb; and at last, when broken down in health and under a strong presentiment of his approaching end, his steps were again directed towards her grave. Through his father he was distantly connected with Edward Jenner, the discoverer of vaccination.

He was educated at a private school, where he does not appear to have particularly distinguished himself in study; but is described as precocious, somewhat pugnacious, and much given to practical jokes.

Leaving school at an early age, he was placed in a merchant's office in the City of London. But commercial pursuits proved to be little in accord with his refined tastes, generous nature, and impetuous temperament: an imperious demand on the part of the principal excited a rebellious retort from the apprentice, which quickly terminated the engagement. The youth being thus thrown back on his parents' hands, fortunately the family doctor was consulted as to his future. To this practitioner, as determining his path in life, Moxon always felt a debt of gratitude, which in later years he did not fail to repay. He set himself to matriculate at the University of London without the aid of a tutor. With what determination he set about this task is evidenced by the fact that "he used invariably to retire at nine every evening, and rise at four to study quietly in his room." This examination successfully passed, he entered as a student at Guy's in 1854, and soon attracted the attention of his teachers by the accuracy of his work, and his exactness in points of detail.

From Mr. Arthur Durham, a fellow-student and an early companion, I have learned with what industry and self-denial these two students worked, neither venturing to go to a place of amusement; but Moxon found it necessary to allow his muscular energies freer play in fencing and boxing. It was by his quick sight and rapid movements, rather than by muscular strength, that he gained advantage in these sports. He was also a more than average cricketer, but riding was with him a late accomplishment. It is characteristic of him that the first time he ever crossed a horse was to perform an act of extreme kindness. The writer was lying ill with rheumatic fever, and Dr. Moxon, who was taking a holiday in Sussex, hearing of my illness, mounted one of his carriage horses, and rode nine miles by a bridle-path over the Sussex Downs to see me. When he arrived, he consoled me by saying that my pains could scarcely be worse than his own; and when asked to take an easy chair replied, with his natural humour, "that all chairs were alike to him, and brought back the most tender reminiscences of his ride." From this time the relation of teacher and pupil resolved itself into one of the closest friendship.

The hours spent in boxing, cricket, and fencing did not interfere with his university career, which was one of exceptional brilliancy. At the first M.B. examination, in 1857, he was placed first in honours, with an exhibition and gold medal in *materia medica*, and second in honours with a gold medal in chemistry. In the following year, before graduation, he was appointed demonstrator of anatomy in the Medical School. He graduated M.D. in 1864, and was elected a Fellow of the Royal College of Physicians in 1868.

Moxon's faculty for teaching became at once apparent when he was appointed demonstrator of anatomy. The students crowded around him directly he entered the

dissecting room, to be amused and instructed at the same time. His knowledge of the human frame was exact and complete; but it was not his habit to teach mere book anatomy, for he used to say, "The books have better memories than you have, and will beat you." His plan was so to interest his pupils as to make them search for themselves. No dissection, however deep or minute, was unfamiliar to him, and the more complicated the relationship the greater delight he seemed to take in making it clear. A colleague, writing of him, said: "He knew anatomy as he afterwards, in an introductory lecture, recommended others to learn it—as a cabman knows his way about London. It was by concentration of attention and by continual repetition that he had become, when I worked under him, the most perfect topographical anatomist I have known." A neat dissector and an excellent draughtsman, he possessed every qualification for the post, which he held for several years.

Moxon became a Fellow of the Linnæan Society, and devoted himself to microscopical research. In 1864 he read before this society a paper on "New Points in the Anatomy of the Rotatoria," in which he described some heretofore unnoticed "cilium funnels" in the water-vascular system. In 1866, in the *Journal of Microscopical Science*, he published a paper on "The Peripheral Termination of Motor Nerve, showing the Direct Ending of Nerve in Muscle," wherein for the first time in this country was described the disc-like termination of the axis-cylinder within the sarcolemma. A paper on the "Anatomy and Mode of Division of the Stentor and other Infusoria" appeared in the *Journal of Anatomy and Physiology* in 1869.

After leaving the dissecting room to become assistant physician, he followed Dr. Pavy as lecturer on zoology and comparative anatomy. In 1868 he gave the introductory lecture on the opening of the winter session of

the Medical School—a lecture so full of interesting suggestions and witty sayings, that, were only one such to be delivered in a decade, there would be a strong argument in favour of retaining this ancient mode of commencing the session. In it he strongly advises the student to preserve his freedom of judgment. “You will have to get,” he says, “and store away in your memories, a vast quantity of knowledge. I tremble for you when I think how much, because of the great danger that this bulk of knowledge may be too much for you. It may sink that individual judgment which you must above all things maintain. Knowledge is fuel, not fire. It is excellent fuel; but, by order of the colleges, it will have to be thrust into you in heaps, and, unless you take care, it will smother the spark of active intelligence, which, if the fuel be added with proper care, will light it all ablaze, to glow upon and cheer your future patients. Mind the fuel does not come faster than you can master it, or you will be more like a coal-scuttle than a fire. Knowledge is but a body of which intelligence is the soul. I fear lest you get more body than you have soul for.”

At this period Dr. Moxon's home life was, perhaps, too strict and rigid to be in accord with students' feelings. No latch-key was allowed, and, except with special permission, we were expected in for ten o'clock prayers; if not in before the clock struck ten, the bolt was turned against us, and no appeal to bell or knocker after this produced any effect. In after years he readily admitted that he had been too severe.

Dr. Moxon was appointed assistant physician to Guy's Hospital in 1866, and he shortly after succeeded Dr. Wilks as lecturer on pathology and curator of the museum. His critical faculty soon made itself felt in a closely reasoned and violent attack on Dr. Johnson's cholera theory, which appeared in the *Medical Times*

and *Gazette* of 1867. This led to a rather bitter controversy, in which Dr. Johnson complained of being personally attacked by one unknown to him. When succeeding Dr. Wilks in the pathological department, Dr. Moxon felt that he had a difficult position to occupy; but he threw himself with zeal into this developing science, and made himself the exponent of the most modern views, of which Virchow's cellular pathology formed the basis. The contrast between the more usual demonstration of facts in disease and Moxon's elaborate discussion of every possible view that might be entertained, formed one of the topics of the day. The simple, practical student, who could not follow him through his mental flights, would sometimes remark, "I wish he would tell us what the man died from"; but no one ever complained that the examinations were not thoroughly made and minutely completed. At this time the importance of protecting patients from any possible source of infection through the dead, had not received the stimulus which Lister's antiseptic treatment of wounds forced upon the profession; and before Moxon entered the post-mortem room it had been customary to make all the examinations with bare hands. Finding, however, that his hands were never free from the unpleasant odours absorbed in this work, Moxon invented some india-rubber gloves, which he persisted in wearing in spite of the sarcastic remarks of his colleagues. Almost the only occasion that I ever remember him put out of countenance and unready with a retort, was when Dr. Owen Rees came into the demonstration theatre, and, seeing the gloves for the first time, playfully remarked, "They tell me, Moxon, puss in mits won't catch mice." These gloves, which he was the first to use, were adopted by all succeeding demonstrators, and are now in general use.

Moxon married, in 1861, the youngest daughter of

Mr. Robert Eckett, a lady of some fortune, and went to reside at 6, Finsbury Circus, where he continued to practise until his death. About five years later, on account of the health of his wife, he took a house at Hornsey, and used to go home laden with pathological specimens for microscopic examination, at which he would work late at night and in the early morning. Some of his best work was done at this time, notably a magnificent and unique series of pathological drawings, which are preserved in the post-mortem theatre of Guy's Hospital, and are well worth inspection. He now became a regular attendant at the Pathological Society, and the "Transactions" of that Society bear abundant evidence of the care and labour he bestowed on his inspections, and of the scientific accuracy that was characteristic of his numerous contributions. The course of *materia medica*, which is generally looked upon with dread by the student, in his hands became most popular. Entering the theatre without a note, he kept his class amused and interested from the beginning to the end of the lecture. He held his audience absolutely and imperiously under his control, never allowing so much as a whisper until he had finished speaking. Men of all years flocked to these lectures, not merely for instruction, but as an intellectual treat, and they were never disappointed. A student tells me that he would always attend one of Moxon's lectures rather than go to a theatre, for the simple amusement afforded. It was his habit to commence every fresh subject with an introductory lecture, and in it he was apt to extol the new subject somewhat at the expense of the Chair he had left. In his opening address on *materia medica* he speaks thus of pathology: "I say it is the noblest branch of medical science. It is noble enough not to fear the truth. And this is the truth, that it is not of much good for healing the sick. It may be of service,

but that is not its direct aim. Something like those maggot-feeding birds that may do good to our crops whilst only thinking of filling their own." "In thinking as therapists," he says, "of the history of therapeutics, we must deal fairly with our predecessors, and not think too much of ourselves. Some day, you know, we shall be historic ourselves—that is, the louder ones amongst us; a chastening thought when you reflect what sort makes the most noise."

Dr. Moxon's style of writing varied at different stages of his life. In his earlier essays, he used to frame sentences of a length which took one's breath away; but latterly he preferred short, pithy periods. Occasionally he would, with design, frame a most complex sentence, such as the following: "You will be a wise man when you find out how you never are the same where you are another as where you are yourself." I remember picking out this sentence when he asked me to glance over the proof, but he would not alter it, remarking that it would set people thinking if they could not understand his meaning. His lectures on *materia medica* were discursive, and but little directed towards the requirements of examiners; still, they were most valuable in guiding the student through the maze of worthless drugs to the uses of the more essential. Some he treated with scant courtesy, as, for instance, when speaking of elm-bark, which he dismissed with the remark that the wood was "good for making coffins." Others, such as opium, mercury, and quinine, he would spend much time upon.

On the retirement of Dr. Owen Rees, in 1873, Dr. Moxon was appointed physician to Guy's, and he then began to devote himself still more to clinical instruction. No matter how late the hour, a new case admitted would receive from him as careful an examination as if he had been the first patient seen. His hospital patients were treated with almost paternal care,

and he was most imperative in his instructions to the nurses, never allowing any chance of possible neglect. The effect of such keen oversight was to stimulate emulation among the workers, and his ward-sisters and nurses were ever ready to carry out the wishes of their chief. His private patients were examined with equal care, and his consideration for the feelings of all whom his opinion might affect made him one of the most popular of consultants. He foretold, in 1868, the kind of physician it was his intention to become. "A chief pride of our noble calling is, that in it there is direct use for every grace of mind and of body. We have to be, as it were, resting harbours where the broken minds of the sick may refit with every mental strength; and we must be ready to give aid to each shaken faculty; we must be ready to create faith—that greatest of tonics—for the unbelieving, and hope—that best of stimulants—for the despairing; we must find fresh interest for the weary of life, and not merely know a few things which others are ignorant of." With what success he trained himself towards the ideal his earlier imagination had foreshadowed there are many living to bear testimony, but no surer proof could have been devised than when, in the last illness of his colleague Hilton Fagge, he so devoted himself to relieve the monotony of the latter's enforced rest, that Dr. Fagge was fain to style him "the perfect physician."

In 1878 Dr. Moxon, finding himself hemmed in by new buildings at Hornsey, purchased a house at Highgate, and, securing a large piece of ground in its vicinity, laid it out as a beautiful garden. In this he took the greatest interest, and amused himself in making frequent alterations and improvements. At one time he added a mountain-top covered with every Alpine plant; at another his fancy led him in the direction of little lakes and pools for the accommodation

of aquatic plants and ferns. Every flower, wild or cultivated, found a home in his garden ; and many had histories that brought back the thoughts of friends. Here, too, the wild birds from the Highgate woods flocked for food and certain protection. In the winter lumps of suet and cocoa-nut sawn in rings were hung on the arches and boughs for the benefit of the tits, and loaves of bread were broken up for the blackbirds, thrushes, finches, and sparrows. Always, before taking his own breakfast on a winter's morning, Moxon first saw to the feeding of his feathered friends. He was, indeed, an ardent lover of nature, to whom every flower in the hedgerows was familiar, and who in his studies had not even neglected to distinguish the various English grasses.

On the retirement of Dr. Pavy in 1882, Dr. Moxon became lecturer on medicine, and this Chair he continued to hold until the time of his death. Upon the preparation of these lectures he bestowed much labour, but he never hampered himself with a note, so that the delivery always appeared to be spontaneous. Given entirely without theatrical effect, they compelled attention, and charmed at the same time by the brilliancy of thought, the epigrammatic sayings, and the pointed illustrations distributed through them.

His contributions to the literature of his profession were numerous and valuable. Whatever he touched he cast a glow of original light upon, and he never fell to the level of the commonplace. To scientific minds those papers will present the greatest interest wherein he was fettered by rigid facts, so that his mental activity found exercise only in elaborating details. But where there was left room for speculative thought, his fertile imagination winged itself from point to point with a touch as light as that which in gathering sweetness scatters wide the anther-dust. It was then

that he raised men's thoughts to an ethereal height and strained their eyes towards the vanishing point. He carried you without effort through the deepest labyrinths of metaphysical thought to an inquiry into the origin of things, subtilely following his silken thread till he landed you at the inconceivable, and then, with a remarkable dexterity, he would bring you back as from a dream to awaken into ordinary daylight. When unconstrained by subjection to every-day facts, as in giving addresses or introductory lectures, he simply revelled in illustration and anecdote, sometimes to such an extent as to obscure his main argument ; but those who listened never wore a look of weariness, and went away refreshed and enlightened.

Moxon was a wide reader ; his reading was always critical, and his books were crowded with marginal notes contesting statements in the text. Mill he read closely, but always in a spirit of extreme antagonism. His copy of Mill's "System of Logic" is scored with objections, and little tilts with this author are constantly appearing in his writings. Carlyle's philosophy was far more in sympathy with Moxon's mode of thinking, and exerted a greater influence on his line of thought. The following passage will strike the reader as inspired by "Sartor Resartus": "I cannot pass on without remarking on that very curious tendency of self to identify itself with its acquired possessions, whether these are stores of learning or such more obviously external property as the clothes from one's tailor. It is so very curious to see how a child prides itself on its new scraps of information, identifying itself with the acquisition just as it also prides itself on its nice new frock, and conceives itself with information, frock and all included. And so grown children identify themselves with all they have picked up in the way of knowledge, just as they do with the clothes they are wearing. And how complete is this

latter identification you may best imagine when after death their ghosts appear generally in these clothes."

But of the many philosophers whose writings he studied no one was so closely in accord with his mental conceptions as the author of "The Stones of Venice." With Ruskin he was a worshipper of the Spirit in Nature as traced in the beauty of her works, and this brought him into direct opposition to the Materialists, who received little mercy at his hands. The following passage will remind the reader of Ruskin: "Instinctively mankind feels at one with all living creatures. The love which the world has for science is cold compared with the love with which humanity loves nature—the visible, audible, sensible world; the world of taste and touch which we call nature. It is a beautiful name; it was invented long ago in some golden age. Nature, the growing, in such contrast with fabric of all kinds; the sensuous presence of this world in which we live, and out of which we die; the consciousness of which constitutes life to each of us; nature, which we try to analyse in science and to imitate in art, but which ever escapes our analysis and distances all imitation. The clever chemist will take a natural object, say a feather, to find out what it is, and he will burn it under certain conditions and collect the results, and measure and weigh, and end by getting the feather into something he supposes he knows better, which he calls carbon, oxygen, hydrogen, and nitrogen. The very special feather has reached its place in his very general generalities; but of the nature of the feather whereby it had its shape for the eye and its resistance to the touch, and its resiliency and all else that makes up feather-nature, if you ask the chemist for this he will bluntly accuse you of metaphysics, which in five-sense science is a heresy. . . . Nature, who yields so little to analysis and is so far above imitation, is one with us all in this life of ours and waits always at our senses

full of instruction, which is not mere science, and of beauty which defies art. And the mode in which we are influenced by sensuous nature constitutes in each of us his character." The comments on his colleague's life end with a typical question and metaphorical answer. "For what is this life of ours out of which Fagge has gone, and what is this individuality which places us in it? If not some sort of shadow cast in some sort of light; the cause of which shadow being removed, we shall all be one in the light."

Some of Dr. Moxon's "Notes and Reflections" were published in the *Guy's Hospital Gazette* with the signature of "Pilocereus Senilis," a *nom de plume* suggested by the comically wise-looking head of the hoary-headed cactus. These have now been collected, and are published with some introductory lectures in the form of a small book, which is well worth perusal. One of his most important papers was "The Explanation of the Association of Aphasia with Right Hemiplegia," published in the *Medico-Chirurgical Review*, wherein he put forward the view, now generally adopted, that the left hemisphere of the brain takes the initiative in right-handed persons, whilst the right acts in unison with it, and so under ordinary conditions the left hemisphere controls the organ of speech. The correctness of this theory has since been proved by the observation of aphasia in association with left hemiplegia in left-handed persons. Many of his papers were published in the "Guy's Hospital Reports." In 1881 he delivered the Croonian Lectures at the Royal College of Physicians on the "Anatomical Conditions of the Cerebral and Spinal Circulation," wherein are described some original observations on the fourth ventricle, upon which, after laying in the dust the previously accepted views, he proceeded to construct some interesting theories of his own.

In the "Pathological Society's Transactions" there are no less than sixty-nine contributions from his pen.

In May 1880, when the Guy's nursing question was being warmly discussed, Dr. Moxon contributed an article to the *Contemporary Review* in answer to an attack by a lady pupil which had appeared in the *Nineteenth Century*. The success of this article caused the editor to seek the aid of Dr. Moxon's fluent pen on other subjects, and he was subsequently able to obtain from him two essays—one on "Alcohol," and the other on "Faith Healing."

In his paper on "Alcohol and Individuality," he asks the question, "What influence has alcohol on the composition or development of mind and texture which shall best enable a man to hold his place in the struggle for existence?" But he stops at once to quarrel with the term "struggle for existence," and remarks that the "struggle good men wage is no struggle for existence but a struggle against mere existence. The struggle for existence is brutal life. A struggle to do more than exist is the sign of human life—the mission of the human soul." The physiologist cannot answer his question. He (the physiologist) cannot distinguish between a Queen's Counsel and a potman. "He will dissect and decompose the one as easily as the other, and into the same fibrin, albumen, neurin, hæmoglobin, etc., and tell both their oxidations up in foot-pounds. A trenchantly simple, levelling view, but with the disadvantage of overlooking differences which, however they evade the scalpel and the retort of physiology, are the very foundation of the order and stability of social life." Neither can the science of morbid anatomy distinguish between a Queen's Counsel and a potman. "She inspected the body of Napoleon III., and recorded thus: 'The brain and its membranes were perfectly natural.' No fragments or traces of broken empires visible to the highest

microscopic abilities." In this way he runs on through anthropology, ethnology, mental and moral philosophy, till he comes to psychology, which seduces him into a digression on the subjection of women and their relation to degrees.

His essay on "Faith Healing" ends with a remarkable passage which, in its reference to good and evil, shows a peculiar phase of the author's mind, that so often led him to view things, as it were, in reverse. "True, the vital spark of heavenly flame does somehow hold one together, yet faith is not for the body. Nor is hope mere earthly expectation; nor is life all centripetal. Nor is the future merely a coming present. And those who vulgarise our holy things do harm to all that is noble in humanity, whose faith must endure all things, with 'nevertheless not my will but Thine'; trusting ever in One whose ways are not our ways; who sees good in everything we call evil, so as to permit it, and evil in everything we call good, so as to send it quietly away; and believing that the good God is always good to all, and strives to be good through all to all; and never fails, but only seems to men to fail."

Dr. Moxon was a devoted and loving husband, a kind and affectionate father, and a true friend. Generous, warm-hearted, and benevolent, he was ever ready to lend a helping hand to those in distress. Many a poor student has been assisted through his difficulties, and many an orphan has been temporarily supported by his open purse. Hospitable, and fond of entertaining, it was his delight to collect round his table men of thought and wisdom, and to introduce some abstruse problem for their discussion. Often for the sake of argument taking the weaker side, he would silence all speakers, and then suddenly changing round, would show in what the fallacy of his former argument lay. This tendency to argue on both sides of a question gave to some the

impression that such versatility meant insincerity, but no more erroneous opinion could be formed of Moxon's true character. Strictly honourable in all his dealings, he was a type for consultants to act up to, and equally popular both with practitioners and patients. At table he frequently relieved conversation by some witticism. Especially, as I have before stated, he excelled in giving a new meaning to an old saying. Some one referring to two parted lovers once made the old quotation, "Absence makes the heart grow fonder." "True," said Moxon, "but of somebody else"; a view of the matter which, however it may jar on the sentiment of the old line, has proved sufficiently often true to excite laughter. These sudden surprises, flashed over a beaten track of thought, always drew listeners to his conversation. Sensitive and tender-hearted, he was deeply affected by the sight of pain, and his spirit rebelled against anything akin to oppression. It will be remembered how, when two of our profession were prosecuted and persistently persecuted by a father for not having sufficiently warned him of his own danger, when asking his assistance in an operation to save his child's life,—how he stirred the Royal College of Physicians, and moved the whole profession to contribute to their defence. In this unselfish defence of the profession he expended much time and labour. He brought out in strong colours the type of father who thought more of his own life than of saving that of his child, and who then proceeded to compass the ruin of the medical men who had honourably done their best for his son. A large subscription list was obtained, and the Home Secretary made a promise that in future the Public Prosecutor should not act against a member of the profession before the case had been submitted to some one capable of judging of its merits. This triumphant result was mainly due to his able advocacy.

The following sketch of Dr. Moxon's character, by Dr. Wilks, appeared in the *British Medical Journal*:—

“It is impossible in a few lines to portray the character of so remarkable a man as the late Dr. Moxon. His was no ordinary mind, and I feel sure there is not any one unfamiliar with his conversation and writings who could form any conception of its wonderful acuteness and depth. When I say his was no ordinary mind, I intend rather to convey the idea that Moxon could in no way be summarised as an eminent doctor or distinguished scientist. He was thus totally different from his late colleague Fagge. The latter had a most orderly mind, of great acuteness, and threw aside everything he could not clearly bring to reasonable proof. Of such composition are most of our best scientific men—men whose methods of procedure are clear to all; and, if one judge by results, in the complete overthrowing of old modes of thought, must be regarded as possessing the best minds of the age. Moxon was not one of these; and, in one sense, might be called superior, for he belonged to a class of persons whose mental processes are beyond analysis: he was essentially a genius; he could elaborate doctrines out of a brain which was always dealing with the most subtle problems. Just as the poet is born and not made, so is it with every genius. Moxon was thoroughly outside all that was commonplace, and touched as he was with a spark of the celestial fire, he could pour out his thoughts with a brilliancy that often amazed his hearers. . . . His intellect was of that high order that whatever he touched he needs must have adorned, and therefore all his contributions were of the most valuable kind. It is possible that he might have excelled still more at the Bar, or in literature have become another Carlyle. . . .

“His mode of expression, humour, and wonderful fancy made his writings read sometimes more like a

romance. I do not consider that he had the ordinary scientific mind ; it was too slow for him, and, moreover, he was not in accord with the doctrines of the leaders of science. His side-hits at these men are seen through all his writings. He was truly a metaphysician, and therefore, in many ways of looking at things, resembled his former colleague Hinton. He would much rather spend an evening in discussing the subtlest question in mental philosophy than talk about a case. Having succeeded me in the Chair of Pathology, he soon acquired a large amount of knowledge on this subject, and then wished to edit my 'Lectures on Morbid Anatomy.' I can thoroughly appreciate the perplexity of a reviewer of this work on its first appearance, when he lamented that Moxon had not brought out a book of his own, and left me to re-edit my own lectures ; 'for,' said he, 'Wilks and Moxon formed an adulterous connection.'

"There are many passages in this book which show the brilliancy and play of fancy which he could throw over the most commonplace fact ; for example, under the paragraph 'Epulis' : 'This is an ancient name for tumours of the gums ; but tumours are of many kinds, hence a difficulty in settling which tumours of the gums are to be called "epulis." Virchow gives the term a typographical significance, and calls all tumours of the gums "epulis," while the College of Physicians in its nomenclature goes curiously to the other extreme, and, after placing all possible tumours of the gums under No. 385, makes epulis 386, but gives it no import, so that it stands like a venerable title without estates.'

"I remember standing talking to him one day, when Dr. Habershon came up and complimented him on the largeness of his class, to which Moxon replied, 'I don't suppose I give the men better bread and meat than

you did, but I put a little mustard on the sandwich.' This condiment he no doubt did use largely.

"His lectures at the College may be remembered from the manner in which he demolished, by his subtle arguments, most of the conventional doctrines about brain functions. It must, however, be admitted that he did not put in their place any established facts demonstrably worked out in the laboratory or wards, but rather suggested some new theories of his own. It is not surprising that there have been those who did not appreciate Moxon: but this, as I have told them, was their own fault; they had never attuned the fibres of their brain in unison with his, and, consequently, had never felt them vibrate when his mind was at work. They had nothing in common with his 'all subtilising intellect,' to adopt the Poet Laureate's expression about his friend.

"As may be supposed, with such a mind and temperament, Moxon was generous, ardent, and often impulsive. His sympathies with the poor, the suffering, and the injured were great; and he was always most indignant at wrong-doing. . . . Such men as he die early, for Moxon did not possess the attributes which a French physiologist declared were so advantageous to a long life—a good digestion and a bad heart."

Slight in figure, and of a very delicate constitution, which showed signs of breaking even when he was a student, Moxon always worked to the extreme edge of his strength, but was buoyed up by a natural vivacity and an indomitable will. I learn from one of his fellow-students that an attack of diphtheria caught at the Hospital appeared to leave a permanent mark upon his health. From that time, when overworked, he was liable to attacks of hæmaturia, and albumen had been noticed in the intervals of the attacks. Six years before his death he on two occasions suffered from

bleeding from the lungs, and was compelled to go abroad, and rest for a term of three months. His delicacy of fibre also showed itself in attacks of ulceration of the cornea, whereby one eye became permanently defective in refraction. Later he began to suffer, too, from periodic attacks of vomiting, occurring often suddenly during the night. Narcotics also became frequently necessary to obtain sleep. But he worked on cheerfully under an increasing weight of practice. Still more recently another symptom appeared in the form of giddiness, with a feeling of numbness and weakness on the left side. He suffered from one of these attacks about four months before his death, but the symptoms passed off after a rest by the sea. To him they meant thickened arteries and impending paralysis or apoplexy. The week before he died he made some long journeys into the country for consultations: one to Honiton, in Devon, another as far as Swansea, in South Wales. The result was that his practice in London accumulated, and redoubled its pressure, so that he could not find time to look over the examination papers in medicine of the candidates for the final degrees. He lost appetite, and was unable to obtain sleep without the aid of chloral. It is not to be wondered at that so delicately balanced a nervous system should have broken down under this terrific strain, but his sudden death was quite unanticipated. He died on July 21st, 1886, having just completed his fiftieth year.

His remains were conveyed to Highgate Cemetery and there interred amidst a sad and mournful crowd of friends, colleagues, and pupils, many of whom had travelled long distances to pay this last tribute of respect to his memory.

DR. FAGGE.

CHARLES HILTON FAGGE was born at Hythe on June 30th, 1838, and died at Grosvenor Street, November 18th, 1883. He was the son of Charles Fagge, a general practitioner, who survived him. His mother was the sister of John Hilton, after whom the subject of this memoir was named. Hilton Fagge was educated first at a private school near Brentwood, and afterwards at Blackheath. He was so successful in his studies that it was hoped he would have proceeded to one of the Universities, but circumstances prevented, and he was entered as a student at Guy's in 1856, when he was eighteen years of age. Here he began to work with an intelligence and assiduity so remarkable, that when he went up for the London University Examinations he carried all before him. He had already at the Matriculation gained the first prize in botany and the second in chemistry, and also the gold medal in botany at the Apothecaries' Hall. At the first M.B. of the London University in 1858, he obtained the scholarship and gold medal in anatomy and physiology, the same in materia medica, and the same in chemistry, as well as the gold medal in botany. At the second examination in 1861 he obtained the scholarship and gold medal in medicine, and the same in physiology, as well as the gold medal in surgery; he was also second in midwifery. In 1863 he took his M.D. degree, and in 1864 became Member of the Royal College of Physicians. In 1870 he was elected a Fellow. On the very first vacancy which occurred at Guy's, Fagge was asked to fill it, and this was demonstrator of anatomy; and as soon as the appointment of assistant physician could be made, Fagge was elected. This was in 1867. He then joined Dr. Moxon as demonstrator

of morbid anatomy, and afterwards succeeded him. In 1880 he became full physician. He was also physician to the Waterloo Road Infirmary, and to the Evelina Hospital. He was Editor of the "Guy's Hospital Reports," and at the time of his death was examiner at the University of London.

During the time that Dr. Fagge was holding these various appointments, he was assiduously working towards the advancement of medicine. He was essentially a clinical physician or pathologist in its widest and largest sense. He showed no predilection for any one class of disease, which indicates often some mental peculiarity on the part of its possessor, urging him towards speculative inquiry on the one hand or leading him on the other to some inferior work requiring little more than mechanical nicety for its aim. Fagge could not thus narrow himself to a special inquiry, possessing as he did the faculty of grasping large and important facts of all kinds, analysing them, and grouping them in such a manner as to make many subjects which were before obscure stand out in a newer and clearer light. His true place was in the wards searching for facts, making his morbid anatomy and chemistry subservient to the solution of larger questions of clinical medicine or pathology. In his remarkable power of insight into obscure forms of disease, and of discovering an explanation of symptoms, he possessed the talents of his uncle, John Hilton.

At the outset of Hilton Fagge's career he studied under Hebra, and interested himself in cutaneous diseases. He accordingly undertook the translation of some of the volumes of the Vienna professor for the New Sydenham Society. The work was done in the best and most conscientious manner, as the correspondence between author and translator proves. All the doubtful passages were discussed between them, and Hebra finally offered

a just tribute of praise to his coadjutor. Fagge afterwards arranged and classified the wax models in the museum according to the newer nomenclature. One of his most interesting and important papers was on a disease of the skin. In his essay on "Scleriosis and Allied Affections," in the "Guy's Hospital Reports," he brought together a number of cutaneous affections which had before been isolated or confounded, such as keloid, morphœa, and various supposed forms of lepra. These he analysed and grouped, producing a rational, scientific, and what is now a classical paper. He also investigated afresh the subject of vitiligoidea, treated in a former volume of the Reports by Addison and Gull; and by a much more extended inquiry he showed, what has subsequently been confirmed, that the subjects of this disease are mostly affected by hepatic disorders. Other papers, on various kinds of diseases of the skin and nails, are to be found in the "Guy's Hospital Reports."

Dr. Fagge's characteristic abilities have already been alluded to, his remarkable perspicuity and his clear mental vision, which enabled him to separate the true from the false, the wheat from the chaff, and to perceive the relation which his facts had to one another, so as to dissect or unite them as the case might be, in order to build up a new piece of pathology. He would generalise or even frame a theory, but he would never theorise without some good basis, or speculate without some show of reason. Fagge's place was in the wards. His mind was practical; and although he probably possessed as much literary knowledge of medicine as any man of his day, being a good French and German scholar, he was able to temper and correct all he read by his own experience, allowing nothing to emanate from him that had not been well assimilated. Probably very little that he has written will ever be gainsaid or found erroneous. His labour was that of assisting in building up the edifice

of medicine, and to this he has added material which will for ever endure.

Dr. Fagge mentions in his posthumous work on medicine that, on his first introduction to Guy's Hospital by his father, he went into the post-mortem room, and there saw a case of aneurism of the heart. The writer well remembers the circumstance, and he has thought that it probably swayed Fagge's mind towards an interest in heart disease. Certainly some of his most elaborate contributions to medical literature were on this subject, for instance his article on "Valvular Disease of the Heart" in Reynolds's "System of Medicine," on the "Presystolic Murmur" in the "Guy's Hospital Reports," and his paper on "Fibroid Disease of the Heart" in the "Transactions of the Pathological Society." On an allied subject—the action of digitalis on the heart—he made elaborate experiments in conjunction with Dr. Stevenson, the results of which were presented in a paper to the Royal Society, and published in the "Guy's Hospital Reports."

The authors in this paper insisted strongly on the value of physiological experiments in testing for poisons. The importance of this method has since been recognised, more especially at a recent trial when the judge accepted the evidence obtained in this way. Soon after its publication there appeared a French novel of some celebrity, called "Le Docteur Claude," by Hector Malot. In this story the heroine is poisoned by a vegetable substance, the presence of which in the body could not be ascertained by chemical analysis, whereupon an expert declares that it might be discovered by another method called the physiological test—that is, by observing the effect of the vomited matters and extracts of the tissues upon animals. "‘Elles sont de vous ces expériences, monsieur le pharmacien?’ demanda le président. ‘Non, monsieur le président, elles sont de Fagge et Stevenson.’”

As evidence that Fagge had not confined himself to any narrow or special questions, we may refer to his papers on cretinism and rickets. That on sporadic cretinism occurring in England was one of his most valuable and original contributions to the science of medicine, and gave an impulse to further inquiries which have borne good fruits in an entirely novel subject. A very important communication made by him, in association with Mr. Durham, to the Royal Medical and Chirurgical Society, was on the "Treatment of Hydatids of the Liver by Electrolysis." Several papers on abdominal disease may be found in the volumes of the "Guy's Hospital Reports," and all of them of great importance.

Never was Fagge's characteristic turn of mind better exemplified than during his last illness, when he made a clinical case of himself. It was about a year and a half before his death that he became aware of the existence of serious heart disease, and shortly afterwards that it was probably associated with aneurism of the aorta. When he thoroughly realised his position, he considered what course he should follow: to continue his work unheeding the catastrophe which must shortly come, or to throw up everything, retire into the country, and by a period of absolute repose to hope that his life might be for some time prolonged; or, by way of compromise, to give up his hospital duties and all arduous work, see only a few patients, and during the day lie recumbent on a couch undergoing the most approved medical treatment, and occupying his time by completing the book which he had had in hand so many years. The last course he resolved to pursue, and resolutely commenced to put it into practice. He arranged his study accordingly, put himself on a restricted diet with a limited amount of fluid, took

iodide of potassium daily, and lay on his couch so that he could read and write with ease. He took accurate notes of his condition, the amount of food and fluid which he ate and drank, his secretions, his temperature, and his pulse. His habit of case-taking seemed to require some object of interest to satisfy it, even though the patient were himself. After a good trial of these means he became very hopeful of success, and those around him gave a friendly, sympathetic acquiescence in his cheerful views, but it was not very apparent to them that any important change for the better had taken place. At the time of his death he was examining at the London University, and had been occupied many hours of the last day of his life reading the candidates' papers. After retiring to his bedroom, he was seized with difficulty of breathing, and in about half an hour all was over. On November 24th, 1883, he was consigned to his grave in Norwood Cemetery, followed by hundreds of his old pupils and friends; his coffin was wreathed with flowers, the emblems of their love. His wife and two children survived him.

Few men at his age have done so much good work and held such important appointments as Hilton Fagge, so that his prospects were of the most brilliant character. In private practice, too, he was beginning to be very successful, for not only was the greatest confidence placed in him by his patients, but his opinion was highly valued by his brethren who consulted him. A considerable sum of money was raised to perpetuate his memory, due more especially to the efforts of his friends the Galtons, and a bronze tablet to keep him in remembrance was placed on the walls of the museum. He had been preparing a work on medicine for some years, and at his death it was nearly completed. Some of this had been written some time, and no doubt, had

he lived, would have undergone revision. The editorship was undertaken by Dr. Pye-Smith, who added the chapter on skin diseases. This had been left until the last, as Fagge regarded the writing it a labour of love. The work had a rapid sale, so that a second and third edition were soon called for, which the learned editor again undertook. It has been truly said that few medical works contain such an amount of practical knowledge happily combined with the latest views of the pathology and nature of the various diseases as this book of Fagge's. Many good authorities, indeed, have pronounced it the best book on medicine in the English language.

From a wonderfully clever article on Fagge, written by his colleague, Dr. Moxon, in the *Lancet* of August 30th, 1884, we extract the following:—

“Fagge was to my mind the type of true medical greatness. Perhaps he might have been corrupted into grandeur if his life had been spared. There comes a danger of that kind of corruption after forty or forty-five, even in the greatest of truly medical characters, especially if it goes to Brook Street or to Grosvenor Street. I believe Fagge was capable of any kind of excellence, and he might have been tempted out of true medical greatness into grandeur. His greatness as a physician became evident to observers of character very soon after his brilliant student career had placed him on the staff of Guy's Hospital. He did not merely constellate already known facts, but he found new facts. Former volumes of Guy's Reports contain ample and most valuable proof of Fagge's greatness as a physician. His genius of eyesight, or power of observation, if you will, was sustained by immense memory, and brought into action by vivid and constant suggestiveness of intelligence. I watched Fagge closely, and knew him to be one of the most dynamic minds of the age; certainly second to none in our profession.”

DR. MAHOMED.

FREDERICK HORATIO ABKU MAHOMED was born at Brighton in April 1849. His paternal grandfather, who married an Englishwoman from Bath, was a native of Patna, in India, and this Oriental strain gave a distinctive aspect to his looks and character. He distinguished himself at school, and then went to the Sussex County Hospital. He thus described his early character in his own "Life-history Album": "As a child, rampagious, irritable, and passionate; always restless and excitable, and giving them no peace in his home; in early boyhood not remarkable for any brilliancy, maintaining a good average place at school, with a tendency towards mathematics, weak in languages, fond of mechanical toys, and apt in constructing them": thus he foreshadowed his bent towards making and improving physiological apparatus. In 1869 he entered Guy's as a student, and very soon made his mark, gaining prizes and showing very superior talents. This displayed itself by his efforts to work out problems for himself and undertake novel investigations. He constructed an apparatus of bags and pipes to show the circulation of the blood, and from this deduced many interesting and instructive conclusions. He then set about working at the sphygmograph, and, believing it capable of improvement, he engaged an instrument maker to introduce certain alterations, which were of so much value that an improved Marey's sphygmograph, known by his name, came into general use. Having qualified in 1872, and desiring to marry early, he sought appointments which might support him. In 1872 he became medical officer to the Highgate Infirmary, and in April 1873 resident medical officer at the London Fever Hospital. He subsequently (1875)

took the M.D. degree at Brussels, and obtained the appointment of pathologist and medical tutor at St. Mary's. During this time his home was broken up by the death of his wife, leaving him with three infants. He had a great yearning to be attached to Guy's, and when a medical registrarship became vacant there he asked for it, and was elected. He then found that for any further promotion something more than his Brussels M.D. degree would be required. How to obtain this now occupied his thoughts. He would have liked to have graduated at the University of London, but he would have had to begin his studies again, and several years must have elapsed before he reached the final degree. If he had gone to Edinburgh he must have resigned his appointment at Guy's, which he could not afford to do, and therefore he determined upon a plan which no one who had not an immense amount of energy would have dared to entertain. That was to do his work at Guy's as registrar, and yet keep his terms at Cambridge. This he commenced to put in force in 1877. He left London for Cambridge regularly every other afternoon after a hard day's work at the Hospital, returning to town on the following morning; and in this way he managed to complete his terms, and so finally to obtain his M.B. degree. At Cambridge he made the acquaintance of Professor Humphry, who remained his steadfast friend and assisted him in many ways until his death. In 1881 he was elected assistant physician to Guy's, and soon afterwards he married again.

Mahomed was altogether a large type of man, tall and stout, so that his presence was always very noticeable when walking in the colonnade or going round the wards. His great characteristic was his indomitable energy. He would put into his work an ardour and enthusiasm not often met with. Scarcely any obstacle

could stand in the way of the attainment of his object. He always had in hand some new enterprise or scheme for improving methods of investigation or teaching. As registrar he initiated improved modes of reporting cases, and introduced new apparatus for testing, such as the new sphygmograph, to which reference has been made.

When the idea of the Collective Investigation of disease was started, he at once threw himself into the scheme, and commenced a journey through England and Scotland to proclaim its objects and its merits. He called meetings of the medical men in the larger towns, and before many months had elapsed he placed the association on a firm footing. It was refreshing, when going to the Hospital, to meet Mahomed, who always had some new scheme in hand whereby he was going to regenerate the whole place; for although it might be all in the air he indicated the possibilities of improvement.

Of course there were those amongst his colleagues and students who had no sympathy with his enthusiasm and were more content to run in the old ways. These men regarded him as somewhat of a visionary and wanting in judgment. He no doubt often justified this opinion when he made a rash diagnosis or pronounced upon the fatal indication given by a sphygmographic tracing taken from the pulse of a patient who would soon afterwards leave the Hospital well. The same thing was noticeable at the Fever Hospital, where on one occasion he called the committee together to sanction his buying sheep, in order to wrap up dying patients in their warm skins, as soon as they had been removed by the butcher. Before the project came into operation he had improved his method and forgotten about the sheepskins. In spite of a little want of balance his enthusiasm was of great value to all those

around him, and especially to the students, some of whom caught his fire; his presence was everywhere felt, and for a time no one was more missed than Mahomed.

It is impossible to say what such a man might not have done. In all probability there was a notable future before him, and undoubtedly his loss to the School was great. The work he did accomplish was most excellent. His papers on Bright's disease, read before the medical societies and to be found in the "Guy's Hospital Reports," testify to his acumen and his power as an original worker and thinker. That on scarlatinal dropsy was introduced at the Royal Medical and Chirurgical Society by Dr. Broadbent, his friend and colleague at the Fever Hospital and at St. Mary's, to whom Mahomed owed much, and of whom he always spoke in the highest terms of esteem and gratitude. He was made a Fellow of the College of Physicians as soon as the rules regarding time allowed, but at first he was obliged to refuse the honour, as he was not in a position to pay the fees. Later he attended the meetings of the College, and was ever ready to speak on any subject in which he felt an interest.

We have spoken of Professor Humphry as his steadfast friend, and it was by his assistance that Mahomed was enabled to proceed to the International Congress at Copenhagen to enforce the merits of Collective Investigation. As its President he thus spoke of Mahomed after his decease: "He was the genius and great supporter of Collective Investigation. The suggestions came chiefly from him, and the carrying them out was in the main his. The international extension of the movement was by his wish, and he went to the International Conference at Copenhagen at much inconvenience to set it on foot, and was very successful in the effort. He threw himself heart and soul into

the movement, and laboured hard at it, simply because he was convinced that it was a good work—good for the advancement of medical science and good for those who would take any part in it. He would have replied to those who doubted its efficacy—and the chill and lassitude that ushered in his fatal illness stopped a reply which he was beginning—that they must look for no golden treasures, no startling discoveries, no new revelations as to the manifestations of disease or the methods of treatment, no redundant harvests; but that by careful tilling of the ground all over by many hands and better husbandry better crops will be sure to follow. He knew well that in such a work there must be many imperfections, many shortcomings, many failures, but his faith in an ultimate result and his fond, cheerful, enthusiastic spirit carried him over all difficulties and disheartening criticism, and through an amount of labour that few other men would have undertaken.”

As already said, Mahomed's great characteristics were ardour and enthusiasm. He also had a high ideal of honour and chivalry. On one occasion, thinking he had been unjustly attacked, he would have openly resented it had not his more judicious friends dissuaded him from it. Those who were his most intimate friends had the highest opinion of his noble character, and many were the instances of his kindness and energy in the cause of others.

At the beginning of November 1884 Mahomed began to be ill. It was probably owing to this that he had a melancholy presentiment, when seeing a hearse drive out of the Fever Hospital, that it would be his turn next, and that he should die of intestinal hæmorrhage. He then rapidly sickened with typhoid fever, which continued its regular course, with occasional slight hæmorrhage, until a collapse suddenly occurred, probably

from perforation of the bowel, and the end soon came. He was attended by his colleagues Drs. Broadbent and Cayley. He died on November 22nd, 1884, and was buried on the 28th at Highgate Cemetery. The funeral was attended by crowds of friends and devoted pupils. Thus ended, at the age of thirty-five, a career begun with great promise.

A sum of money was subscribed for the benefit of his children, and his staunch friends Dr. Cayley and Mr. Field became their trustees. Further particulars respecting Dr. Mahomed may be found in the biography written by Dr. Goodhart and Mr. Jacobson in the "Guy's Hospital Reports."

DR. CARRINGTON.

The name of ROBERT EDMUND CARRINGTON recalls that of his grandfather, Noel Thomas Carrington, the Devonshire poet, whose "Dartmoor," and many other poems depicting the rural life and scenery of his own county, deserve to be remembered. The subject of this notice was born on May 10th, 1853, at Bath, his father afterwards removing to Gloucester, where he was the editor and proprietor of the *Gloucestershire Chronicle*. As a child, Carrington was markedly characterised by both amiability and love of work, the latter quality earning for him the sobriquet of "Studious Bob." He had a way of learning his lessons with an amusing book by his side, which he alternated with his studies, taking one up and then the other till his work was done. He inherited a taste for literary work, which his father fostered and improved by giving prizes for the best-written tale or essay on some historical subject in connection with a manuscript school magazine. Soon after he entered the Gloucester Cathedral School. He lost his father in 1864, but his headmaster, the Rev. Hugh

Fowler, carried on the youth's education most successfully; and as he grew up, while full of life and fun, he was yet a "glutton for work." After brief study at the Gloucester Infirmary, Carrington entered at Guy's, winning the second prize in arts; in 1872 he carried off the exhibition in both chemistry and zoology at London University preliminary scientific examination. He followed up this success by winning the exhibition and gold medal in chemistry and materia medica at the 1st M.B., and a gold medal in medicine at the 2nd M.B.

In 1877 he was appointed demonstrator of anatomy at Guy's, and in this post, which he held for five years, he spared neither time nor strength. His knowledge of anatomy was thorough and precise, while his gentleness and patience of temper made him peculiarly useful to students. His "Manual of Dissections," published in 1881, was described by a reviewer in the *British Medical Journal* as being "as solid a piece of work as was ever put into a book, accurate from beginning to end, and unique of its kind." In 1880 Carrington was elected physician to the Seamen's Hospital (formerly the *Dreadnought*) at Greenwich. In 1881 he became medical registrar at Guy's, afterwards demonstrator of pathology, and in 1883 assistant physician. Both in the post-mortem room and in the wards he showed the qualities of a sound thinker and good teacher, and was beginning to take higher work as curator of the museum and joint editor of the "Guy's Hospital Reports," and no doubt overworked himself. He became sleepless, and began to be worn and jaded. While suffering from a slight attack of fever owing to getting wet, in March 1887, he aggravated the attack by performing a post-mortem examination. Pleuro-pneumonia came on, under which he sank on March 16th, in his thirty-fourth year. He was buried at Norwood on the 19th.

We cannot do better than quote a few lines by Mr.

Jacobson describing Carrington's personal character:—
“In him were singularly combined the spirit of charity (rare in every age), a profound humility (especially rare at the present day), which played softly over every day of his life, great simplicity of character, tender domestic affection, unwillingness to think evil of any, even of those of whose conduct he disapproved, habitual consideration for the welfare and interests of others, and a most consistent shrinking from anything like self-assertion, self-interest, and show.” With his thoroughness of character and patient perseverance he could not have failed to do useful work as a physician if he had been spared to work at medicine as thoroughly as he had done at anatomy.

DR. WOOLDRIDGE.

LEONARD CHARLES WOOLDRIDGE, the youngest of those whose loss Guy's has had to deplore, was the son of a medical man in Overton, Hants, and was born on December 16th, 1857. His father dying early, his mother removed to the neighbourhood of London, and the boy was educated at the Surrey County School, Cranleigh. Entering at Guy's in October 1875, after having already won the Neil Arnott exhibition in physics at London University, Wooldridge soon showed powers of application, became laboratory assistant in physiology, and in 1879 went to Leipsic, where he studied physiology to such good purpose, under Professor Ludwig, that in 1880 he took the high degree of Doctor of Science in that subject at London University. He had previously been elected to the George Henry Lewes studentship in physiology. Resuming his medical studies in order to qualify, he took the M.B. degree at London in 1882, with the gold medal in medicine and first-class honours in forensic medicine. In 1883 he returned to Germany

and spent several months at Berlin, studying pathology under Virchow. In 1884 he was appointed to one of the research scholarships instituted by the Grocers' Company, and in the same year became demonstrator of physiology in Guy's Medical School. Here his work was excellently done, his laboratory teaching being especially zealous. In 1884 he married a daughter of Sir Edward Sieveking, physician to St. Mary's Hospital.

Physiological research, however, was Wooldridge's predominant delight. He had already, while at Leipsic, made some original contributions to science, published in Ludwig's and Du Bois Reymond's journals, and in 1883 he came before the Royal Society with a paper on the "Origin of the Fibrin Ferment," following it up in later years by papers which caused him to be elected Croonian Lecturer in 1886,—a very unusual honour for one so young,—when he delivered a lecture on the "Coagulation of the Blood." This was a question which he made peculiarly his own.

He became joint lecturer on physiology at Guy's, assistant and full lecturer at the College of Surgeons, and examiner in physiology at the College of Physicians; and his success in research seemed likely to lead him speedily to the fellowship of the Royal Society. But the lamented occurrence of Dr. Carrington's death was followed by the announcement of three vacancies in the staff of assistant physicians, and Wooldridge thought the opportunity was one not to be missed. He consequently applied and was elected in 1887, and at once threw himself ardently into medical and pathological work, studying the coagulation of the blood in disease, making experiments on hæmorrhage and dropsy, discovering new methods of sterilising infusions containing germs of disease, and he even thought he saw his way to a reconstruction of the whole theory of cardiac disease. "His independent and suggestive way of

looking at all pathological questions, whether old or new, his boldness in speculation and grasp of physiological principles and methods, made him a fascinating and inspiring teacher," says Dr. Pye-Smith, "and never were his remarkable powers of thought and of exposition more manifest than in the last year of his life, when he was lecturing on physiology, teaching and working in the laboratory, and stirring all the best minds among the students by his conversation in the wards or the clinical rooms. He felt his own powers, and believed himself capable of far greater work than he had yet done; and in this belief all who knew him shared." A senior student wrote, "Conversations with him I always look back upon as time spent to the very best advantage. An hour's talk with him was worth a whole day's reading."

Unfortunately, Wooldridge, who was slightly built and rather below the medium height, worked too hard, without showing fatigue or overwork very obviously, and he had no taste for outdoor amusements or any kind of sport. Towards the end of May 1889, when exhausted with work, he ate something which disagreed with him and appeared to set up serious bodily disturbance, against which he continued to work for more than a week. On June 6th he had to leave the clinical wards ill, went home and projected a holiday journey, was suddenly seized with faintness, fell back in bed, and died almost at once. It was afterwards found that he had extensive ulceration of the intestine.

His friend Dr. Pye-Smith has appreciatively summed up Wooldridge's mental character and powers in the following words:—"With a little of the waywardness, and more of the defects in exposition, which sometimes mark original power, Wooldridge had the temperament, the insight, and the resources of genius. He looked

at every question from a fresh and independent point of view, while, well acquainted with what had been done in modern physiology and medicine, he was not overborne by its authority nor overweighted by its voluminous mass. He was always inventing new methods, throwing out new conjectures, attacking old problems from a new side. His patience and skill in carrying out experiments were scarcely inferior to the fertility of his brain in devising them. Sometimes the fulness of his knowledge, the brilliancy of his hypotheses, and the enthusiasm he threw into all he said supplied the place of orderly arrangement and finished rhetoric, and made his lectures truly eloquent. That is what all who heard them say of three clinical lectures on aneurism, enteric fever, and hæmoptysis in cardiac disease, which he delivered almost immediately before his death. In him we have lost more than the world will ever know." A list of his scientific papers will be found appended to Dr. Pye-Smith's obituary notice in "Guy's Hospital Reports for 1889."

CHAPTER III.

THE SURGEONS WHO HAVE DIED SINCE THE COMMENCEMENT OF THE PRESENT CENTURY.

SIR ASTLEY COOPER.

ASTLEY PASTON COOPER was the grandson of a surgeon at Norwich. His father was a very estimable clergyman in Norfolk; his mother wrote novels of some repute, and was noted for her benevolence and unselfishness. Astley, the fourth son of a numerous family, was born at Brooke on August 23rd, 1768. At fourteen years of age he went to Yarmouth, where his father was instituted rector. His boyhood was marked by a succession of hairbreadth escapes and exploits demanding coolness and audacity. He had no great taste for classics or literature in youth or through life. As a youth he had a handsome and expressive countenance, with much openness of manner and liveliness of conversation, so that he often charmed those who disapproved of his wild freaks. Like John Hunter, he had a free youth, and if unimproved was likewise unspoiled by systematic training. Both the grandfather and uncle of Astley Cooper—the latter a lecturer at Guy's—are credited with some share in exciting a surgical bias in the boy's mind. Visiting the Norwich Hospital one day and seeing a striking operation, he was strongly impressed with the utility of surgery. In 1784 a visit from his uncle, the London surgeon, led to the nephew

being articulated to him, but he was soon afterwards transferred to Mr. Cline, one of the leading surgeons of the day. Under Cline, young Cooper imbibed the spirit of Hunter's teaching from one of his most enthusiastic pupils; for Cline's judgment about Hunter was, that there seemed no comparison between his great mind and all who had preceded him.

Young Cooper was soon actively engaged in dissection, and his adventurous nature found scope in many a night expedition with the body-snatchers, or resurrectionists, in their search for "subjects." He spent one winter session (1787-88) at Edinburgh, having already made considerable progress in anatomy and surgery. Having returned from Edinburgh, he attended John Hunter and other celebrated lecturers; and in 1789, being then twenty-one, he was appointed demonstrator at St. Thomas's. Two years later Mr. Cline obtained for him the joint lectureship with himself in anatomy and surgery. In December 1791 he married Miss Anne Cock, whose father had amassed a considerable fortune as a Hamburg merchant, and having retired from business some years, had taken up his residence in West Green Lane, Tottenham. The wedding was perfectly quiet, owing to the recent death of the lady's father, and on the evening of the same day Astley Cooper lectured on surgery with his usual composure without any of his pupils becoming aware of his marriage. In June 1792 the young surgeon and his bride visited Paris, and were there during the three terrible months which followed. Cooper spent much time in studying French methods of surgery, and in attending the debates of the National Assembly. His safety was declared by a democratic badge and by friendship with leading revolutionists in England to whom Cline adhered.

In addition to his income from his hospital lectures,

Mr. Cooper came into possession by his marriage of a fortune of £14,000, so that he was at once placed beyond any pecuniary anxiety. He was consequently able to devote himself mainly to study and teaching. He went to the Hospital before breakfast to dissect for lectures, and he also demonstrated to students before the lecture hour. He injected their subjects, lectured from two until half-past three, and on three evenings a week he lectured on surgery. Further, he persevered in visiting the interesting cases in the Hospital and making notes of them. His lectures on surgery—which he was the first in the Borough hospitals to separate from anatomy and physiology—were not at the beginning a conspicuous success. He found that he had been too theoretical, but soon changed his plan, and selected cases in the Hospital as the basis of his lectures. From this moment his class increased and became interested. He himself acquired a facility in recalling cases and circumstances illustrative of the disease under consideration which greatly added to the attractiveness of his style. The fact is, that he was not the intellectual successor of John Hunter, and could not succeed by similar methods. Yet the influence of Hunter upon him was unmingledly beneficial; he had the wit to perceive that Hunter was not “an imaginative speculator, and any one who believed in him a blockhead and a black sheep in the profession.” The improved lectures on surgery attracted twice as many entries as in previous years, and when twenty years afterwards he gave a course, which was published in the *Lancet*, he had a class of four hundred students.

Mr. Cooper was besides selected as lecturer on anatomy at the College of Surgeons. An important part of his duty in this latter capacity was to lecture on and dissect the bodies of executed criminals. The lectures were most successfully given to crowded audiences. In 1797

the now rising surgeon removed from his early residence to Jeffries Square, St. Mary Axe, long occupied by Mr. Cline, who now moved westward. Cline was becoming very jealous of Guy's, as it was growing into fame; he had a great predominance at St. Thomas's, for although the two institutions were considered in unison, yet to have been a pupil of Cline and to have carried a box under his superintendence always gave a man a character and lift in after-life.

In 1800 Astley Cooper was appointed surgeon to Guy's, and it was at that time that Mr. Travers, who became his articulated pupil, said of him that he was the handsomest, most intelligent-looking and finely formed man he ever saw. According to the custom of the time, he wore his hair powdered, with a queue, and had always a glow of colour on his cheeks. In his daily ride he wore a blue coat and yellow buckskin breeches and top-boots. He was remarkably upright, and moved with grace, vigour, and elasticity, and would not unfrequently throw his well-shaped leg upon the table at lectures to illustrate some injury to or operation on the lower extremity. Cheerfulness of temper, amounting to vivacity and a relish for the ludicrous, never deserted him, and his chuckling laugh, scarce smothered whilst he told his story, his mirthful look and manner, and his punning habit, were well known. His personal habits were very simple; he drank water at dinner, and took two glasses of port after. A good digestion never forsook him; as he said, "he could digest anything but sawdust." He was remarkable for requiring little amusement or company beyond what he found in his professional pursuits, and he read comparatively little medical literature.

Dr. William Roots says: "From the period of his appointment to Guy's until the moment of his latest breath, he was everything and all to the suffering and

afflicted. His name was a host, but his presence brought confidence and comfort ; and I have often observed that on an operating day, should anything occur of an untoward character in the theatre, the moment Sir Astley Cooper entered, and the instrument was in his hands, every difficulty was overcome, and safety generally ensured." No doubt reference is here made to the fact recorded by Sir Astley Cooper himself as follows: "I was always of opinion that Mr. Cline and I gained more reputation at the hospitals by assisting our colleagues than by our own operations, for they were always in scrapes, and we were obliged to help them out of them." We may also quote South, who described Sir Astley as bright, quickly stepping upstairs, surrounded by an admiring crowd, always kind and sympathetic to his patients. After going round the wards he walked across to St. Thomas's to give lectures on anatomy.

To Sir Astley Cooper, as to most men who rise to eminence, remunerative practice came but slowly. "My receipt," says he, "for the first year was £5 5s.; the second, £26; the third, £54; the fourth, £96; the fifth, £100; the sixth, £200; the seventh, £400; the eighth, £610; the ninth (the year in which he was appointed surgeon to the Hospital), £1,100." This was in 1800, when his uncle, William Cooper, resigned the surgery. He never, however, forgot the scientific side of his profession, even though it cost him money. Thus we read the following entries in regard to obtaining the body of a man on whom he had operated twenty-four years before: "Coach for two there and back, £3 12s.; guards and coachman, 6s.; expenses for two days, £1 14s. 6d.; carriage of subject and porter, 12s. 6d.; subject, £7 7s.; total, £13 12s."

The earliest of Mr. Cooper's literary productions appeared in a volume of papers, entitled "Medical Records and Researches," published in 1798. In 1800

he made his first communication to the Royal Society on the effects of destruction of the tympanic membrane of the ear. He had found that considerable openings might be made in the membrane without impairing the hearing power. He consequently applied this operation to certain kinds of deafness resulting from disease or obstruction in the Eustachian tube, and in 1801 sent in another paper detailing the results of twenty cases. Although his success in restoring lost hearing was much less than he anticipated, the operation has since been frequently performed; and the Royal Society in 1802 awarded him the Copley medal for these papers. In the same year he was elected a Fellow.

Astley Cooper's activities were at this time strongly directed towards the improvement of the profession by intercourse and discussion at societies of several of which he was the life and soul. The Physical Society at Guy's afforded him the earliest opportunity of this kind and long retained his active interest. The most important Society with which he was connected was the Royal Medical and Chirurgical Society, which originated in a secession from the Medical Society of London. He became Treasurer of the Society, Dr. Saunders, his colleague, being the first President. The earliest volume of the Transactions in 1809 contains a paper recording his first operation for the relief of aneurism of the carotid artery by tying it below the sac. But he had previously published a work on "Hernia," which largely contributed to his reputation. The expense of the illustrations to this work was so great that Mr. Cooper lost a thousand pounds by it when every copy had been sold.

In 1806 Mr. Cooper left St. Mary Axe to occupy the house in New Broad Street, which for nine years was crowded by his patients during the most remunerative years of his life. In those years he rose at six, dissected

privately until eight, and from half-past eight saw large numbers of patients gratuitously. At breakfast he ate only two well-buttered hot rolls, drank his tea, cool, at a draught, read his paper a few minutes, and then was off to his consulting room, turning round with a sweet benign smile as he left the room. Patients crowded his rooms and besieged "Charles," using manifest devices to get the earliest interview possible. At one o'clock he would scarcely see another patient, even if the house was full, but if detained half an hour later, would fly into a rage, abuse Charles, and jump into his carriage, leaving Charles to appease the disappointed patients. Sometimes the people in the hall and ante-room were so importunate that Mr. Cooper was driven to escape through his stables and into a passage by Bishopsgate Church. At Guy's he was awaited by a crowd of pupils on the steps, and at once went into the wards, addressing the patients with such tenderness of voice and expression that he at once gained their confidence. His few pertinent questions and quick diagnosis were of themselves remarkable, no less than the judicious, calm manner in which he enforced the necessity for operations when required. At two the pupils would suddenly leave the ward, run across the street to old St. Thomas's Hospital, and seat themselves in the anatomical theatre. After the lecture, which was often so crowded that men stood in the gangways and passages near to gain such portion of his lecture as they might fortunately pick up, he went round the dissecting room, and afterwards left the Hospital to visit patients or to operate privately, returning home at half-past six or seven. Every spare minute in his carriage was occupied with dictating to his assistants notes or remarks on cases or other subjects on which he was engaged. At dinner he ate rapidly and not very elegantly, talking and joking; after dinner he slept for ten minutes at will, and then started to his surgical lecture, if it were a lecture night.

In the evening he was usually again on a round of visits till midnight. "Charles," of whom we have above spoken, was his servant Charles Osbaldeston, a name which in practice softened down to Balderson. He was keenly alive to his master's interest, and had much tact and disposition for manœuvre. He boasted that in twenty-six years he never lost a patient for his master whom it was possible to retain. Wherever Mr. Cooper was, Charles would start after him, if urgently required, and at any cost of post-horses track him out and bring him triumphantly to the fore. It was said that he made an income of £600 a year by being paid to usher patients into the presence of the surgeon before their time. When he was retiring from practice a good deal of scandal was excited by its being said that Sir Astley allowed him to see patients when he was not at home. It is probable that Balderson's son might have done so, for he had been educated and brought up to the profession by Sir Astley and lived close by in Poland Street.

Dr. Pettigrew, in his "Medical Portrait Gallery," thus describes the overpowering influence Sir Astley Cooper had upon his pupils: "I can never forget the enthusiasm with which he entered upon the performance of any duty calculated to abridge human suffering. This enthusiasm by the generosity of his character, his familiar manner, and the excellence of his temper, he imparted to all around him, and the extent of the obligations of the present and of after-ages to Sir Astley Cooper in thus forming able and spirited surgeons can never be accurately estimated. He was the idol of the Borough School. The pupils followed him in troops; and like to Linnæus, who has been described as proceeding upon his botanical excursions accompanied by hundreds of students, so may Sir Astley be depicted traversing the wards of the Hospital with an equal number of pupils listening with almost breathless anxiety to catch the observations which fell from his lips. But on

the days of operation this feeling was wound up to the highest pitch. The sight was altogether deeply interesting; the large theatre of Guy's, crowded to the ceiling, the profound silence obtained upon his entry, that person so manly and so truly imposing, and the awful feeling connected with the occasion, can never be forgotten by any of his pupils. The elegance of his operation, without the slightest affectation, all ease, all kindness to the patients, and equally solicitous that nothing should be hidden from the observation of the pupils, rapid in execution, masterly in manner, no hurry, no disorder, the most trifling minutiae attended to, the dressings generally applied by his own hand, the light and elegant manner in which Sir Astley Cooper employed his instruments, always astonished me, and I could not refrain from making some remarks upon it to my late master, Mr. Chandler, one of the surgeons to St. Thomas's Hospital. I observed to him that Sir Astley's operations appeared like the graceful efforts of an artist in making a drawing. Mr. Chandler replied: 'Sir, it is of no consequence what instrument Mr. Cooper uses; they are all alike to him, and I verily believe he could operate as easily with an oyster-knife as the best bit of cutlery in Laundry's shop.' There was great truth in this observation. Sir Astley was at that time certainly one of the best operators of the day, and this must be taken in its widest sense, for it is intended to include the planning of the operation, the precision and dexterity in the mode of its performance, and the readiness with which all difficulties were met and overcome."

Astley Cooper reached his zenith in Broad Street. In one year his income reached £21,000; for many years it was £15,000. One merchant prince paid him £600 a year. The story of another who tossed him a cheque for a thousand guineas in his nightcap after a successful operation for stone is well known.

In 1815 he moved to Spring Gardens, and subsequently to Conduit Street. He lectured for two seasons at the College of Surgeons on comparative anatomy, in succession to Sir Everard Home. Not being deeply read in the subject, he resolved to see what industry would do, and restricted himself to three or four hours' sleep, that he might gain additional time for the dissection of animals. He also employed several assistants to dissect for him, and the result was that his specimens came by coach loads to each lecture. Mr. Clift remarks of one lecture, "This was an overpowering discourse and highly perfumed, the preparations being chiefly recent and half dried and varnished." His lectures were very successful, although he would have preferred lecturing on surgery, which was allotted to Abernethy. At this time he signalled his skill by his celebrated operation of tying the aorta for aneurism in a case in which life was in the extremest peril. He says in his lectures: "I was sent for one day to the hospital to see a man with violent bleeding from just above the groin, in consequence of a rupture of the external iliac artery; the integument had sloughed, and bleeding was going on; I thought myself justified, therefore, in tying the aorta." He gives his reasons for the propriety of the operation, viz., his having ligatured the aorta with impunity in dogs, and also his having found it totally obliterated from disease in the human subject. The ease with which he prepared for the operation and the masterly skill and success with which he completed it—without the aid of chloroform, be it remembered—excited admiration throughout the profession, who could best judge of the difficulties which had to be overcome. Some years later, in 1824, he amputated at the hip joint, the first time, we believe, the operation had been performed. The whole operation, with the dressing of the wound, took

half an hour. The patient bore it with extraordinary fortitude, and after all was finished said to Sir Astley "that it was the hardest day's work he had ever gone through," to which Sir Astley replied that it was almost the hardest that he had ever had.

Sir Astley's fame was European, so that distinguished foreign surgeons never failed to visit him at the Hospital. We read of Dupuytren going round the wards with him and seeing Mr. Key perform lithotomy. When he took leave he saluted the worthy baronet on each cheek. The manner in which Sir Astley submitted to the ceremony afforded no small share of amusement to the pupils standing round. The baronet was also presented with a copy of the "*Pharmacopœia Guyensis*," by the venerable Stocker. Baron Larrey also went round with Sir A. Cooper. He believed much in the efficacy of the moxa, and showed how it should be used, also his manner of putting up fractures.

After having some years attended Lord Liverpool, Mr. Cooper was called in to remove a small tumour from the head of George IV. His success was followed by a baronetcy, and in 1822 he was appointed Examiner at the College of Surgeons. In the same year his important work on "*Dislocations and Fractures of the Joints*" appeared. In January 1825 he resigned his surgeoncy at Guy's and lectureship at St. Thomas's, owing to the impairment of his health. He bought an estate at Gadesbridge, near Hemel Hempstead, and spent as much time there as possible. Lady Cooper having lost her adopted daughter, Mrs. Parmeter, and their only child having died in infancy, could not endure being in London. Her death in 1827 was a heavy blow to him, and he was so much affected by it that he resolved to retire altogether from practice. Before the end of the year, however, he found the ennui of retirement insupportable, and returned to

town, and was soon in full practice again. He was married a second time to Miss C. Jones in July 1828. Having no lectures, he still dissected and occupied himself largely with completing his various works for the press. His work on "Diseases of the Breast" appeared in 1829, and was followed by "Diseases of the Testis" in 1830, and "The Anatomy of the Thymus Gland" in 1832. He was a second time President of the College of Surgeons in 1836. In 1833 he received the decoration of the Legion of Honour from the King of the French.

At the beginning of 1841 Sir Astley became ill, and soon dropsy set in, and on February 13th, 1841, he died. The funeral took place on February 20th. The body was brought from Conduit Street, and the coffin placed in the board room of Guy's Hospital. At three o'clock the funeral took place, in presence of a large number of visitors as well as colleagues and students. He was buried beneath the chapel, where a tablet is placed in memory of his services to the Hospital. A statue of him by Baily was erected, chiefly by members of the medical profession, in St. Paul's Cathedral, near the southern entrance.* An admirable portrait of him by Sir Thomas Lawrence exists. There is also a bust by Towne in the museum of Guy's, dated May 7th, 1841, with the inscription, "Alumni grato animo hoc marmor posuere." A full account of the post-mortem examination by Mr. Hilton will be found in the sixth volume of the "Guy's Hospital Reports."

Sir A. Cooper left amongst his private papers an estimate of himself, written in the third person, which is worth quoting:—"Sir A. Cooper was a good anatomist, but never was a good operator where

* By some mistake the date of Sir A. Cooper's death is given as 1842, instead of the previous year.

delicacy was required. He felt too much before he began ever to make a perfect operator. Quickness of perception was his forte, for he saw the nature of disease in an instant, and often gave offence by pouncing at once upon his opinion. The same faculty made his prognosis good. He was a good anatomist of morbid as well as of natural structure. He had an excellent and useful memory. In imagination he was vivid. His principle in practice was never to suffer any who consulted him to quit him without giving them satisfaction on the nature and proper treatment of their case. My own success depended upon my zeal and industry, but for this I take no credit, as it was given to me from above."

MR. ASTON KEY.

CHARLES ASTON KEY was the eldest son by his first wife of Mr. Thomas Key, a general practitioner first in the Borough, afterwards in Fenchurch Street, who late in life took the degree of M.D., and carried on a lucrative practice as obstetric physician in Lombard Street. He was born in Southwark on October 6th, 1793, and educated at Buntingford Grammar School. He was apprenticed to his father in 1810, and entered as a pupil to the lectures of the United Hospitals in 1812 and as a pupil of Guy's medical and surgical practice in 1814. He afterwards, in 1815, gave a large premium to Sir Astley Cooper as his apprentice. In 1819 he, in company with Mr. Morgan, opened a dissecting room in Maze Pond, but this was closed after two years. In 1820, when Mr. Joseph Henry Green succeeded Mr. Henry Cline as lecturer on anatomy at St. Thomas's Hospital, Aston Key was appointed demonstrator, and this post he held for two years. In 1821 he became a member of the College of Surgeons, and

commenced practice in St. Thomas's Street. He subsequently moved to St. Helen's Place, where he practised until his death. He married, in 1818, Mrs. Anne Cooper, the niece of Sir Astley and sister of Bransby. In 1821 he was appointed assistant surgeon to the Hospital, an office specially made for him, but ostensibly for the better attendance of surgical out-patients, and in 1824 full surgeon. He shortly afterwards gave the lectures on surgery, in conjunction with Mr. Morgan, and continued the course for some years. In 1845 he was amongst the first elected Fellows of the College of Surgeons, and was in the same year chosen to a seat on the Council. In 1847 he was appointed surgeon to Prince Albert.

On Wednesday morning, August 22nd, 1849, after seeing some patients, he began to feel unwell and retired to his room. Very soon afterwards the worst symptoms of cholera appeared, and he died on the following morning, after twenty hours' illness, in the fifty-sixth year of his age. He was buried in St. Dionis churchyard, St. Mary Axe. He left a wife, who still survives, and nine children. His son, Admiral Sir A. Cooper Key, died in 1888. Aston Key's father had married twice, and so he had for a half-brother Thomas Hewitt Key, for some years Professor of Latin and Head Master of University College School.

Key very soon began to make himself distinguished as a surgeon, one of his most important operations being a successful ligature of the subclavian artery in a case of axillary aneurism, in the year 1823. The case is described in the 13th volume of the "Transactions of the Medical and Chirurgical Society," and the dissection of the arm, twelve years afterwards, in the 1st vol. of the "Guy's Hospital Reports." It was remarkable as the first successful case which had occurred in London. The man had been under a

practitioner in the neighbourhood who had endeavoured to cure the aneurism by pressure, having bound a piece of cork over the vessel for several days. Mr. Key in subsequent years himself tried pressure, and in the year 1845 had various instruments made of the tourniquet character to compress the femoral artery in case of popliteal aneurism. There was some want of skill, and more want of perseverance, which caused his failure.

It may be here worthy of remark that the ligaturing of a vessel for a certain time, instead of permanently tying it, had been supported and tried by Sir A. Cooper. In the year 1816 this surgeon had in the Hospital a case of popliteal aneurism, in which he exposed the femoral artery and put a ligature around it. After two days he loosed the ligature, but the blood soon again flowing into the aneurismal sac, he tightened it once more. After another twenty-four hours—that is, seventy-two from the first ligaturing—the vessel was found closed, and therefore the ligature was altogether removed. No further pulsation occurred, and the man got well.

In connection with Key's first operation, there is a charming bit of romance as told by Mr. Bryant. When lately visiting Mrs. Key, she related how well she remembered this first famous operation of her future husband, of his anxiety day by day whilst he was paying his visits of courtship, and how he told her that he was waiting for the ligature to come away. One day he went in smiling and exclaimed, "The case is all right, and here is the ligature." The lady took it from him and kept it as a souvenir. Then, turning to a box, Mrs. Key put in her hand and pulled out a string, saying to Mr. Bryant, "And this is the ligature."

Mr. Key contributed also to the first volume of the

“Guy's Hospital Reports” in 1836 some valuable papers on hernia, and subsequently on lithotrity and other subjects. He was then made F.R.S. He also read an elaborate paper on “The Pathology of the Ulceration of Joints,” showing the formation of vascular fringes and their power of absorption. He was one of the first to use ether as an anæsthetic, soon following Liston, his operation being one of lithotomy.

Key was a splendid operator, and above the average of surgeons in this respect; he had a power and dexterity with the knife which few possessed, and, in common with other superior operators like Liston and Ferguson, had immense hands. These he knew how to use, so that it was a real pleasure to see him handle a limb for examination; it seemed to bend and move under his manipulation in a manner which gave a new aspect to the part. An anonymous writer in one of the journals said: “Key is a neat, elegant, finished operator; he was never known to bungle from any ignorance of details. He handles his scalpel with singular ease and grace, and waves it in semicircles as the painter his pencil, and has the art to invest with interest by his exquisite execution an operation that in other hands would appear hideous and revolting; every moment proclaiming the perfect artist.”

In the year 1831 he performed a tremendous operation, which became “the talk of the town.” A Chinaman named HooLoo, æt. 32, came to England with an enormous elephantiasis scroti, to see if it could be removed. Mr. Key undertook to do it, and the operation lasted one hour and three-quarters. The tumour, on removal, weighed $56\frac{1}{2}$ lbs., a quarter of the weight of the man's whole body. He continually fainted during the operation, and artificial respiration was kept up. Transfusion was had recourse to, but he quickly died, apparently from loss of blood. The operation excited much interest

in the medical world, and was commented on especially by Professor Delpech, of Montpellier, who wrote to Sir A. Cooper on the subject, as he was present during its performance. He thought a better success might have been obtained by a dissection of the parts, leaving the sound organs and removing the morbid tissues. He said, "I was surprised on reading that a similar operation had been performed in the United States, and my astonishment was much increased when I learned that in the first hospital in England, under the eyes of the first surgeon of the age, and by the hands of one of the most skilful operators of London, the operation had been repeated in the same manner."

To speak now of Key from a personal point of view: it was said that when young he was a smart man and fond of dress; as we knew him in middle age, he was a tall, upright man of commanding appearance. His slightly aquiline nose, approaching to the Wellington type, added to his general imposing effect. He wore for a considerable part of the year shepherd's plaid trousers, but darker ones in the winter. As the spring appeared the season was announced by Key's freshly washed plaids, which also became somewhat tighter every year. These made his feet look extraordinarily long, corresponding with his large hands. The latter were remarkable—big, like those of other good surgeons, but very mobile though powerful, so that his manipulation of a limb was something interesting to see. He wore generally a grey striped necktie or stock, which threw up his head and produced two folds on his cheeks. He had a merry twinkle in his eye, with a nervous twitch in his face; this became very marked if anything ruffled him, as was often the case, as his temper was not one of the sweetest. When arriving at the Hospital, he walked into the colonnade with a long stride and majestic air, his class waiting for him, and taking off their hats whilst he

extended his left hand or forefinger for his dressers to shake. He then proceeded into the wards, pleasant in his manner, but altogether dictatorial, so that an admiring class gathered round him to catch every syllable that fell from the oracle. He did not familiarly discuss subjects with the students as did some others of his colleagues, but did little more than lay down the law, and all obeyed. Woe to the man who came in collision with him. In speaking of the surgeons forty or fifty years ago, much must be said for the times in which they lived. It was the habit to show more brusqueness and roughness, instead of the kindness of manner and consideration of the present day. At that time the use of strong words and oaths towards patients and subordinates was not at all uncommon. Some excuse, therefore, may be made for Key when he exemplified the manner of the day on occasions when he was irritable or a little ill-tempered. We can never forget how on one occasion, when a patient had not received his allowance of wine, because the steward said it was not signed for, seeing that one or two scratches did not in his eyes constitute a signature, Key turned white with rage and asked for a pen and paper, on which he wrote C. A. K. in gigantic letters, crushing the pen into splinters while he did it, and at the same time uttering objurgations on the head of the unfortunate steward, the nurses, patients, and pupils standing aghast at his wrath. Even in private practice the new manners may well contrast with the old. Mr. Cleveland, an old dresser of Key's, informs us that on one occasion having to assist him at an operation where the patient—a lady—was to have a small tumour removed from the neck, she exclaimed, "I don't think I can have it done," and in spite of his remonstrances repeated it several times, whereupon Key, making use of a very decided though unparliamentary expression, left the house.

When at the height of his fame the *Medical Times* gave a description of him. The writer caught the peculiarities and characteristics of the man, although some features are exaggerated. The picture, although strongly drawn, conveys a fair impression of this great surgeon. "Mr. Key is a thin, spare man, with long visage and narrow forehead, the range of the organ over the eye prominent, which is small and sunken; nose high, large, and prominent. The perceptive are comparatively much larger than the reflective faculties, forehead high but declining backward, face narrow and sharp, with a general expression of quickness and sagacity. To be seen to perfection you must follow him to the Hospital. Napoleon's eye was never lighted with purer ambitious pleasure when, at the head of a brilliant cortége, he dashed on his gallant charger into the centre of the square of the Tuileries, to review his devoted veterans after some glorious campaign, than Key when he steps along the wards with his head erect, with his numerous suite or staff of admiring students. He marches along as if he felt himself every inch a king. There is an air of conceit, a conviction of self-importance, an arrogant pretension of optimism which would be regarded by his equals as an assumption,—we will call it usurpation,—but is regarded and recognised as his right by his subjects. Every look is here law, every diagnosis infallibility, every prognosis life or death. Doubt is treason, scepticism infidelity. If an error now and then occurs, it is one of nature's freaks. She departed from one of her fixed laws; she might be wrong, but her interpreter, her prophet, Key, never. Every word he utters is manna, molten gold. Observations the most trivial become aphorisms. He is, indeed, the epicycle of his own uncle; they revolve round like satellites around the sun."

The present writer gave a short account of Key at the

time of his death. He then said : " If a stranger had for the first time met Mr. Key, and observed his figure, tall, upright, and commanding, he would at once have declared that he was looking upon no ordinary man, but upon one accustomed to rule, upon one from whom he would instinctively retire, feeling himself an inferior being. Nor would this impression, gained from external appearances, have deceived him ; for if he but marked the first utterances of his lips, he would have perceived that they were words of authority, and came from a man who was asserting his superiority and his right to command. Mr. Key's knowledge of his profession was in the fullest sense profound. He had not studied surgical diseases in a large hospital in vain. Nothing worthy to be acquired could have escaped his quick and penetrating mind ; and with this quickly perceptive faculty there was a wonderful power of diagnosis and an extraordinary *tactus eruditus*. In operating he had not a rival ; his power of handling the scalpel was only surpassed by the wisdom which directed it, and by the resolution which never for a moment could make it waver, but rather made it a stronger instrument in his hand in proportion to the difficulties which it had to encounter. The ascendancy which he acquired, therefore, was due in part to the energy and force of character which was natural to him, and also to the intuitive feeling that knowledge was power. Such a mind properly cultivated must carry its owner to high professional fame, especially in the surgical department. Those who remember his colleague Mr. Morgan must have observed what a striking contrast there was between the two men : the one a slow, contemplative man, heavy in structure ; and the other a tall, spare man, of vigorous and mobile intellect. In speaking of Key's characteristic and haughty manner we would not wish to convey the impression of coldness or hardheartedness, for there are many gentlemen now

living who can testify to his friendship and to his unbroken steadfastness in assisting them whenever occasion required."

MR. MORGAN.

JOHN MORGAN was the son of Mr. Morgan, of the Equitable Insurance Society, the most celebrated actuary of his day. We have no history of the son's performances as a student, but he had distinguished himself so much as to be elected assistant surgeon in 1821 with Aston Key, and full surgeon in 1824, at the same time as his colleague. These two surgeons lectured on surgery at the opening of Guy's School, and continued to do so for many years. Morgan also gave lectures on ophthalmic surgery, there having been built two special wards for eye diseases. In 1839 he published a work on diseases of the eye, containing some very good plates by Canton—a subsequent edition was brought out by Mr. France, his successor in the ophthalmic department. He was elected on the council of the College of Surgeons in 1843, but never became President. Mr. Morgan was a plodding, hard-working, and intelligent surgeon; his judgment was always regarded as important, and his operations were most skilfully performed. He was wanting in the brilliancy of Aston Key, who was regarded as the successor of Astley Cooper; but there were many of Morgan's dressers who maintained that, take him for all in all, Morgan was the better operator of the two. There was no pretence and no flourish, but he went to work in a solid manner, and completed his operation to perfection. He was one of the first who amputated by the flap method, whilst his colleagues continued the accustomed circular operation. At that time, before the introduction of anæsthetics,

rapidity was a great merit, as well as certainty, about first incisions, so as to avoid cutting the skin a second time. The students always thronged the theatre if it were known that Morgan was about to amputate, especially if it were the leg; and it was said that passing his knife over the front and then thrusting it through to make a flap, with a subsequent circular cut around the bone, and the insertion of the point between them, occupied only a few seconds, and the very slow and deliberate sawing of the bones only a few seconds more. Key often consulted Morgan as to the nature and treatment of his cases, and was much influenced by his judgment. He had a good following, because he was methodical in his teaching; and, although no doubt this was imperfect according to modern lights, was much appreciated by the students. He could tell when to give calomel and opium and when to withhold them; what cases required a cold lotion, and which a warm poultice. A few of his lectures were published, and showed much judgment and intelligence: one especially on hydrophobia, in which he advocated the trial of many remedies, amongst these being "woorari." In July 1834 he had in his ward a young man suffering from tetanus, whom he made inhale nitrous oxide gas. Having had a discussion with Dr. Addison as to the operation of poisons, they determined to perform some experiments—the question between them being whether the poison acted at once upon the nerves or was carried by the blood into the circulation. In 1829 they undertook these experiments by uniting the carotid arteries of two dogs, each divided portion being attached to the vessel of the other dog. On introducing the poison, the one which was inoculated died; the other escaped, showing that the poison acted immediately and not by absorption or by being

carried to the brain, as was generally thought. They performed other experiments with the same object, but these were not altogether conclusive.

Mr. Morgan gave all his spare time to natural history, and published several papers in the "Transactions of the Linnæan Society," of which he was a Fellow. One very interesting paper was on the mammary organs of the kangaroo, in which he stated that the marsupial bones form a fixed point for resistance, against which the mammæ are squeezed by the muscular girdle enclosing the glands. The female is thus enabled to employ by compression the excretory ducts of its mammæ. The mammæ were formed of double glands on each side. Some of these were small and inactive, whilst the lower appeared to perform exclusively the office of preparing a nutritious fluid for the young animal. The museum at Guy's contains "the pouch of a young and virgin kangaroo showing the teats in the undeveloped state, one of them artificially drawn out"; and another preparation "the mammary gland of an adult kangaroo showing the marsupial teat in its developed state, the ducts filled with mercury." He had also a good collection of stuffed birds.

In person Morgan was of middle height and a thick-set, heavy man of leucophlegmatic temperament, very different from his colleagues Key and Bransby Cooper, the one striding in with head erect waiting for every one to do him reverence, the other in a jaunty manner, greeting those around him in familiar and pleasant tones; whilst Morgan walks straight in with a white impassive face, goes to work without a word of gossip, taking heed of nothing or nobody, gives his opinion of the case and the treatment in a few words, and then goes on to the next. His work was done well and in a business-like manner, his colleagues

highly respecting his opinion, and his pupils being much attached to him. They probably did nothing more than respect him, for his heavy and sallow countenance, dull eye, and hypochondriacal expression could not possibly excite any vivid emotion in others. Thomas Bell, however, said that between him and Morgan a true friendship had existed for many years, and that he was a man of great sincerity and of warm heart. As Key was all nerve and vivacity, so was Morgan all dulness. As it was the habit of the surgeons then to take snuff, so did Morgan in excess; you could often mark his traces in the wards by the snuff he let fall. The snuff-taking was so much the practice that many students caught the habit, and snuff-boxes were seen continually going round the lecture room. Morgan practised in Finsbury Square and had a country-house at Tottenham, where he died of (we believe) Bright's disease, October 14th, 1847.*

MR. BRANSBY COOPER.

BRANSBY COOPER was the son of the Rev. Samuel Cooper, vicar of Yarmouth, and brother of Sir Astley Cooper. He was born at Yarmouth on September 2nd, 1792. Being inspired by the naval power of England during his boyhood, he went to sea as a midshipman, and made his first voyage in 1805. Being tired of the occupation, he paid a visit to Sir Astley in Broad Street, who interested him in the medical profession and sent him to Norwich Hospital. Subsequently, in 1811, he came to London and entered the Borough Hospitals. After that he joined the army as assistant surgeon, and was present at many battles in the Peninsular Wars,

* See Life of Morgan in his "Lectures on Diseases of the Eye," 2nd edition, 1848; edited by John F. France.

for which he was decorated. After having been sent to Canada, he retired from the army and proceeded to Edinburgh to pursue his studies further. He then came to London and assisted his uncle in the dissections for the anatomical course, as Sir Astley was then lecturing to four hundred students. He subsequently gave a part of the course, but a disagreement springing up, as has already been mentioned, it was determined to build a separate anatomical theatre at Guy's, and when this was completed Bransby was appointed lecturer. In this year (1825) Sir A. Cooper gave up lecturing and retired from the Hospital. Bransby was elected assistant surgeon and went to reside in Spring Gardens. Soon after Sir Astley retired from practice, and his nephew hoped to succeed him in it, but he soon came back and took a house in Conduit Street. At his death Sir Astley's museum passed to Bransby, and then most of it to the College of Surgeons. Whilst lecturing Bransby wrote a book on anatomy, and was made F.R.S. in 1828. His early career was marred and soured by his quarrel with Wakley and the *Lancet*. The incident, no doubt, did him much harm with the public, although it endeared him the more to his pupils. Immediately after the close of the trial, a letter appeared in the *Morning Herald*, signed by Mr. Hilton on behalf of one hundred and fifty students, in which they expressed their utmost confidence in their master. A few years afterwards his portrait was painted by subscription; the artist was Mr. Eddis, and the engraver was Simmonds. The portrait, as well known, is most excellent and life-like. No man was more beloved than Bransby Cooper: he was a very different man from his cold and haughty brother-in-law Key; he was warm-hearted, sympathetic, and jocular, and by no means laid down the law unless he was quoting from his uncle, whom he adored, and whose words were gospel to him. Indeed he was wanting in confidence in

himself, and therefore gained little from his patients; this was not remarkable, when he would say, "Let us try this medicine," and, on the following day, "Let us try that." His devotion to his uncle partook of actual love, for he could not mention his name without a tear starting in his eye. "As my poor uncle used to say," was the expression always on his lips, accompanied by a faltering of the tongue, denoting his emotion. After hearing of his son's death in India, he was for a long time depressed, and on mentioning his name one day in going round the wards he was so much affected that he lay down on one of the beds. If a poor dying patient said, "Goodbye, I may never see you again," he took out his handkerchief and wiped his eyes. He always seemed in his tender-heartedness as if unable to brook the troubles of the world, and as if it were a misfortune that he had been placed in a position of such responsibility as surgeon to a hospital. His appointments there, however, materially assisted in keeping him, as his private practice was never great. He also had much family trouble. The writer of these lines will never forget how Bransby told him of his perturbed life both in public and private, and well he remembers the melancholy impression it made upon him. Towards the latter part of his life he interested himself in chemistry, and made analyses of the animal fluids and calculi; of these he had a good collection, as well as some admirable drawings.

He was a well-made man, muscular, a good boxer, rower, and a good shot. There is a story told of his prowess when demonstrator of anatomy, how, during a fight between St. Bartholomew's and Guy's men, Bransby came to the rescue and thrashed the enemy. One day, on coming to the Hospital, he said he could not amputate as his hand was unsteady, having rowed down from Westminster Bridge; on another day he would drive down in a gig and fast horse, although his usual

vehicle was the old-fashioned large yellow chariot. He would enter the Hospital in a jaunty manner, with his hat on one side and with a comical expression produced by his blind eye, and ready to shake every one by the hand. He was never called Cooper, but always by the more endearing name Bransby. His last public act was the delivery of the Hunterian Oration on February 14th, 1853. At this time he was hoarse, and he declared that he had a fish-bone in his throat. As the trouble increased he submitted to examination, when some ulceration was seen at the back of the throat; he also got out of health and grew thinner. It was evident that he was the subject of some serious disease, but he continued to go out, and on August 11th, 1853, he went to the Athenæum, and while crossing the hall he asked for a glass of water, as blood was spouting from his mouth; he fell down and shortly died. There was found a deep-seated cancerous ulceration at the root of the tongue, with implication of the neighbouring glands; the right lingual artery was laid open, and the stomach and lungs were full of blood. The funeral took place in St. Martin's-in-the-Fields, the coffin being placed in the same vault as that of John Hunter's before its removal to Westminster Abbey. A procession was formed at his house in Spring Gardens, headed by the Guy's staff and pupils. His personal estate was sworn under £6,000.

MR. CALLAWAY.

THOMAS CALLAWAY, senior, was born in 1791 of Isaac and Alicia Callaway, who both died young. He was consequently brought up and educated by his grandfather, who was steward of Guy's Hospital. He was thus always amongst the sick, and acquired from childhood a taste for surgery. In 1809 he was appren-

ticed to Sir A. Cooper, and thus acquired, according to custom, certain privileges as regards appointments, as assisting in the dissecting room, etc. In 1815, after the Battle of Waterloo, he went over to Brussels with many other surgeons. In 1821 he became member of the College of Surgeons, and in 1825, when two vacancies occurred, he was appointed, with Bransby Cooper, assistant surgeon to the Hospital. Both of them were young men, and had a whole life before them, so that when his colleague was shortly after appointed full surgeon, Callaway's promotion to a similar post seemed long distant, and, indeed, he never attained it; for when a vacancy occurred years afterwards, he was advanced in age. It is difficult to say whether chance or any more direct causes were operating against him, for at that time rivalry and party spirit ran so high it is impossible to arrive at the truth. The *Lancet*, which was continually attacking Guy's and the system of election, and more especially the Coopers, was upholding Callaway at the expense of his colleague Bransby Cooper. When more than twenty years afterwards a vacancy occurred, Callaway resigned his office of assistant. His duties at the Hospital included little more than seeing out-patients, all the rest of his time being devoted to private practice, for which, no doubt, he was more fitted than for the position of a teacher at a medical school. He followed the line most suited to his character, and, although he showed skill in such operations as hernia, he never pretended to any scientific attainments. He was essentially a man intended for practice, his manner and style being altogether suited to make a popular impression; whilst at the same time he possessed none of the qualities of a professor. He commenced practice by taking rooms in the High Street, Borough, and at

once obtained patients, so that he enlarged his premises and started a carriage before he had paid off the money he had borrowed with which to begin life. He told a friend who contended with him on this apparent rashness that he had started his carriage to pay his debts, showing the confidence he had in his own powers. He was perfectly right in the estimate he took of himself, and in the method of "getting on." It was said of him, as of other surgeons of the time, that he dressed up to Sir A. Cooper. When known to the writer, he was about fifty years of age; he was rather under the middle height, rather stout, bald on the top of the head, with very black hair at the sides. He was clean shaven like his master, wore a black dress-coat tightly buttoned up, with a massive gold chain hanging below; the collar of the coat was narrow, over which appeared a very white cravat. He had piercing black eyes expressive of great discernment and intelligence, and nothing escaped them. When he sat in his large yellow chariot with footman behind, he was continually looking out, first on one side and then on the other, so that he never missed a friend to give him a kindly nod; whilst the latter was always pleased to be recognised by "Dr. Callaway," the distinguished surgeon. According to the manners of the time, when the carriage drove up to the patient's house the footman knocked heavily at the door, and when opened proceeded to let down the carriage steps to enable his master to alight, who then in a stately manner marched up to the house. His practice was more medical than surgical, and, although he was much respected by his brethren in the neighbourhood, who frequently met him in consultation, his patients were mostly his own, and this was probably the reason why his fees were small. His rooms in the Borough

were thronged every morning, so that the stories of his enormous practice were very rife, such as a heavy bag of guineas being taken into the neighbouring banker's every morning, and the omnibus conductors on their way to the city from the suburbs demanding "Any one for Dr. Callaway's this morning?" He was thus giving himself up entirely to private practice, and every one in the southern district knew him or had consulted him. He had a peculiar power in gaining the confidence of his patients, which might have been conjectured by his frank open countenance and agreeable manners. Even to the out-patients he was most courteous, and placing a towel over his knee he would say to the foulest fish-fag with a smelling ulcer, "Put your foot up here, my dear," or to a man, "How are you to-day, my friend?" He was thus for many years doing a large practice in the south of London, and amassed a considerable fortune — a result never attained by any of his Hospital colleagues. It ought to be mentioned, however, as an episode in his life, that in 1841 he delivered the Hunterian Oration. In October 1847, when his junior, Mr. Cock, was elected full surgeon, Mr. Callaway resigned his appointment at Guy's, and did not offer himself for the higher one, feeling that he was then unfit for new and onerous duties. He was twice married, having children by both wives. His eldest son became afterwards attached to Guy's, while his youngest was yet a boy when he died. After his resignation he lived only about a year, dying at Brighton on November 17th, 1848. His widow lived many years after him; his daughters married and had families, but both his sons have long since died.

MR. HILTON.

JOHN HILTON entered Guy's in 1824. He was born at Castle Hedingham, in Essex, in 1804, and was educated at Chelmsford. He made such progress as a student that after he became a member of the College of Surgeons in 1827 he was appointed demonstrator of anatomy at Guy's. It was then that he made the elaborate dissections from which Mr. Towne executed the beautiful wax models which adorn the anatomical museum. In 1844 he was elected assistant surgeon at Guy's, and on the death of Mr. Key in 1849 full surgeon. He became a Fellow of the College of Surgeons under the new charter; subsequently, in 1852, served on the Council; and became its President in 1867. Previous to this he had given lectures at the College from 1860 to 1862. These were subsequently published in book form under the title "Rest and Pain." These lectures made Hilton justly celebrated, and form the principal ground on which his future fame will rest. He was afterwards made surgeon to the Queen.

After lecturing at Guy's on surgery for many years, Hilton resigned his office in 1870, but continued his practice in New Broad Street, retiring to his house at Clapham in the evening. For some months previous to his death he had suffered from gastric symptoms, indicating malignant disease, and he died September 14th, 1878, aged seventy-four years.

Hilton was a very ordinary-looking man in general appearance. As he plodded heavily along it would scarcely have occurred to a passer-by that he was the possessor of a remarkably active intellect. His great peculiarity in this respect lay in his keen powers of observation and the way in which he could bring his

intellect to bear upon any question before him. No cases of disease were so simple or apparently trivial that they did not become full of interest directly he touched upon them. It might be a simple ulcer that he would dilate upon, until the student beheld in it something much more worthy of note than he had just considered it. It was a case of this kind in which he first discerned that the ulcerative process was kept up by the irritation of a nerve, upon the division of which the sore healed. The case became classic, and the treatment was looked upon as a great discovery, for it was long before neuritis and the effects of nerves on nutrition had been carefully studied, and the knowledge thereby gained became the property of the profession. Other trivial complaints he treated in the same scientific method, as may be seen by a reference to his clinical lectures published in the "Guy's Hospital Reports," some of the most interesting and valuable being on such subjects as hæmaturia or hæmorrhoids. No man could ever teach the student so much from a simple theme, and medical practitioners meeting Hilton in consultation were all agreed that, thoroughly as they thought they understood the case, this surgeon would come in and throw fresh light upon it.

We well remember both the first and the last occasions on which we met Hilton in private, the interval being thirty-five years, and we were equally impressed with his shrewdness both times. The first occurred before we had had the advantage of listening as a student to his lectures, and the meeting was at a post-mortem examination in a house not far from the Hospital. The man who kept the shop had only one leg and made use of a crutch. His wife had died after an obscure illness, so that the medical man in attendance asked for a post-mortem, and we accompanied him. Hilton found an abscess of the liver, and immediately exclaimed,

“This did not come of itself; she has had a blow with that crutch,” which he had observed on entering; he then found a broken rib, and it turned out that in all probability Hilton’s surmise was correct. On the last occasion we met him in the case of a gentleman dying with suppurative inflammation of the neck around the larynx. Hilton was asked to come in and open the windpipe. After looking at the patient a little while, he said, “The larynx is free; the difficulty of breathing is due to implication of the pneumogastric nerves in the inflammatory process.” Of course this was not proved, but it exemplified well Hilton’s characteristic of finding a cause which was by no means immediately obvious.

His book on “Rest and Pain,” now edited by Mr. Jacobson, is full of illustrations of the kind, although it is true that some of his suggestions are extremely speculative. Even these, however, have borne fruit.

It was probably owing to Hilton’s training that he was able to import so much anatomy, physiology, and good pathology into the practical work of surgery. For many years he had devoted himself to these purely scientific subjects, and he was well aware, when he was appointed assistant surgeon, how much he had neglected purely professional work. He therefore gave up many hours of the day to seeing the cases in the surgical casualty room, so as to gain the larger experience which he required. But his deep anatomical and physiological knowledge served him well; his admirable dissections of the nerves, which Towne copied in wax, were probably always before his mental vision in the wards. His careful sections and unravelling of the brain made him give the first clear account of the cerebro-spinal fluid and the channel in which it existed. This again suggested the closure of the fourth ventricle as a cause of chronic hydrocephalus. With all his powers of

observation, Hilton had not much sympathy with the scientific learning of the day. He was on a very friendly footing with Dr. Moxon, who, as is well known, was not a believer in Darwinian evolution and other systems in vogue, usually called materialistic, and Hilton often joined him in ridiculing them. Now and then Hilton would touch on deeper subjects, when the turn of his mind could be better seen. In one of his lectures he says :—

“The theorists who maintain most strenuously the possibility of tracing the phenomena of life to the influence of physical or chemical agents are constantly obliged to suppose a mode of agency altogether different from any yet known in physics or chemistry—the vast but inscrutable chasm between chemical and vital affinities. Whenever we approach the consideration of life itself or the spirit we are self-restrained by our finite reason. All is darkness to the human understanding. We know not how the union was produced at first, nor do we know how it happens that the blow which prostrates the body and imprisons it in the grave, gives pinions to the soaring spirit, crowning it with freedom and triumph. We believe the soul is destined to live

‘Unhurt amidst the war of elements,
The wreck of matter, and the crush of worlds.’”

It may be well understood that Hilton's following was great, both in the lecture room and in the wards, for every word that fell from him was full of meaning. And yet it could not be said that he was liked or beloved. His manner to students was irritating, and many were the quarrels that arose in consequence. He probably had no intention of hurting their feelings, but his remarks and jokes at their expense were extremely galling. It is remarkable how freely some men will joke one

another, and it is all taken in good part and no pain is felt. Hilton had the misfortune to make jokes (after the manner of Douglas Jerrold) which were not appreciated by the persons for whom they were intended, but had the effect of annoying them. It was his misfortune to say disagreeable things, for he was really a kind-hearted man.

The address in surgery delivered by John Chiene, Professor of Surgery at the University of Edinburgh, to the British Medical Association in 1891, bore striking testimony to the merit of Hilton's classic work. Making "rest as a therapeutic agent" his text, Professor Chiene went on to say: "Bacon says there are books to skim over, books to read parts of, and books to absorb: Hilton's book on 'Rest and Pain' is one to absorb."

MR. POLAND.

ALFRED POLAND was a strange contrast to his colleague Tom Callaway—the latter restless, and never fixed to any one pursuit, whilst the former would quietly work for hours and cram himself with knowledge like an encyclopædia. He had had a good education at Highgate, and afterwards at Paris and Frankfort. He was apprenticed to Aston Key in 1839, and worked hard as a student and gained several prizes. As soon as a vacancy occurred he was appointed demonstrator of anatomy at Guy's, and in 1849 assistant surgeon. He took the Fellowship of the College of Surgeons in 1847. Having a special inclination towards ophthalmic surgery, he obtained an appointment as surgeon to the Moorfield's Ophthalmic Hospital. This he kept for many years, until he was elected ophthalmic surgeon at Guy's. In 1861 he became full surgeon.

Poland had a remarkable power of gathering together

detailed knowledge, including dry facts and figures; so that his essays are complete treatises on the subject in hand, and are of permanent value. In 1853 he obtained the College of Surgeons' prize of £50 for a dissection of the nerves of the orbit, and soon afterwards the Fothergillian Prize for an essay on wounds of the abdomen, and also the Jacksonian Prize for a memoir on gunshot wounds. His papers in the "Guy's Hospital Reports" are voluminous and full of facts; as, for example, that on tetanus, in which he gives in detail, with statistics, the conditions most favourable to its development, such as climate, season, and temperature. Then his paper on "Aneurism of the Subclavian Artery" contains all the known cases and the results of treatment. On the occasion of the late Dr. King Chambers' first illness, the facts which Poland brought forward decided the question of amputation.

During the temporary absence of Mr. Hilton, Poland was requested to give the lectures on surgery; and, not content with filling the gap, he wrote out a complete syllabus of the course. It was said, with great truth, that if Poland had been shut in a room containing not a single book, but with only pens and paper, he could have written a complete work on surgery; not in a vague way, giving merely general descriptions and treatment, but in a systematic manner, detailing the distinct forms and varieties of the diseases then in his mind. But not only had he all this book-learning; he was at the same time a good practical surgeon and a brilliant operator. No one was more skilful or neater-handed than Poland, and many competent men have declared that he was the best operator on the eye they had ever seen.

Although Poland possessed all this ability, it was kept strictly to himself, and but for the essays he had written no one would have guessed that he had within him such

a mine of knowledge. He was a man of few words, and very retiring in manner; and yet it was not so much modesty as an utter indifference to praise or blame which made him let no one know the extent of his accomplishments. Although so skilful with his knife, he would choose some quiet hour unknown to nearly every one in which to perform an operation. He was also utterly careless as to his personal appearance. He would leave the dissecting room without changing his coat, and it was often the subject of surmise whether he washed his hands. Had it not been for his remarkable talents he would probably have never reached the surgeoncy at Guy's, for on his appointment the Treasurer had no hesitation in telling him that he would have to dress himself more decently and cleanly. It is not, therefore, surprising that Poland never had any practice to speak of. He never laid himself out for it, or endeavoured to attract any patient by attending either to his person or his establishment. There was nothing in his manner to give confidence. After having commenced in Trinity Square in the Borough, his ambition reached no higher than to pass into St. Thomas's Street. He was then prevailed upon to go westward, and for a short time he possessed part of a house in Welbeck Street. He again, however, went back east, and ended with Finsbury Circus. He married a few years before his death: it was a misalliance, and added much to his misfortunes.

Poland was a spare, thin man, and some would have called him wiry. He could not be said to have had habitual bad health, and yet he had several most serious illnesses, so that he used to remark that he was like a cat with nine lives. He once had a fearful hæmoptysis, also a hæmatemesis with enlarged liver, a chronic pyæmia, a prostatic abscess, a paralysis of the facial nerve, and many other troubles. The writer once visited him when suffering from a severe attack of hæmoptysis;

ordered him medicine and quiet ; but, to his astonishment, saw him going round the wards with the students on the following day, none of them being aware of what had happened.

If Poland could have been kept for hospital duties only, his position would have been an admirable one, being a good surgeon, an expert operator, and an excellent teacher. His systematic method was much appreciated by the students. With them he was a great favourite, although his unprepossessing appearance made it seem unlikely. Probably ill-health and domestic trials tended to make him quite reckless and careless of professional success. He died of consumption on August 2nd, 1872, in the fifty-second year of his age.

MR. CALLAWAY, JUN.

THOMAS CALLAWAY, junior, was appointed assistant surgeon to Guy's in 1853, and during the few years this young surgeon was attached to the Hospital no man was more conspicuous there. He was somewhat like his father in appearance—of dark complexion, black hair, cheerful manner, and ready wit, but withal of such a mobile constitution as made him be ever on the move, and, as it were, ubiquitous. This was, in part, owing to a misfortune which caused him never to be overlooked. In boyhood he had had disease of the knee-joint, from which ankylosis followed ; the result was that he walked with so pronounced a jerk of the stiff leg that his presence was most conspicuous. His father had educated him well, and entered him at Guy's in 1840, hoping that he would succeed him, both in public life and private practice ; and, as regards the first steps of Tom Callaway, his father was well satisfied. But it was soon seen that he had not the plodding ways and perseverance necessary for success. He had a versatile and mercurial

temperament, which he could not overcome. He, however, worked at the practical part of his profession, passed the examination for the Fellowship of the College of Surgeons, and in the year 1846 obtained the Jacksonian Prize for an essay on "Dislocations and Fractures of the Clavicle and Shoulder-joint." This was well spoken of at the time, as exhibiting much sound knowledge on some difficult questions of surgery.

In 1846 he was appointed demonstrator of anatomy at Guy's, and after having held this office for some years was made lecturer on the same subject. In 1853 he was made assistant surgeon. His father, who was then dead, had left him his house in the Borough and ample means. He was, however, unlike his father in not having the patience to wait for practice, and found it most irksome even to sit at home for a few hours in the morning. He would make any excuse to go to the Hospital, and so the inhabitants of St. Thomas's Street would seldom look out of their windows without seeing Tom Callaway flit by with a "hop, skip, and a jump"; for he always went at a good pace, throwing out his stiff leg as he hurried along. At last the life of a London surgeon proved too much for his endurance, and when the mutiny broke out in India, he resigned his assistant surgeoncy and joined the army of Lord Clyde. He saw a good deal of the mutiny, and was present at the relief of Lucknow. After the close of hostilities he left India, and, seeking for some new adventure, went to Italy and joined the army of Garibaldi. He marched with the latter to the conquest of Naples, and subsequently received a commission in the Italian army. He soon, however, threw this up, and in 1862 went to Algiers. He then took a house and commenced practice. He had remained there three winters when his health gave way, and this, together with his restless disposition, caused him to leave Algiers and come to London again. It was then found that he had

both serious heart and kidney disease. When a little better he determined on a voyage to Australia, and proceeded to Sydney. He had been there only a day or two when he was found dead in his bed. The occupants of the house in their alarm sent out for the nearest doctor, and when, shortly after, Sir Alfred Roberts arrived, he exclaimed, "That's Callaway, my old teacher at Guy's." This was on February 28th, 1869, when he was forty-seven years of age. He had taken a wife not long before, but it was an ill-assorted marriage. Mrs. Callaway married again and survived him many years.

It may be imagined from what has been said that Callaway's enemies were to be found in himself and his own restless disposition. Personally, no man was more beloved. He was social, generous, lively, and full of anecdote. His father had left him well off, but he could never take to harness and plod on as most successful men have done. It is not surprising that his career was a short and not a brilliant one.

MR. COOPER FORSTER.

JOHN COOPER FORSTER was born on November 13th, 1823, in Mount Street, Lambeth, where his father, who was in no way related to the Forsters previously mentioned as surgeons to Guy's, was a general practitioner. Here he had a good apprenticeship, for living opposite Maudslay's engineering factory, he had opportunities of seeing much minor practice in his father's surgery. He went to King's College School, and afterwards entered at Guy's, in 1841. He worked hard as dresser under Aston Key, and took his M.B. in 1847 at the University of London, with the second place and the gold medal in surgery, and he passed the Fellowship examination at the College of Surgeons in 1849. His recreation during student life was taken on the river, for he was

a most enthusiastic oarsman. He was captain of the Guy's rowing club in its early times, and its principal sustainer for many years afterwards. The club held for a time the championship of the river, having among its members Hewitt of Clapham, Cooper of Brentford, and others;* and at this time Forster was reputed to be the best amateur trainer on the Thames. In 1848, however, he took advantage of the disturbances in Paris to go there and study gunshot wounds. When he married, in 1850, he visited Dublin, to see the practice of Sir W. Wilde, then the noted aurist, and of the Dublin School of Surgery. After his student-ship Forster became surgeon to the Surrey Dispensary, and subsequently to the Hospital for Women and Children in the Waterloo Road. In 1850 he was appointed demonstrator of anatomy at Guy's; and having married Miss Hammond, he took a house in the High Street, near London Bridge, facing St. Thomas's Hospital, and commenced practice. He soon began to succeed, and had his circumstances not altered, there is no doubt that he would have had a very large practice, for he had an impressive, almost dictatorial manner which gave confidence to his patients. His appearance and style were imposing, and his manner commanding. When a student he was conspicuous amongst his fellows. Considerably over six feet in height, with a good head covered with bushy black hair, quick and lively in his manner, with a great deal of energy and "go" in his character, he could not be overlooked. Cheerful and generous, he was naturally popular and a favourite.

The exigencies of the South Eastern Railway obliged Forster to leave the High Street in 1854, and take refuge in St. Thomas's Street. Here occurred the first sorrow of his life—the loss of two boys from diphtheria. He

* See *Lancet*, April 12th, 1862.

operated on both, but unfortunately without success. In 1855 he was elected assistant surgeon to Guy's, when he gave up his other appointments. About this time a relative left him a considerable sum of money, and having a small fortune of his own he became careless about practice. This gave him the opportunity, which he had long desired, of following his tastes on the river, such as rowing and fishing, and showing his hospitality to his friends. It is only right, in giving a just estimate of his character, to say that his weakness lay in the direction of display or ostentation. This affords a key to many acts of his life, otherwise inexplicable. On the acquisition of his fortune, he started a carriage of the newest fashion and horses of good breed, and built stables with his coat-of-arms on the front and fitted up, regardless of cost, with every newly devised improvement. He had now the means of driving his friends or dressers to Greenwich or Richmond, where he gave them a good dinner. Never was Forster so happy or seen to such advantage as when regaling his friends in this manner, for his hospitality knew no bounds. The river, however, was his greatest attraction, so that for many years he had some place at Twickenham, Maidenhead, or Henley where he kept boats of the very best rig; and having inspired his children with the same love of the water as himself, it was pleasant to see them with their four oars gliding along the stream. It was a grand sight also to see him steering when on the towing path with a very quick horse, and shouting to the other boats to clear the course. It was said of him, with some degree of truth, that he had mistaken his vocation, for being a man made to command, if he had entered the navy he would have been an admiral commanding a fleet instead of navigating a four-oar between Maidenhead and Windsor. Later in life, having lost some of

his children, and the circumstances for boating not being so propitious, he turned to fishing, and this he now pursued with the same ardour as his former avocation. He would start off from London by the earliest train for a day's fishing in some trout or salmon stream in Hampshire, and at those fishing resorts he was well known.

After fifteen years as assistant surgeon, Forster was appointed surgeon in 1870. He had a good, bold, and neat hand, which made him a skilful operator. He used his tools neatly, and in every way he was a good manipulator. When Dr. Habershon proposed opening the stomach in cases of stricture of the œsophagus, Forster was found ready to perform the operation, being, we believe, the first to do it, in this country at any rate. He had no one and nothing to guide him, and yet the operation was done methodically and with complete success, although the patient afterwards sank from exhaustion. He was essentially a practical man, and was consequently a good guide and teacher to the students. One of his former dressers, Mr. G. A. Wright, of Manchester, thus describes his work in the wards: "Promptitude and decision were perhaps Mr. Forster's chief characteristics. Quick in forming an opinion and in deciding upon a line of treatment, impatient of 'fads,' but always ready to allow his dressers to try any reasonable new methods, he was essentially a practical surgeon. 'Make up your mind quickly and do it at once,' seemed his instinct. Yet with this he was so entirely free from anything like roughness, so kindly and so generous to all alike, that those who worked under him felt not only admiration but personal affection for their surgeon." His clinical lectures were noted for their decisiveness, their terseness and abounding common sense, brought home even to the most careless of listeners by his emphatic

delivery and commanding presence. It is obvious from what has been said that a man of his active nature could never have been really studious, and therefore he was not scientific. This he never pretended to be, and in his lectures he left the elementary principles to others, whilst he kept to the part more essentially clinical. As showing his energy and impulsive character, we may mention the following. Having heard of a new method of arresting the flow of blood in a vessel, by acupressure, he started off to Aberdeen, previously sending word of his coming. On the road the train broke down, when he telegraphed on to delay the operations, if possible, for an hour or two. He arrived, was delighted with what he saw, and returned to London on the following day. He was enthusiastic about the operation, at once used it, wrote upon it in the "Guy's Hospital Reports," declaring he should never use any other method; but, alas for his hastiness! he was adopting torsion like other surgeons before the year had passed. After lecturing for a short time on surgery he gave it up, as it was never congenial to him, and in 1880 he retired from the Hospital. A few months before he had been requested, with Dr. Habershon, to resign, as we have already mentioned. The request was afterwards withdrawn, but these two gentlemen, of their own initiative, nevertheless resolved to resign, and did so in the autumn of 1880. Four hundred Guy's men subscribed to present them with a testimonial in the form of silver plate, as a proof of sympathy and regard.

Forster afterwards, in 1884, reached the height of his ambition, in being elected President of the College of Surgeons. He was very regular in his attendance at the College, but had not the force of character or steadiness of purpose to cope with the coming opposition to the College administration. He fulfilled other duties in a way which was quite unprecedented. All the

externals and grandeur of the presidency he magnificently displayed; and he was a subject of general admiration when seen in his official robes receiving the guests at his conversaciones at the College. He also gave dinners innumerable of the most *recherché* description, to which he invited all his friends in turn. He beamed with satisfaction to see them enjoying the dishes and splendid wines. At the close of his presidency he removed his plate from his door, and retired from practice.

There is no doubt Forster would have done more but for his easy circumstances. He was a good practical horticulturist, a very skilful oarsman, having a very wide and complete knowledge of English waterways, and a devoted fly-fisher; he was also noted for his cheery and well-planned hospitality.

During the latter part of 1885 he had suffered occasionally from pain in the upper part of the left arm, and when staying at Bournemouth he showed serious languor and depression, which was attributed to his having done too much during his presidential year. After close work at the College, he would get up between five and six on Saturday mornings, winter and summer alike, and go down by the first train into Hampshire, to Horsebridge or Christchurch, to fish, returning to town just in time for Monday's work. It was thought that he would find rest without fatigue on the Riviera, but for himself he disliked going abroad, and was only persuaded to go by the belief that Mrs. Forster would enjoy the trip.

In January 1886 he again went to the Riviera. Whilst at Cannes he was not well, and then went on to Nice, where he grew worse. He therefore started home, when he looked so ill that his servant scarcely knew him. When he reached London he was at once visited by his friends Habershon, Wilks, Paget, and Hutchinson, and it was thought from his high state of fever and

general condition that he had typhoid fever. These symptoms continued, with great exhaustion and distaste for food, and he died after a few days, on March 2nd, 1886. A post-mortem examination revealed no special disease, otherwise the death would have been returned as one of typhoid.*

Cooper Forster's house in Grosvenor Street was known to many as containing one of the best ferneries in London; the choicest and most delicate specimens flourished splendidly under his attention. The due supply of moisture and warmth, together with care of the soil, kept them in perfect preservation. A most beautiful fern from New Zealand, with horseshoe-shaped fronds, called the *Trichomanes reniforme*, was given by Mrs. Forster to the Conservatory at Kew Gardens, where it may be seen now flourishing in perfection.

So ends for the present the roll of deceased surgeons of Guy's. It is reserved for later days to tell of the triumphs of antiseptic surgery, of the many daring feats in the way of new operations or improvements of old ones, of the sound teaching and steady advance which have marked the later surgical history of the Hospital.

We will now give the biographies of other officers of the Hospital who held special appointments, beginning with those of the Obstetric Physicians.

* In the *British Medical Journal* for March 13th, 1886, Mr. Jonathan Hutchinson gave a most interesting account of the case, which is quoted in Mr. Jacobson's full memoir of Forster in "Guy's Hospital Reports," vol. xlv.

CHAPTER IV.

OBSTETRIC PHYSICIANS.

JOHAN HAIGHTON, physician and physiologist, was born in Lancashire about 1755, and after being a pupil of Else at St. Thomas's Hospital, became a surgeon to the Guards, but resigned on being appointed demonstrator of anatomy at St. Thomas's under Cline. He was so promising an anatomist that John Hunter had almost concluded with him an agreement to assist him in his lectures. Haighton, however, was not so agreeable and accessible to students as his junior, Astley Cooper, whose developing talent and influence blocked his prospects of advancement. Consequently Haighton resigned his demonstratorship in 1789, and turned his attention to physiology, in which he succeeded Dr. Skeete as lecturer in 1788-89, and to midwifery, in which he at first lectured in conjunction with Dr. Lowder. Both these courses were for the united hospitals of St. Thomas's and Guy's. He had already become a skilful surgeon, and was disappointed that he had never succeeded to a physiciancy, though he obtained the degree of M.D. He was said to be very irritable, opinionated, and argumentative, but he was a good lecturer on physiology and an excellent obstetric operator. He made many original experiments, and was joint editor of "Medical Records and Researches," and assisted Dr. Saunders in his treatise on the liver. The silver medal of the Medical Society of London for 1790 was adjudged to him for his paper

on deafness. In later years he suffered much from asthma, and his nephew, Dr. James Blundell, began to assist him in his lectures in 1814, and took the entire course from 1818. He obtained his F.R.S. mainly for his papers on mathematics and astronomy. He died on March 23rd, 1823.

Dr. Blundell's nephew, Dr. G. A. Wilks, of Torquay, has a good portrait of Haighton, and an engraving of him has been presented to Guy's Hospital. He also constitutes one of the group of doctors in the well-known picture in the Medical Society's Room.

Haighton wrote a number of original and interesting papers, notably the history of two cases of fractured olecranon in Volume IX. of *Medical Commentaries*; and another, called "An Attempt to ascertain the Powers concerned in the Act of Vomiting," in the "Memoirs of the Medical Society." In the same Memoirs may be found experiments made on the laryngeal and recurrent branches of the eighth pair of nerves. In the "Philosophical Transactions" for 1795 he had a paper entitled "An Experimental Inquiry concerning the Reproduction of Nerves." His method was to test the repair of nerves by the recovery of their physiological function after division. This was the first paper of the kind, and in the "Medical Records" of 1798 there is reported a case of *tic-douloureux* cured by division of the nerve. We believe the nerve was the infra-orbital, and the patient his own mother. He had also in the "Philosophical Transactions" a paper styled "An Experimental Inquiry concerning Animal Impregnation," detailing his experiments on rabbits, but imperfect owing to the lack of microscopic knowledge at that time. He also wrote on the Cæsarian operation. He published extended syllabuses of his courses of lectures, the manuscripts of which are to be found in the library of the Medico-Chirurgical Society.

In a letter addressed to Mr. Pettigrew, Dr. Blundell thus speaks of his uncle: "To Dr. Haighton I owe all a man can owe both in the way of precept and example. I had the inestimable advantage of residing with him for years. He was a man of the kindest heart, and of a very generous disposition, of moral character unspotted, of first-rate physiological attainments in his day, an excellent anatomist, a cautious, safe, and able physician, a man who had that remarkable regard for the sanctity of truth which made him exact in all his observations, most veracious in his statements, and a guide that may be confidently relied upon whenever he speaks to facts. He was a little irritable, but it was only a 'hasty spark,' and how could a man up at nights, worried with cough, etc., be otherwise?"

DR. BLUNDELL.

WILLIAM BLUNDELL was born in London on December 27th, 1790. He was educated at a private school, and then was sent to the Borough Hospitals, where his maternal uncle, Dr. Haighton, was lecturing. He subsequently went to Edinburgh, and graduated in 1813, his inaugural thesis being "de sensu quo melos sentitur," in which he endeavoured to prove that the senses for music and hearing are distinct. In 1814 he returned to London, when his uncle invited him to join him, first in the midwifery lectures, and then in physiology. He became a Licentiate of the College of Physicians in 1818, and then succeeded his uncle in the chairs of physiology and midwifery in the united hospitals of Guy's and St. Thomas's. He then occupied much of his time with experiments on animals, arriving at many practical conclusions, more especially in showing how blood could be transfused from one animal to another, and how the dread of injury of the peritoneum in operations had been

exaggerated. He performed experiments which made him advocate bolder plans in abdominal surgery, amongst others that ruptures of the bladder might be cured by opening the abdomen and sewing up the wound, removing urine from the peritoneum, and washing it out with tepid distilled water. The account of these experiments he published in a volume styled "Researches, Physical and Pathological." He also removed the womb, spleen, and ovaries, and concluded that the same operations might be done with impunity in the human subject. He also suggested division of the Fallopian tubes to produce sterility in cases of deformed pelvis, also extirpation of the ovaries to prevent dysmenorrhœa and monthly bleedings. Of the removal of ovarian cysts Blundell says: "This operation will, I am persuaded, ultimately come into general use, and if the British surgeons will not patronise it and perform it, the French and American surgeons will." He recommended extirpation of the uterus when diseased, and extirpation of the puerperal uterus instead of the Cæsarian section. He alludes to several cases of cancerous wombs having been removed by continental surgeons, and he performed the operation himself three times. His first case was that of Mrs. A. B., æt. 50, in 1828, in whom he removed the whole cancerous organ pervaginam. She made a rapid recovery and remained in good health for a year, when she died of obstruction of the bowels; this was due to cancerous disease of the peritoneum. Being elated by his success, he operated on two other women, but they both died soon after the performance. In consequence of his experiments on the best mode of transfusing blood, he commenced to practise transfusion in the human subject. His first case was that of a man in the Hospital, in 1818, who had cancer of the stomach, and considerable benefit followed. In 1828 he transfused a woman who had post-partum hæmorrhage, and this case was also attended

with success. Then followed others with varying results. Other medical men in the neighbourhood were also inspired with a desire to transfuse, and amongst these was Mr. Doubleday. He had a patient who was sinking fast from loss of blood, when he determined to inject her with fresh blood. The husband gave his arm to have a vein opened, and fourteen ounces of blood were injected by means of a syringe into his wife. The woman, who was a native of the sister kingdom, exclaimed, "By Jasus, I feel as strong as a bull," and rapidly recovered. It seems that Blundell drew the blood into a cup, and then threw it into a vein by means of a syringe. He performed the operation nine times: four cases succeeded and five failed. He thought it probable that arterial blood would have been more successful, and suggested that a better plan would be to take blood from the temporal artery. Amongst his researches on the blood and the vessels, he found that whatever destroyed the vitality of the vessel, destroyed also the power of resisting coagulation. We might remind our readers that one of the first, if not the first case we read of transfusion, was that of Pope Innocent VIII., about the year 1490. He was transfused three times from the blood of three boys, who in turn had the blood of the Pope thrown into their veins. The history (as given by Villari in his *Life of Savonarola*) is that the Pope rallied, but the three boys died. Dr. Lower, in 1660, first proposed throwing the blood of animals into the human body. Blundell was attacked for his experiments on animals, and was obliged to defend himself, which he did very energetically in the following terms: "They who object to putting animals to death for scientific purposes do not reflect that the death of an animal is a very different thing from that of a man. Are not the very persons who raise these objections in the habit of torturing animals in hunting? Do not they murder

pheasants and massacre partridges? Is not pain daily and hourly inflicted on the inferior animals to contribute to the support or pleasure of man? and shall it be particularly objected to when inflicted for the purpose of advancing physiological and medical knowledge? Men are constantly forming the most erroneous estimates of the comparative importance of objects in this world. Of what importance is it now to mankind whether Anthony or Augustus filled the imperial chair? Will it matter a few centuries hence whether England or France swept the ocean with her fleets? But mankind will always be equally interested in the great truths deducible from science and in the inferences derived from physical experiments. The fact that life may be saved by the transfusion of blood into the veins will be as beneficial a thousand years hence as it is at this day. I will ask then whether the infliction of pain in the lower animals by experiments is not justified by the object for which those experiments are instituted; viz., the advancement of physiological knowledge. Is not the infliction of pain or even death on man often justified by the end for which it is inflicted? We defend the sacrifice of animals so far as it is calculated to contribute to the improvement of science, and in those parts of physiological science immediately applicable to medical practice we maintain that such a sacrifice is not only justifiable but a sacred duty." Blundell had a good insight into many obscure subjects of physiology, and like Hodgkin saw the dawn of the doctrine of evolution. In his lectures given in 1828 he speaks of "animals having been formed one upon another by a process of *epigenesis*, and which constitutes the doctrine of *evolution*."

Blundell relinquished his lectures on physiology in 1825, and confined himself to midwifery. Besides these he gave a private course at his house in Great Winchester

Street. Those called "The Principles and Practice of Midwifery and the Diseases of Women" were published in the *Lancet* for 1828. This gave great umbrage to the authorities at Guy's; the *Lancet* stank in their nostrils and was not admitted within their walls, so that a strong appeal was made to Blundell to withdraw them. It ran thus: "At the very moment when your colleagues have publickly expressed their detestation of the *Lancet* by expelling from the walls of the Hospital one of the contributors to that work, you, a lecturer, their associate, perhaps calling yourself the friend of those very men, are what? Why, you are likewise a contributor, and have in that capacity levelled yourself to a Wakley or a Lambert. Should the mean ambition of popularity haunt you, in the name of common sense and common feeling look to the course you have taken." These lectures became celebrated, for not only was the matter good but the style forcible, so that they were considered above the standard in literary ability, interspersed as they were with classical quotations. Many of his sayings were terse and became proverbial, as, for example: "I don't like to see an elegant pair of forceps; let the instrument look like what it is, a formidable weapon—*arte non vi* may be carefully engraved on one blade, and *cave perineo* on the other." In 1834 he gave up the lectures, and was succeeded by Dr. Ashwell, but not without a long struggle, as we shall presently see when speaking of Dr. Ashwell. Dr. Blundell regarded the chair of midwifery as his own, and therefore had a right to nominate his successor. In 1838 he became a Fellow of the College of Physicians. Dr. Blundell was highly esteemed by the profession on account of his abilities, and he also had a good private practice. He never was, however, courted either by medical men or patients, for he was always regarded as somewhat eccentric both in his manner as well as in clothing and general personal

appearance. It may be supposed, therefore, that all kinds of stories were current about him: none of these touched his professional abilities or honour, but had to do with personal peculiarities. He was at this time living in George Street, Westminster, having removed from the City; and subsequently, in 1847, he took the mansion in Piccadilly, when the Duke of St. Albans died. It may be stated that he was never married. It was said that he did not rise until twelve o'clock, and would then see his home-patients until six, when he would have his dinner and go his rounds. His visits were generally made in the evening, and sometimes almost up to midnight. He had a light in his carriage and several books, so that he wasted no time; his reading was of all sorts, professional and general. He was a good Greek scholar, and is said to have made a complete translation of Homer. He was always distinguishable by his carriage, a large yellow chariot. This he never changed nor replaced, but had parts repaired as they became worn out, so that at last none or little of the original was left. When his coachman told him that the vehicle would allow of no further work nor repair, he said he would give up his carriage altogether, and the coachman might take a month's notice.

Dr. Blundell died on January 15th, 1878, aged eighty-seven years, leaving a personal estate sworn under the value of £350,000. This is the largest sum on record ever left by any medical man, but of course only a part made in his profession. His fortune passed to members of his family, amongst whom is Dr. G. A. F. Wilks, of Torquay, a nephew, who assisted him in practice, and for some time lectured on *materia medica* at St. Thomas's Hospital. Blundell had retired for so many years that his existence was not known to the present generation. His portrait was taken when a

young man, an engraving of which may be found in Pettigrew's medical biographies. A copy of this picture made by his niece, Miss Noyes, has been presented to Guy's. The *Lancet*, alluding to his death, said: "His rare abilities and untiring industry placed him in an eminent position at a very early age. Having for many years previous to his decease almost entirely withdrawn himself from professional intercourse, he was only known by name and reputation to the majority of the younger race of medical men. He had retired many years ago from his lectureship at Guy's." An old Guy's man, Mr. Crompton, of Birmingham, relates the following story about Dr. Blundell: "I passed one summer in Paris, the year after Dr. Blundell removed the uterus through the vagina. One day I was standing at the lecture room door at La Pitié, when Dr. Blundell—not recognising me, though I was very regular at his lectures—gave me his card to give to Lisfranc, who was lecturing; on receiving it, Lisfranc turned, bowed, and rushed at Blundell, kissing him on both cheeks. Then turning to the class, Lisfranc introduced Blundell as the distinguished Englishman who had immortalised himself by that operation. A woman was brought in and laid on the table to have a large fungoid-looking os uteri removed, an operation which Lisfranc was then doing freely and was fond of. While the woman's uterus was being pulled down by a large hooked forceps, Lisfranc kissed her on the cheek, upon which little Blundell thought he ought to do likewise. There were at least half a dozen English pupils in the room, and you may imagine Blundell's face when we simultaneously clapped our hands and cried, 'Well done, Blundell!' The story fled to Guy's in a very short time. Nevertheless we were proud of him, for he gave the class, at Lisfranc's request, an excellent lecture in the French language."

DR. ASHWELL.

DR. SAMUEL ASHWELL succeeded Dr. Blundell in the chair of midwifery in the year 1834. The appointment did not take place without much acrimonious feeling and long correspondence between Dr. Blundell and the Treasurer. The cause of the grievance was the same as that which had produced nearly all the quarrels at the Hospitals—the question of the right of the lecturer to the possession of the professor's chair. Originally the lectureships had been private, and these were sold by one lecturer to another; finally they belonged exclusively to the hospital and school by whom the professors were appointed. Before this happy solution had been reached, the squabbles were innumerable, but had not wholly ceased until Addison relinquished the chair of medicine, he contending to the last that some remuneration was due to him from his successor. Originally, no doubt, the independence of the lecturers was complete, for many gave lectures at their own homes or in houses they rented and called schools, so that the theatre preparations and drawings were all their own; and when subsequently they gave their lectures at the Hospital, they transferred their preparations and drawings also. A good lecturer could command a good class, and his emoluments were in proportion to its size. If highly remunerative he could sell it at a good price. At the time of Blundell's retirement there had evidently been some desire on the part of the Treasurer that he should leave, and no doubt the necessity of resigning had been urged upon him. When Dr. Ashwell was appointed in his place, he contended that, having been introduced into the lectureship by Dr. Haighton, he also had a right to appoint his successor. A paper war then ensued between Dr. Blundell and Dr. Ashwell,

and it is evident that other motives were at work. Dr. A. reminded Dr. B. that the latter had invited him, in the year 1829, to assist him in the midwifery course, and in 1834 to join him in seeing the out-patients and visiting the obstetric ward, which had now been opened three years. It was therefore clear that Dr. B. had accepted Dr. A. as a perfectly efficient assistant. There can be very little doubt that if Dr. B. had himself requested Dr. A. to take his place on his retirement, he would have asked for a considerable pecuniary consideration; but by the Treasurer taking the professor's chair out of Dr. B.'s hands, he was left without any hope in that respect. This probably was the true explanation of the quarrel, for Dr. B. maintained that the transaction was a robbery. The Treasurer, however, was supreme; the appointment was given to Dr. Ashwell, and Dr. Blundell received no remuneration. This paltry quarrel is interesting only in so far as it shows the different position of the lecturers in former days.

Dr. Ashwell had for many years devoted his time almost exclusively to obstetrics and diseases of women. He was therefore fully competent to fill the vacant chair. He was a very good and lucid lecturer, being evidently master of his subject. During the hot controversies which then took place, the other members of the staff joined in the quarrel; and we have heard very unpleasant things said of both Blundell and Ashwell. The friends of the latter spoke disparagingly of Blundell's personal appearance, whilst those of the former maintained that Ashwell was a cockney and had a difficulty in finding the right place for the letter "H." This gave rise to a *bon mot*. Our late consulting surgeon, Mr. Cock, on hearing of this peculiarity, exclaimed, "It is no matter; 'Ashwell' would sound 'Aswell' without the H."

Ashwell was a large fat man, of bright ruddy complexion, and showed no hair on his face. He was pleasant in his manner, liked by the students, and had a large private practice in Grafton Street. In 1828 he published a practical treatise on parturition and diseases of the pregnant state. Subsequently he wrote a large work on "Diseases Peculiar to Women." A review of this book at the time of its publication said: "Dr. Ashwell's attainments are such as to place him deservedly in the front rank of the medical department in which he is engaged — a man of powerful mind and very early in life attached in a responsible situation to one of the most extensive fields of observation and practice in this country. He could hardly fail, therefore, to attain in a great degree the confidence of the profession and the public." He also wrote several papers on his own special subject in the "Guy's Hospital Reports."

DR. LEVER.

JOHN CHARLES WEAVER LEVER was born at Plumstead on September 28th, 1811, his father having held some office in the dockyard. He was apprenticed to Mr. Butler, of Woolwich, and entered Guy's as a student in 1832. He there became at once known by his great industry and powers of endurance, both mental and physical; for, being poor in pocket, he walked daily for two years from Woolwich to attend the nine o'clock lecture, and walked home again in the evening, a distance of eighteen or twenty miles, and he drank nothing but water. He passed his examination in 1834, and went into general practice in Newington Causeway. Having worked much in the department of midwifery, he was appointed in 1842 to assist Dr. Ashwell in the duties of the Lying-in Charity, as more than two

thousand women were confined annually. In 1843 he obtained the Fothergillian medal for his essay on diseases of the uterus, and in 1849, on the resignation of Dr. Ashwell, was appointed, together with Dr. Oldham, joint lecturer on midwifery. He changed his residence to London Bridge, where he practised his speciality. In 1836 he married Miss Pettigrew, of Woolwich, by whom he had a family of six children.

Dr. Lever was known essentially as a practical man, and his lectures were characterised by their practical aim. They were clear and forcible, and upon the whole good. Having once started in practice, his rise was rapid: his consulting rooms were crowded to overflowing, and he for a time almost monopolised the practice in the southern suburbs of London. It was difficult to find a person of the female sex who had not consulted Lever, and no carriage was better known than his with its red borderings and red wheels, which gave it the popular appellation of "Lever's fire-engine." He was a strongly built man, with a big head and rather coarse, blunt face, expressive of much power—very characteristic of the Englishman who goes without other resources than his own perseverance to any distant colony and becomes a successful man. With this frame working like a horse, and with good common sense, he carried all before him. Never pretending to be scientific, he added to the literature of his subject by some good papers in the "Guy's Hospital Reports"; more especially by his discovery of albumen in the urine in cases of puerperal convulsions. He gained the confidence of women more, perhaps, by his seeming power than by any pleasant manner; yet so infatuated were they with him, that a number of them united to have his bust taken by Baily, which they afterwards presented to him. At the height of his fame he took a country-house, bought horses for his children, and launched out in a more lavish way of

living ; he became a *bon vivant*, and ceased to be a teetotaller. He then lost two children, and soon after his wife, whose death in 1849 was a great sorrow to him, and made him still less careful of his mode of life. About this time he discovered that a young preacher had come into a neighbouring street of the name of Spurgeon, and being a man of strong and deep emotions, he attached himself to his chapel, and subsequently followed the preacher, who soon became celebrated, to his Tabernacle in Newington. He then married, a second time, Miss Farebrother, of Clapham. It soon became evident that he had lived in every respect too fast a life, and that his health was failing. His energy, however, was so great that he would be carried by the lift to his ward in the Hospital, and continued to lecture with faltering voice and gesture. Then dropsy appeared in his legs, but he rose at his usual hour, saw some patients in his consulting room, and then fell dead from his chair. He was forty-eight years of age, and left his wife, and a son and daughter by the first marriage. His son entered the army, and lost his life in a fire ; his daughter married Dr. Palfrey, who was for some time obstetric physician to the London Hospital.

A friend wrote of Lever : "All who have watched his rapid rise to fame and fortune, who knew of his love to his profession and of his zeal in its pursuit, who have derived benefit from his knowledge or experienced the kindness of his heart, will deeply lament the sad intelligence of his loss."

DR. PHILLIPS.

JOHN JONES PHILLIPS, having distinguished himself as a student, was appointed assistant physician in the obstetric department when Dr. Braxton Hicks was made a full

physician. He also became assistant physician to the Hospital for Sick Children and to the Maternity Charity. He was secretary to the Obstetrical Society and edited its "Transactions"; he also published papers on ovarian disease, on the mortality after obstetric operations, and on puerperal fever. Dr. Phillips was a thoroughly well-informed man in all branches of his profession, and for two years before his appointment to the obstetric department he had been demonstrator of anatomy.

For a long time he had had symptoms of heart disease, and on one occasion he had an attack of temporary aphasia. On January 21st, 1874, he went to bed feeling unwell, and the following morning he was found unconscious, and shortly afterwards died. He probably had cerebral embolism leading to hæmorrhage. During his brief career few men were more universally esteemed and beloved, for not only had he reached a good professional position, but he was marked by his perfect straightforwardness and integrity of purpose. By his intimate friends he was held in the highest regard. His life and conduct had a noble simplicity and purity; his gentleness of manner was remarkable, and he was a deeply religious man. There was a charm about his ways that was recognised by every one with whom he came in contact, and probably he had not an enemy in the world. His kindness and sympathy with others were unbounded. He was ready always to devote his time and care to his friends and their relations in sickness. He was buried at his home in Wales, friends and students awaiting in great numbers to witness the departure of the night train which carried his remains.

CHAPTER V.

PATHOLOGISTS.

THOMAS WILKINSON KING was a man of great promise, a most original thinker, an indefatigable worker and investigator, and had he lived would have taken a foremost place in scientific medicine. He was the son of a medical man at Dover, and entered Guy's in 1824; he soon began to show his great intellectual powers, but unfortunately his physical nature was not in accord. Though young, he had an aged, worn look. He was very thin, stooped as he walked, and always seemed to be suffering from a chronic cough; so that no surprise was felt when pulmonary disease in a few short years carried him off. He was appointed curator of the museum after the departure of Dr. Hodgkin, and also undertook the duties of demonstrator of morbid anatomy. The amount of work he then did may be known by a perusal of the books in the museum. In the "Guy's Hospital Reports" will be found many of his writings, which at once show his originality and power. The best known is that contained in the volume for 1837 on the safety-valve function of the heart. This is a most elaborate paper, giving the results of his experiments and dissections of the hearts of various animals, in which he attempts to prove that the tricuspid valve is not a perfect valve, but allows of reflux when the ventricle is over-distended. He was in the habit of showing the fact by placing a tube in the aorta and allowing water to flow into the

left ventricle, when the mitral valve would float up and perfectly close ; but when the same process was repeated on the right side, the tricuspid failed to close thoroughly, but allowed some escape of water through the orifice. Whilst this was taking place in the living subject he would show the pulsation in the veins, indicative also of the regurgitation. In order to display this the more readily, he fixed a bristle at an angle on the vessel by means of a small portion of wax, when the end of it could be seen vibrating with the movement of the vessel ; the same also on the artery. This little instrument he called the "sphygmometer." In another paper he explained how the white patches on the heart were due to attrition. He also wrote on the diseases of the valves, on the circulation in the lymphatic system, and on congenital narrowing of the aorta and other malformations. He gave a few lectures on pathology, but they were not practical and too abstruse for the ordinary medical student ; they were also badly delivered, and therefore it is not to be wondered at that he had only a small and not appreciative audience. Some of these lectures were published in the *Medical Gazette* for 1843, and are well worth perusal on account of their highly philosophic character ; as, for example, one on constitutional irritation, and another on the effects of cold on the human body.

He had not lived long enough to be famous, but the few who were acquainted with him personally, or by his writings, knew him to be a very remarkable man. He died at his house, 36, Bedford Square, on March 26th, 1847, leaving a wife and family.

His daughter, who still survives him, writes : "Mr. King was born at Dover in 1811, and was educated in London and Paris. He married Anna Best in 1841, by whom he had two sons and one daughter ; the former are both dead."

DR. HODGKIN.

THOMAS HODGKIN was born at Tottenham on August 17th, 1798, took his degree at Edinburgh in 1823, and became a member of the College of Physicians in London in 1825. He belonged to the Society of Friends, as may be easily gathered from the style of his writings. He was possessed of very great literary attainments, being especially complimented on the pure Latinity of his thesis on "Absorption" on the occasion of his taking his degree at Edinburgh. He passed a considerable time in France and Italy, where he perfected himself in the continental languages and acquired a strong taste for pathological pursuits. This no doubt was due to the scientific tendency of his mind which prompted him to undertake the study of those branches of medicine which possessed a more positive character, and were more congenial to his remarkably simple and truthful nature. On his return to England, he engaged himself with others in the foundation of an independent School at Guy's Hospital, by becoming curator of the museum and demonstrator of morbid anatomy. The work he did in forming the museum was enormous, both in preparing specimens and framing a catalogue; the result of this labour is seen also in the two volumes of "Lectures on the Morbid Anatomy of the Serous and Mucous Membranes."

That Dr. Hodgkin was actuated by no slight ambition in his work may be gathered from the following lines, taken from his opening address to his lectures: "I shall conclude by assuring you that it will be my constant aim—whether I may be fortunate enough to reach the mark or not—to co-operate with those who are strenuously endeavouring to render the School of Guy's Hospital the first medical school in the kingdom."

The foundation which he thus laid in the museum and pathological department was one on which many distinguished men have since built by adding their mite to the work he so well began. Every one who cares to look upon Guy's as his alma mater cannot but feel a debt of gratitude to Hodgkin for the important share he took in endeavouring to constitute it a scientific school of medicine. It may be safely asserted that there had been no writer on pathology in this country before his time who had grasped the subject in so philosophic a spirit, for although Baillie, Hooper, and others had already written good descriptions of morbid appearances, Hodgkin was the first to follow in the footsteps of the great Bichat by discussing the diseases and changes according to the various tissues of the body. We have already spoken of the museum which he formed and of the large number of specimens which he collected as illustrations of various diseases, although at the time quite ignorant of their full pathological significance. During this time he contributed important papers to the Societies, notably one to the Medico-Chirurgical Society on a peculiar enlargement of the lymphatic glands and spleen (now known as Hodgkin's disease); also another paper to the Hunterian Society in 1827 on retroversion of the aortic valves, he being the first to recognise this lesion with its accompanying morbid sounds. Hodgkin translated Edwards on the "Influence of Physical Agents on Life," and appended to the work notes of his own. The author speaks of the temperature of the body rising sometimes to 110°, and of the value of the application of cold water in such cases to reduce it. Hodgkin then alludes to the value of Curry's treatment—that is, cold water—in fevers. He subsequently wrote a little book on the "Means of Recovering Health," in which he again takes up the subject of the

treatment of fever by cold baths. He describes the method, and shows how, instead of covering patients up with bedclothes, if they are sponged all over with cold water a refreshing sleep and critical change will follow. About the same time the records of the Physical Society show that a paper was read by Mr. Rolph on a case of fever, where the fever ran very high and was treated by affusion. A pailful of cold water was thrown over the man, who was then put to bed, with the result that the fever abated and a speedy recovery ensued.

Hodgkin's mind was often turned towards the doctrine of evolution, like many other scientific men of the day. We have already, in the memoir of Blundell, alluded to his remark about animals being formed one upon another, which he called the doctrine of evolution. Hodgkin in like manner, in his lectures in 1828, speaks of malformations, and the likeness of these malformations to permanent conditions in the lower animals. After showing the similarity of structure, he says:—

“It is on these resemblances, traced out with respect not merely to particular organs but to their combinations in the composition of an individual, that some philosophical anatomists of modern times have founded the doctrine of analogies and of an unity of plan pervading the whole animal kingdom. This doctrine is beautiful and even sublime, and affords a happy explanation of many remarkable phenomena in the organisation of animals.

“We will now endeavour to show the importance of the investigation of monstrosities in reference to the doctrine at which we have taken a glance. In ascending from the lowest forms of animal life to the most perfect, we have a gradual development and increase of parts, and this we also observe to be most marked and regular in the most important organs,

such as those of sensation and circulation. Now in the human embryo, as well as in those of the more perfect animals, the heart in the progress of development exhibits those forms which are permanent with the inferior animals. It is in this difficulty that we are helped by the examination of cases of monstrosity, for it appears that many of these depend on the suspension of development of particular stages. The growth of the organ not being suspended with the suspension of its development, it at length comes under examination of a size and texture much more favourable to correct observation. In the malformation of the heart, the organ which I have adduced by way of example, we find, though very rarely, a rudimental form analogous to the dorsal vessels of insects. The instances are somewhat more frequent in which the structure of the fish and the batrachian reptile is preserved, but a degree of development extremely analogous to that of the saurian reptiles, of which lizards and crocodiles are examples, is by no means uncommon.

“The idea of the production of a new species, or in other words spontaneous or equivocal generation, is not to be wholly rejected without some examination. We have strong facts to show that the production of distinct species of animals of the higher classes has not been limited to one spot of the earth or to one period of time. Different parts of the surface of the globe have their distinct and peculiar animals as well as vegetables. I am unable to conceive any other explanation of this fact than the natural conclusion that the several groups of animals were created in the region in which they are found, and were then adapted to their peculiar localities. The evidence of the creation of animals having taken place at different times is also as conclusive. The researches of the

geologists have shown us the remains of numerous animals once inhabiting the earth's surface, now extinct, and that those animals with which we are at present acquainted, with some exceptions, did not exist. It is not merely one but several changes, with respect to the species of animals inhabiting it, which the surface of our globe has witnessed. The creation of organised beings has not been limited to one spot or to one period, and therefore it may not be unreasonable to suppose that even now new species may be called into existence."

In 1836 Dr. Hodgkin was offered the Fellowship of the Royal College of Physicians, but declined it. In 1837 Dr. Cholmeley died, and Dr. Hodgkin offered himself for the vacancy of assistant physician at Guy's. His opponent was Dr. G. Babington, who was appointed to the office. A great deal of acrimonious feeling was aroused at the time amongst the friends of the rival candidates; a large number of students from Guy's and elsewhere signed a memorial on Dr. Hodgkin's behalf. The friends of the latter charged the Treasurer with favouritism and a personal dislike to Hodgkin on account of his liberal views and independent character, being one of the members of the new London University. Hodgkin, it may be remarked, was one of the founders of the "Aborigines" Society, and it was said that the Treasurer would have no officer of the Hospital who drove about with a North American Indian. The lapse of time is too great and the circumstances involved in too much obscurity to make it worth the trouble to unravel this episode in his history. Nevertheless it must be said that in Hodgkin Guy's Hospital lost one of its greatest ornaments, and the profession in England one who was destined to shed a lustre on its ranks.

After his severance with Guy's he was offered a lectureship at St. Thomas's, but there his stay was but short;

he continued to practise medicine, but his sources of information on matters of pathology being gone, he turned his mind to more general subjects. He wrote a book on the "Preservation of Health," and some other semi-medical subjects; but he soon devoted most of his time to philanthropic pursuits, and was mainly instrumental in founding the Ethnological Society, in connection with which he devoted himself to the study of philology. In 1850 he married a widow of the name of Scaife.

Subsequently he travelled in the East with Sir Moses Montefiore for the purpose of rendering aid to the Jews. On their last journey he was seized with dysentery, and died at Jaffa on April 5th, 1866, aged sixty-eight. It may be mentioned that his successful opponent for the physicianship, Dr. Babington, died in London three days afterwards, aged seventy-two. Hodgkin was buried amidst the scenes of his labours, and Sir Moses erected a monument over his grave in the form of an obelisk made of syenitic granite, on which is the following inscription:—

"Here rests the body of THOMAS HODGKIN, M.D., of Bedford Square, London, a man distinguished alike for scientific attainments, medical skill, and self-sacrificing philanthropy. He died at Jaffa the 5th April, 1866, in the sixty-eighth year of his age, in the faith and hope of the Gospel.

Humani nihil a se alienum putabat.

The epitaph is inscribed by his deeply sorrowing widow and brother to record their irreparable loss."

On the obverse is the following:—

"This tomb is erected by Sir Moses Montefiore, Bart., in commemoration of a friendship of more than forty years, and of many journeys taken together in Europe, Asia, and Africa."

If Hodgkin had been attached to the Hospital it is a curious speculation to make whether he would have got into practice and gained the confidence of the public. He always had enough to do, in the intervals of his other duties, amongst his immediate friends, and it is said that they imposed upon him and gave him no remuneration, because unasked for. One of the medical journals, speaking of him, said: "Although possessing the entire confidence of those who knew his worth and talent, Dr. Hodgkin never obtained a large share of practice. He had no worldly wisdom, and did himself and perhaps others injustice by a disregard of due professional remuneration which amounted almost to eccentricity. On one occasion, after sitting up all night with a man of very large fortune, Dr. Hodgkin offended him by filling up a blank cheque with the sum of ten pounds, and made the offence still greater by telling him that he did not look as if he could afford more. Dr. Hodgkin was never again sent for to this gentleman. It was difficult to make him take fees he had earned, and for this reason alone many of his friends would not consult him."

In 1857 some of his friends, with Sir James Clark at the head, set on foot a subscription for a testimonial to Dr. Hodgkin, which soon amounted to three hundred guineas. He would not accept this in any form, and at his reiterated entreaty it was made over to the Medical Benevolent College.

CHAPTER VI.

CHEMISTS.

WILLIAM ALLEN, who lectured on chemistry so many years at Guy's, has occupied a public position in so many ways that we need only speak of him here in his scientific aspect. His life was so busy, being engaged in such numerous philanthropic works, that it required three goodly volumes to give an account of his multitudinous occupations. Of late a smaller book, by Mr. Fayle, styled the "Spitalfields' Genius," gives an epitome of his life.

Allen was born at Spitalfields, his father, Job Allen, being a silk manufacturer in that neighbourhood, and a member of the Society of Friends. Born on August 29th, 1770, he entered as a student at Guy's, and subsequently joined Mr. Higgins in the lectureship on natural philosophy. Mr. Higgins was the author of a little book entitled "Alphabet of Electricity." This was in 1795, when Babington and Curry lectured on medicine, and Haighton on physiology. In 1802 he undertook the lectures on chemistry, and continued the course until his resignation in 1826, having been professor for twenty-five years. So well did he succeed, that he was invited in 1804 to deliver some lectures at the Royal Institution, and he gave a course on natural philosophy and mechanics for seven years. In 1807 he was made F.R.S. Towards the end of the course at Guy's he was joined by Bostock, Marcet, and Aikin. We read that

in 1794 he was elected a member of the Physical Society of Guy's, and in 1802 he speaks of inviting Joseph Fox, Astley Cooper, and others to his house, in order to proceed to the Physical Society to hear a paper on cow-pox. He joined with others in forming a scientific society called the "Askesian Society," which met at his house. He had already joined Mr. Howard, and so founded the well-known firm in Plough Court.

There were considerable breaks in his lectures, as he had so many philanthropic objects in hand to occupy his time. Twice he proceeded to Russia, to have an interview with the Emperor in favour of peace and other good objects, taking care to visit some of the most important prisons on the Continent. It is interesting to read of his taking the chair at a Society for the Abolition of Capital Punishment, since we meet among the names of his supporters with two whose son and grandson now hold office at Guy's—Dr. Lushington and the Rev. J. Pye-Smith, D.D. Mr. Cock has testified to the interest in his lectures which was taken by his crowded class. He says: "I well remember the description of the way in which he and some of his friends succeeded in freezing half a hundredweight of mercury into a solid ball: it was greatly exciting, and we listened with breathless interest."

It was at this time that Davy and others had made experiments with nitrous oxide gas, and the effects struck them as so remarkable when it was inhaled that they called it laughing gas. At the present time, when the gas is so universally administered and the effects so well known, surprise is felt at the name then given to it; but fortunately Allen has described with some detail the results upon himself, from which it is evident that the gas had no more title to the appellation then than it has at the present time. In his diary, March 1800, Allen says: "Present Astley Cooper, Bradley, Fox, and

others. We all breathed the gaseous oxide of azote. It took a surprising effect upon me, abolishing completely at first all sensation; then I had the idea of being carried violently upward in a dark cavern with only a few glimmering lights. The company said that my eyes were fixed, face purple, veins in the head very large, apoplectic stertor. They were all much alarmed, but I suffered no pain and in a short time came to myself." It is very evident that Allen was endowed with the scientific spirit, and therefore he knew that all advance must be made by experiment. It is also evident that he was the most humane of men, and was quite incapable of inflicting any wilful cruelty on animals, and yet we read such notes as this in his diary: "Experiment with Pepys took up nearly the whole day. A very important and interesting one with a guinea-pig, which breathed for an hour a mixture of hydrogen and oxygen gases. The only effect it appeared to produce was to make him sleepy towards the end of the experiment, but he did not seem to suffer in the least. Our apparatus was so contrived that we could have relieved him whenever he appeared uneasy."

It is worthy of note how his science dovetailed into his piety, and how he would rather trust the man of science with correct views on religion than the mere speculator, and yet at the present time it is curious to see how often the world of literature presumes on having a higher religious and moral tone than the scientific. He writes thus to Henry Brougham in the year 1829: "It is with no small degree of alarm that I perceive by a circular a proposal to make the philosophy of Kant an article in the Library of Useful Knowledge. Much as I admire some parts of the character of that philosopher, and the ingenuity of his system, I cannot but consider it dangerous to quit the solid ground of fact and experiment to enter the ærial regions of metaphysics, where

we may soon become the sport of various winds of doctrine and the partisans of infidelity."

Allen was twice married. He had a country residence at Lindfield, where he died in 1843, aged seventy-three years. He was buried at Stoke Newington.

It may be surmised that a man of Allen's benevolence and piety would not fail to impress good moral truths upon the students, and his opportunities were great, as his subjects included both natural philosophy and astronomy. He gave a special address to them on the attributes of the Deity, and after his last lecture on May 18th, 1826, he concluded with some general remarks for their guidance, which are printed in his *Life*. We have only room for a few quotations:—

"As it is clear, then, that the dispensations of the Divine Being have a reference to the happiness of man, it follows that the exercise of benevolence and deeds of mercy must in a peculiar manner be consistent with His will. It seems, indeed, that by an ordinance of His providence these acts are made a source of the purest pleasure. 'If,' says a celebrated author, 'thou doest good to man as an evidence of thy love to God, that peace which is the foretaste of paradise shall be thy reward on earth.' And I need not tell those who are engaged in the medical profession how many opportunities they have of exercising the best feelings of the heart. They will be called to see human nature under the most afflicting and trying circumstances. It is when the mind is subdued by misfortune, and when the body is oppressed with disease and pain, that the value of the balm of sympathy is most fully appreciated. He who is qualified to administer it under these circumstances may be regarded as an angel of mercy, a delegate from heaven. Your profession is a liberal one, and it is expected that your conduct shall do honour to that profession. It is not enough that you merely bring to

it that knowledge which is essential to the cure of diseases. Suffering humanity requires something more: it requires soothing manners, it demands sensibility of heart, and those exalted feelings which distinguish the man and the Christian. These qualifications are necessary to the complete character of a medical man: they will not only be acceptable in the sight of God, but being congenial with every noble sentiment of the heart, will powerfully contribute to advance even your temporal interest and enable you to make your way in the world."

MR. AIKIN.

ARTHUR AIKIN was long connected with Guy's School as lecturer on chemistry. He belonged to a distinguished family, being son of Dr. John Aikin, who practised first at Warrington and then in London as a physician. But he was better known in the world of literature, especially for his popular writings in connection with his sister, Mrs. Barbauld, styled "Evenings at Home," etc. He died at Newington in 1822, and he is represented in the celebrated picture of the members of the Medical Society, now hanging at the Society's rooms. His eldest son Arthur was born at Warrington in 1773, and at an early period devoted himself to scientific work, especially geology, mineralogy, and chemistry. He was for some years editor of the *Annual Review*, and was one of the founders of the Geological Society. He published a manual of mineralogy, and gave lectures on geology. He was best known to the public as Secretary of the Society of Arts, an office which he held from 1817 to 1839. In 1821 he joined Allen at Guy's in delivering the course of chemistry, and subsequently continued with Alfred Taylor until 1851, when he resigned. He had special knowledge of the chemistry of the metals, and he wrote several papers in the "Chemical Dictionary."

Aikin was a good scholar, of exceedingly amiable disposition, and of even, quiet temper. He was beloved and esteemed by every one. In stature he was short and spare; very retiring, and of nervous temperament. He, therefore, was not quite the man to lecture to a medical class; for although there are plenty of students who are ready to listen attentively to a learned discourse, there are other noisy and idle ones who can only be kept in order by a lecturer who is able to command them. Aikin had not this power, but, entirely absorbed in his subject, he would go on talking and making his experiments, all the while nervously shrugging one shoulder, whilst his class would talk, make remarks, and often become very disorderly. They even ventured sometimes to play tricks with his tests, so that the results of his experiments were quite unexpected. He died at his house in Bloomsbury, May 11th, 1854, in his eighty-first year. His brother, Charles Aikin, was long Secretary to the Medico-Chirurgical Society.

DR. A. S. TAYLOR.

ALFRED SWAINE TAYLOR was a contemporary of Robert Christison, and occupied for many years a position in the English mind almost as exclusively associated with the detection of cases of poisoning, as Christison did in the Scotch. He was born at Northfleet in 1806, and educated at Hounslow. At the early age of sixteen he became the pupil of a surgeon near Maidstone, and in October 1823 entered as a student at Guy's and St. Thomas's Hospitals, then forming a united Medical School. Later on he was entirely connected with Guy's as pupil and lecturer until his retirement in 1878.

From the year 1826 Taylor gave much attention to medical jurisprudence, although his diligence was such

as to win for him a prize for anatomy at Guy's. Chemistry proved a congenial subject to him under the instruction of Allen and Aikin, and he was further stimulated in the same direction by frequent visits to Paris and all the principal continental medical schools. At Paris he heard, among others, Orfila and Gay-Lussac. Geology, mineralogy, and physiology engaged his attention likewise; and so was formed a mind singularly broad in its views of natural phenomena, and well calculated to expound their laws. Taylor passed his examinations at the Apothecaries' Hall in 1828 and at the College of Surgeons in 1830, and entered upon practice, continuing, however, to study in the chemical laboratory of Guy's Hospital.

In 1831, when the Apothecaries' Society first required candidates for their diploma to attend lectures on medical jurisprudence, Mr. Taylor was appointed to lecture on the subject at Guy's Hospital, a post which he continued to hold for forty-seven years. He did much to create the department of medical jurisprudence, his being the first course on the subject, and many leading members of the bar attended his teaching. In the next year he succeeded Mr. Barry as co-lecturer on chemistry with Mr. Aikin, whose colleague he continued till 1851, after which he was sole lecturer on chemistry till 1870, when he resigned this lectureship. In these important functions Dr. Taylor acquitted himself admirably. He was exceedingly clear in his statements, exact and successful in his experiments, while yet very undemonstrative in his manner.

In 1832 the new lecturer commenced his long series of memoirs bearing on poisoning, by publishing an account of the Grotto del Cane, near Naples, with remarks on suffocation by carbonic acid. This appeared in the *London Medical and Physical Journal*. In subsequent years he contributed important papers to

“Guy’s Hospital Reports” on the action of water on lead, on poisoning by strychnia, on the tests for arsenic and antimony, etc., and was soon a recognised authority on medico-legal questions. He contributed to the *London Medical and Physical Journal* valuable memoirs on poisoning, child murder, etc. In 1836 he published the first volume of a work on “Medical Jurisprudence,” which was not completed at that time. In 1842 he brought out his well-known “Manual of Medical Jurisprudence,” which reached its tenth large English edition in 1879, in the author’s lifetime, in addition to numerous American editions. The Swiney Prize of one hundred guineas, together with a valuable silver vase, for a work on jurisprudence, was also awarded to him in 1859.

In 1848, when he became a member of the College of Physicians, Dr. Taylor published a work on “Poisons,” which was at once accepted as standard, and has gone through several editions. In 1865 his large work, entitled “The Principles and Practice of Medical Jurisprudence,” appeared, including much matter for which there was not space in his manuals. This work attained its third edition in 1883, having been edited by Dr. Thomas Stevenson, his distinguished successor at Guy’s Hospital.

But this represents only a portion of the literary labours of Dr. Taylor. From 1844 to 1851 he was the editor of the *London Medical Gazette*, afterwards incorporated with the *Medical Times*. He largely co-operated in editing various editions of Pereira’s “*Materia Medica*.” He brought out, in conjunction with Professor Brande, a “Manual of Chemistry” in 1863; and in 1876 edited Dr. Neil Arnott’s celebrated work on “Physics.” He was elected in 1853 Fellow of the College of Physicians, having had previously conferred upon him the honorary M.D. of St. Andrew’s University.

He was elected a Fellow of the Royal Society in 1845. He married in 1834 a Miss Cancellor.

It was as a medical witness in important legal cases that Dr. Swaine Taylor was most widely known. If a case of unusual character came before the courts it was expected that he should be called as a witness, and for many years he was retained by the Treasury as their medical adviser on such cases.

It is impossible here to refer to the numerous important cases of this character in which Dr. Taylor figured. A writer in the *Medical Times* for June 12th and 19th, 1880 (pp. 642, 671), enters into this question from full knowledge, and describes him thus: "Personally, Taylor was of a tall and imposing figure, gracious to friends and bitter to foes, and, as the lawyers found, a superb witness, not to be shaken by any light wind of doctrine. . . . There was a thoroughness about Taylor's work which was always satisfactory."

In regard to the celebrated Palmer trial, Dr. Taylor was severely cross-examined, and was contradicted on important points by experts called for the defence. In fact, it is possible that the case would have gone in favour of the prisoner, but for the strong confirmation of the view of the prosecution given by Dr. Christison. Dr. Taylor expressed his strong views on this question in an extended pamphlet on "Poisoning by Strychnia," most of which appeared in "Guy's Hospital Reports" for 1856. He died on May 27th, 1880.

CHAPTER VII.

DENTISTS

JOSEPH FOX was probably the first dentist in England who wrote a scientific work on the teeth and gave lectures at a medical school. He left his specimens and models to the Hospital, which may be now seen in the museum. He was succeeded in 1825 by Mr. Bell. The name of Fox is worthy of record in the History of Guy's as being a friend of Allen and of another Quaker, Lancaster, who founded the British and Foreign Schools, afterwards known as the Borough Road Schools. Joseph Lancaster first opened a school in Kent Street for the education of the poorest children, and by a little assistance had, at the beginning of the century, more than a thousand under his control. His success attracted the attention of great people, and then of George III., who paid the school a visit. Unfortunately Lancaster's enthusiasm carried him away, and without sufficient means he enlarged his premises in the Borough Road and got seriously into debt. Fox then came to his aid, as is described in the following terms by William Allen: "Fox, the surgeon and dentist of Lombard Street, a man abounding in the best feelings of the human heart, and at the same time possessing undaunted courage and perseverance in every good work, seeing that a great cause was on the brink of ruin, with a liberality unparalleled not only brought the powers of

his energetic mind, but his property also, to the rescue. Lancaster's creditors were clamorous, writs were out against him, when Fox made an arrangement for the final settlement of all claims by selling out funded property to the amount of £2,000, and made himself responsible to the remaining creditors for £4,000 more." The name Lancaster is still perpetuated by the street running from Newington Causeway to the Borough Road, where the British and Foreign Schools, the outcome of the Quaker's benevolence, now stand.*

MR. BELL.

THOMAS BELL was the son of Thomas Bell, a medical man at Poole, where he was born, October 11th, 1792. In 1813 he entered as a student at Guy's and St. Thomas's, and in 1815 became a member of the College of Surgeons. He early made a study of natural history, so that after he had been at the Hospital two or three years he was asked to give some lectures on comparative anatomy; and soon afterwards, in 1825, he with others started the *Zoological Journal*. At that time Joseph Fox, of whom we have already spoken, was the leading dentist in the City, and gave lectures on dentistry at Guy's Hospital. Having retired and left his specimens and models to the museum, Bell succeeded him both in private practice and in his lectureship. It should be mentioned that Fox had written a work entitled "Natural History of Diseases of the Teeth."

Mr. Erichsen was therefore not quite correct, when delivering his eulogy on Bell, to speak of him as the first teacher of dentistry. He said: "The appointment at Guy's opened up a new era in dental surgery.

* Now being removed.

So far as I know Bell was the first legally qualified and thoroughly educated surgeon who, devoting himself especially to dentistry, became associated in the capacity of teacher of his art and dental surgeon with a large metropolitan hospital and school of medicine. Bell had the great merit of applying the general rules of surgery to the art of dentistry." Bell, however, was not a mere dentist: his mind was too active and energetic, and too deeply imbued with a scientific spirit, to allow itself to be confined within the narrow circle of such a restricted speciality as dentistry; so he devoted himself to comparative anatomy and zoology. In 1828 he was made a Fellow of the Royal Society, and was afterwards Secretary from 1848 to 1853. In 1836 he was appointed Professor of Zoology at King's College, and then resigned his lectureship on the same subject at Guy's, but retained the lectureship on dentistry. He retired from both in the year 1862, when his nephew, Mr. James Salter, took his place. We may here state that he was much indebted to Mr. Salter for the assistance he gave him in the publication of his various books. In 1848 Bell became Secretary to the Linnæan Society, and from 1853 to 1861 its President. It was mainly owing to him that this Society has its present location in Burlington House. He was President of the Ray Society from its foundation in 1844 to 1859. Besides contributing a great many papers to the various societies to which he belonged, he wrote a history of British quadrupeds and reptiles, and a work on British stalk-eyed crustacea.

His works on natural history are written in an easy and attractive style, and have always been popular. He did not pretend to any original researches, and therefore his works may be regarded as good compilations. Much of his popularity was owing to his personal manner,

which was always attractive, so that he gained the confidence of all classes and was a most excellent president of societies.

After his retirement Bell went to reside at Selborne, having purchased the house called the "Wakes" from Gilbert White's grand-nieces. Here he published a new edition of the famous "Natural History of Selborne." It contains a memoir of White, written in his most pleasing style. It may be here remarked that Gilbert White not only resided all his life in the house which Bell bought, but was born in it in 1720 and died in it in 1793, his father having been Rector of the village.

Personally Bell was a short, thick-set man, with a cheery, chubby face, on which there was no appearance of hair. His features were somewhat broad and thick, but he had a pleasant, intelligent, and benevolent face. He was quiet and amiable, but showed much vivacity when discoursing on any favourite subject of natural history. He was generally clothed in a suit of black.

Thus enjoying robust health, he collected relics and memorials of Gilbert White, receiving with delight any of his admirers who visited Selborne. He spent there his happy and prolonged old age, until his death, March 13th, 1880, in his eighty-eighth year.

CHAPTER VIII.

AURIST.

JAMES HINTON was the third child of the well-known Baptist minister John Howard Hinton, having been born at Reading in 1822. It was from his mother, Eliza Birt, that James Hinton derived most. She is described as a fervent, lofty-souled woman, full of enthusiasm and compassion, yet dignified and able to rule others with mild and irresistible sway. At school James Hinton did not show special ability, though he had a remarkable verbal memory until a certain period when he suddenly lost it without any special cause. In 1838 his father left Reading for London, becoming minister of the Devonshire Square Chapel. Feeling some pressure of circumstances with his large family, Mr. Hinton placed James in the first situation which presented itself, viz., that of cashier at a wholesale woollen-draper's shop in Whitechapel. After holding this situation about a year, and spending some time in search of a more suitable occupation, Hinton became a clerk in an insurance office in the City. Here, while not becoming an adept at book-keeping, he sat up at night and gave himself a miscellaneous education. At this time he has been described as "an abstract idea untidily expressed." He was wholly indifferent to appearances, his clothes could never be made to fit him, and he was often guilty of lapses of politeness. He was very argumentative, and always determined to get to the bottom

of everything. Business, however, was not suited to him, and his father was wisely advised to let him enter the medical profession, as being more fitted to give scope to his mental powers. He was consequently entered at St. Bartholomew's Hospital at the age of twenty. He was able to perform his entire course of medical study with very great rapidity, and before taking his diploma went a voyage to China and back as surgeon to a passenger ship. On his return in 1847 he became a member of the College of Surgeons, and in the autumn of that year took the position of surgeon to a shipload of freed slaves, who were to be carried by voluntary agreement from Sierra Leone to Jamaica. He remained for more than a year after this in Jamaica, taking the practice of a medical man in ill-health, and looking after the progress of his late charges. He ever after took a great interest in the negro question. On his return he joined a Mr. Fisher in Bartholomew Close, and became engaged to Miss Margaret Haddon, after an attachment of some years. In August 1850 we hear of his first success in aural surgery, in curing his mother's deafness by a well-performed syringing. Some other cases of success followed, and this was very cheering to him. Soon afterwards he was introduced to Mr. Toynbee, and became much interested in his department during the walks he took with this aural surgeon to St. Mary's Hospital. He dissected specimens for Mr. Toynbee, and formed a museum for him. In 1852 he was married, and went to reside in a North London suburb, where he did a small practice and had leisure for his literary work. He had friends at Guy's Hospital, and obtained permission to pursue his special study of the ear in the post-mortem room. He thus became favourably known to the authorities, and was appointed aural surgeon to Guy's in 1863. He then took a house in George Street, Hanover Square, and began practice

as a specialist. Three years afterwards his old friend Mr. Toynbee died, and Hinton took his house in Savile Row. Here he practised for nearly ten years, being the most eminent aural surgeon in London at the time, and made a considerable income. He brought out a large work, entitled "Questions on Aural Surgery," the more valuable of the drawings being made from nature by Mrs. Hinton and coloured by her own hand. He also contributed several papers to the "Guy's Hospital Reports." This was simply his professional career, for he was still engaged as far as time allowed in continuing his writings on philosophical subjects, which had previously occupied all his attention. After he had earned a competency he longed for his freedom, so that he might devote himself to his favourite pursuits; therefore, in March 1874, he retired from practice. He had, amongst other speculations, bought some property in St. Michaels in the Azores; there he sent Mrs. Hinton and his daughter for a holiday, and he followed them in the autumn of 1875. His health had previously been breaking, and when he arrived there his altered condition was manifest to his family; he grew worse, and about six weeks afterwards died, it was said of inflammation of the brain, December 16th, 1875, and was buried at Ponta Delgada, St. Michaels.

At the time of Hinton's death a large number of medical men knew him only as an aural surgeon, and short notices of him appeared in this capacity only. The writer, therefore, sent a letter to the *Lancet*, which gave in general terms a sketch of what the man was. This letter having met with approval, we repeat it here.

"I am prompted to take up my pen and offer a slight tribute to the memory of that most remarkable man James Hinton, inasmuch as it has surprised me to meet with persons who have not known him other than as an aural surgeon, and have not connected him with the authorship of some well-known philosophic works.

When I say he was one of the most remarkable men in our profession, I feel astonished that he was ever in it, but being *in* it he was not *of* it. I believe accident alone must have made him a medical student, just as a kind of chance gave him his speciality. Of all the mistakes (he often told me) which people made about him, the greatest was that of regarding him as an eminent doctor. It was certainly not his forte to deal with his fellow-creatures, and treat their various complaints in a commonplace way, any more than it was his inclination to devote himself to medicine with a purely scientific spirit. So far from his being able to pursue a special department of science in the chemical or physiological laboratory, I believe he was totally unfitted for such work. It was the ideal, speculative, philosophic, and metaphysical, which occupied his mind. Whatever chance it might have been which led him to his professional speciality, he could not but bring a great force of intellect to bear upon it, and it necessarily grew in his hands; but nevertheless he did not like it, for once, when twitting him upon his numerous patients and large fees, he said the harder he worked the sooner he should gain his freedom.

“Hinton’s papers in the *Medico-Chirurgical Review* and in the *Cornhill Magazine*, although physiological and based on physical facts and laws, are speculative in the highest degree. They all show a train of thought which forbad him to grovel with mere details, but obliged him to link together and endeavour to harmonise the facts which he found in all dominions of nature. It is this which interests us—being the tendency of our modern thought. He knew not one ’ology from another, seeing they were but fictions of man’s creating, and to him all departments of nature appeared bound together by the same universal laws. The main idea current throughout his writings had reference to his views of life—the

greatest of all problems requiring solution—and he always spoke of his indebtedness to Coleridge, for affording him the true interpretation of this great mystery. Coleridge had regarded life as an all-pervading essence, but more concentrated or ‘individualised’ in man. Man, therefore, became the possessor of consciousness, and obtained of necessity an erroneous idea of the living world around him. That the whole world, organic and inorganic, was living, was the centre round which Hinton’s mind revolved, and this idea pervaded the whole of his writings. The subject is fully developed in ‘Man and his Dwelling-Place.’ I fear that I have not a full conception of his views, and am not sure that I have ever grasped them, for all his doctrines are very visionary, and his writings ‘mystic, wonderful.’

“Scientific in the ordinary sense of the word, as applicable to those who are engaged in the investigation of different departments of nature, he was not. It was the ideal rather than the real which he endeavoured to grasp. He never argued a point, but he discoursed; he was eminently a seer, so that his acquaintances were divided on the question as to whether his writings were little better than oddities, or whether he was not propagating a new gospel, which would soon number its countless devotees. It is very difficult to form a correct judgment of men of Hinton’s mould, and therefore it is that the world is divided in opinion upon the merits of Irving, Comte, Swedenborg, and the like.

“In purely speculative subjects, when a mind is richly furnished with a mass of material gained from nature’s storehouse, it is impossible to say how far its visions are gained from a clear insight into nature’s depths, or how far they are the creations of a fantastic brain. Time alone can tell. Hinton maintained that the human mind had a power of penetrating into the abyss and unveiling the mysteries there. He one day, whilst

discoursing to me on cycles and epicycles, exclaimed, 'Don't you see?' and on replying that I did not, he affirmed that such as I could only see a foot before us.

"I say I believe it is good for such men to sometimes fall amongst us, for we see what speculative philosophy will do with some of the common facts of human nature; and I do not hesitate to say that the whole tone of Hinton's mind, mystic though it would sometimes be, was kindred to that of some of the best thinkers of the day—I mean in the matter of the uniformity of nature's working in the organic and inorganic world. If I remember rightly, it was Hinton who maintained how much higher and grander is the investigation of this universal spirit pervading all things than the older and vulgar teleological method, which is always seeking for final causes. Of course he ignored the conception of a special vital principle. In his paper on Morphology he shows how growth is influenced by least resistance; and having the passage before me, I will quote it as an illustration of the power of generalisation which he possessed: 'The most superficial glance reveals a spiral tendency as a general characteristic both of the vegetable and animal creation, but a minute examination traces it in every detail. The beautifully spiral forms of the branches of many trees, and of the shells which adorn the coast, are striking examples of a nearly universal law. But the spiral is the direction which a body moving under resistance ever tends to take, as may be well seen by watching a bubble rising in water or a moderately heavy body sinking through it; they will rise or sink in manifestly spiral curves. Parts which grow freely show it well—the horns of animals or the roots of seeds when made to germinate in water. The expanding tissue, compressed by its own resisting external coat, wreathes itself into spiral curves. The formation of

the heart is an illustration of the law of spiral growth.'

"I should mention that Hinton had latterly devoted himself to social subjects and to the art of painting, on both of which topics he has written largely. His predilections might be anticipated from his turn of mind, and he might be known to be an interpreter of Turner and of the modern school of French landscape. When the British Medical Association met at Birmingham, I went into the town museum, and there saw Hinton gazing rapturously at a misty sunrise of Turner, when, seeing me, he exclaimed, 'Good God! how did he do it?' It was in the afternoon of the same day when, not meeting him at any of the medical sections, he told me that he had been having a most interesting conversation with Father Newman.

"Hinton's views of living nature were those which animated not only his writings, but his own existence. He was accustomed to say that he was perfectly indifferent as to whether he died the following day or not, and then he would declare that he was beginning a new life in order to regenerate his race. Life and death were to him all the same as part of his philosophy, and now, contemplating his unexpected end, I am reminded of his own words: 'It is a wonderful thing—Life ever growing old, yet ever young; ever dying, ever being born; weakest and strongest of the things that God has made. Life is the heir of Death, and yet his conqueror. Victim at once and Victor. All living things succumb to Death's assault; Life smiles at his impotence and makes the grave her cradle.'

Hinton had indeed a great love of music and of art. He was also of a poetic mind, although he seldom launched into verse. He said music represented the universe; it embraced discords, things evil in themselves yet making an essential part of the perfection of the

whole. One day, after hearing some high-class music by Beethoven and Mozart, he came home and wrote a poem which he gave to his wife. It embodied the idea just mentioned, and ended thus:—

“So listenest Thou, O Christ, with heart intent,
 But knowing all the chords; the passionate cry
 Of hearts grown sick with hoping, tears unspent,
 Weakness, oppression, ruin, purpose high
 Frustrate and vain: all, all Thou knowest, Lord,
 Thou hearest—we the music—one accord.”

Although Hinton was a good observer, and did not despise the ordinary scientific methods of acquiring knowledge, he believed the intellect supreme which could give us a deeper insight into things. Whilst walking to the Hospital he would stop, take a piece of paper out of his pocket, and, placing it against a lamp-post, write down some idea which had passed through his brain. He would say when he saw the smile on his friend's face, “That which I have written down is as much a truth as anything you have ever discovered in your laboratory.” In this way much of his work was done. At a friend's house, in the street, at church, at a concert, he would jot down his notes on scraps of paper, backs of envelopes, bills, and programmes, writing them out in full in the evening. The first book which he wrote, “Man and his Dwelling-Place,” was a key to all his philosophy. “That what we see around us,” he said, “is phenomenal. That what we call the material and dead world is owing to our own ignorance.” In the words of Miss Haddon, one of his interpreters, James Hinton's view is this: “The spiritual (or moral) alone truly exists; the material is the phenomenon of the spiritual: it is from a ‘passion’ in our spirit (the action of God the world-spirit) that we are made to perceive the material. The *existence* of a material world is an unwarranted inference from this

perception. The true order is from the psychical to the physical, not *vice versa*, so that we should not ask, 'What is this material which I perceive?' but 'What is that actual which causes me to see such and such material things?' Hinton used to say, "It is the sense and the intellect which raise us to a scientific appreciation of the mechanical relations of things; but it is genius and intuition which enable us to penetrate to their higher meaning." Sir W. Gull said of Hinton: "He was not a man of science, but a philosopher. Science was to him the servant of philosophy. He felt himself to be an interpreter of nature, not in the Baconian sense by the collection and arrangement of facts, the sequences of causes and effects, but, like the Hebrew seer of old, penetrating through appearances to their central cause." Hinton's biographer in the "National Dictionary" says: "Hinton's analysis of scientific methods coincides in a remarkable way with the Hegelian idea of a 'dialectic movement' inherent in thought itself—a coincidence the more striking as he was unacquainted with the Hegelian philosophy."

Naturally to medical men one of the most interesting essays which Hinton wrote was the introductory lecture at Guy's. Therein was much of his high-flown philosophy, but portions of it more applicable to the professional calling were expressed in very beautiful and poetical language. He says: "More than ever now the medical man becomes, or should become, the friend, the confidant, the counsellor of his patient. A place too seldom filled by him, yet impossible to be filled except by him, stands vacant—that of a friend whose trained knowledge and quick sympathy should be able to unravel for each man and each woman in these perplexed and restless days what is mere physical, what mental in their distresses; where a simple impaired digestion fills the mind with morbid phantoms, and where excessive

care makes discord in the delicate harmony of the nerves and sends perverted currents to every organ. . . .

“More than ever now the physician must have knowledge of the soul ; must feel with finer senses other pulses, and measure heats and chills which no thermometer can gauge. The mind, the burning passions, are his study ; unwitting of these or unregardful, half his work—often the larger half—is unperformed. Calm himself, he must for his fellow know ambition and despair, must feel how fiercely burns desire and with what a leaden weight failure seals up the springs of life. Into the depths of another man’s remorse he must enter, or how can he know how it corrodes the frame and turns the healing waters themselves into bitterness? And his soul, too, must thrill with another’s joy, lest he ascribe fancied powers to his drugs and turn the very gladness of one man to the mortal damage of another. For who will tell us how much medicine has suffered by false virtues ascribed to remedies because, perhaps, the doctor has wrapped up hope with his pills, or a sudden gladness has turned into the very elixir of life an ordinary draught. . . .

“The needs of man interpret the laws of God. And who stands so close to the needs of man as you will, gentlemen? to whom, in their very direst need, *all* will cling ; to whose voice sick hearts will listen as if it were the very voice of God declaring judgment or mercy ; the very skirts of whose garments—if only a heart beats beneath them—faint hands will be raised to touch. Closest to the very sources of the life of the human soul you will stand : it is the physician’s place. Of the highest law he is made interpreter.”

When Sir William Gull heard of the end of his old friend, he wrote : “Thanks for letting me know of Hinton’s death. His was a strangely metaphysical brain-organisation. He thought our intellectual vision absolute. The torch is out.”

CHAPTER IX.

APOTHECARY.

JAMES STOCKER, for many years apothecary at Guy's, succeeded his father in the same office, and continued in it until shortly before his death in December 1878. His father died in 1834, æt. 73, and was buried in the chapel. No one during this long period of years was better known at Guy's than James Stocker, owing to his multiplicity of offices. He was seen in the dispensary superintending the making up of medicines, then everywhere in the wards when a fresh case came in, being at the same time resident medical officer, and finally giving a kindly regard to the students, as he was the Secretary of the School. The first introduction to the Hospital which a new student had was to Stocker; and this was fortunate, for he was kind in manner, sympathetic, and at once made the young man at home. His affability, however, and the courteous and considerate manner in which Stocker put down his name and took his money, looked sometimes like the bearing of a shopman to a new customer. But his kindness was very genuine, for at all times he was ready to see the students, give them a helping hand, and offer them a word of encouragement. Owing to his numerous duties, together with a little muddleheadedness, his office-books became somewhat puzzling, although in a remarkable manner they came out all right at the end.

As a medical practitioner he was, as may be supposed,

most excellent ; having been brought up in the Hospital, his knowledge of disease was great, his diagnosis was always good, and his treatment judicious. He had no pretensions to scientific methods, in fact he abjured them, but rather let his own experience and instincts guide him. He gave no reasons for his opinions, although it was often evident that these existed, yet he never could be made to put down on paper the items of his knowledge or in any way formulate them. His remarks, however, were always good, and many of them were long remembered ; for example, if a young person was brought to the Hospital with symptoms doubtfully suggestive either of cerebral disease or fever, he would say that if on attempting to raise his shirt to look for an eruption the patient assisted you, it was a case of fever ; if he resisted, it was one of head disease—meaning, of course, that in one case the patient was simply lethargic and acted in an automaton-like manner, in the other he was irritable and full of pain. Stocker attached much importance to the odour of patients, declaring that there was a distinctive smell of liver disease, kidney disease, pyæmia, etc. If a patient was brought in insensible, and on having his clothes removed these were found soiled, he diagnosed apoplexy. One day we remember a young girl being taken in as an urgent case because the medical man who sent her pronounced the case one of pyæmia. On looking at her Stocker shook his head, and, on inquiring the reason, he said a patient with pyæmia never did up her hair in that manner. It was in the evening, when Stocker went his rounds, that the best opportunity occurred for seeing his practice and learning from him ; he did not, however, often prescribe, for he was unwilling, unless the occasion pressed, to alter the medicine of the physician. His task was in this respect rather a difficult one, for he feared to place himself in any way in opposition to the methods proposed

by the proper attendant of the case. This perhaps rather added to the humble position which he took ; but having naturally no force of character, he never would have opposed his opinion to that of others. In this way he managed to steer a quiet course amongst many conflicting elements ; he was a peaceful man, and often said life was too short for quarrelling. Every fresh patient he saw he prescribed for, and his method was so routine that there was no difficulty in deducing Mr. Stocker's diagnosis from the medicine he gave. Being friendly with all, he was well acquainted with everything that was going on in the Hospital amongst the staff, officials, and students. He was thus able to impart important information to the Treasurer, who gave to him a ready ear, and no doubt Stocker in this way exerted upon him much quiet influence. It was often thought that he was partial in his judgments, but if so, it was with no sinister intention ; for having no very great strength of character, he was naturally attracted towards those who possessed it ; and thus he did not fairly appreciate the quiet and unobtrusive men amongst the medical staff, any more than he did amongst the students.

As regards the resident officials at Guy's and St. Thomas's Hospitals, a very bitter feeling, or actual hatred, sprung up between those attached to each institution. There was no unfriendly feeling amongst the members of the medical and surgical staffs of the two hospitals ; but it was not so with the subordinates, for from the apothecaries downwards the ill-feeling existed. The porters were not above endeavouring to influence the police as to the superiority of their own hospital in case of accidents, and the one at Guy's said he had often known patients pass from St. Thomas's to Guy's because they got better beer. We believe that the apothecaries, with their wives and families, were not on speaking terms, and many were the stories afloat among

the tradesmen in the Borough as to the air of superiority which one assumed over the other.

It must be remembered that ever since the separation of the two hospitals Guy's flourished and St. Thomas's sank. This did not add to the kindly feeling between them. Stocker never concealed his animosity, and as everything was excellent at Guy's, so was it bad in St. Thomas's. When the latter published a report on cholera, Stocker had no hesitation in saying it was untrue. He no doubt felt much comforted when St. Thomas's departed and the walls were demolished, but he was not too well pleased to see it rising in fresh glory on the banks of the river. He had lived long enough to see it completed, and on the last occasion when the writer saw Stocker he twitted him upon it, when Stocker exclaimed, "I see no beauty in it; it reminds me of the toy houses I used to buy for my children." When Guy's adopted the new system of having house-physicians, many of Stocker's duties were taken off his hands, and he was merely required to superintend the dispensing department. These new arrangements were not agreeable to him; he failed to see the value of the innovations, and his position was becoming untenable. He therefore retired on a handsome pension. No man was ever more attached to the Hospital than Stocker, and all his time and energy were given to promoting its interests. A subscription was set on foot shortly before his death, by old Guy's men, to commemorate his services. He left a large family.

CHAPTER X.

ARTISTS.

JOSEPH TOWNE, the distinguished wax-modeller, did much to enrich the museum by his works of art, and at the same time afforded the students increased facilities for gaining a knowledge of anatomy, to say nothing of diseases of the skin, by means of some of the most remarkable models ever made. His introduction to the Treasurer and his early struggles have an air of romance about them. He was the third son of a dissenting minister at Royston, in Cambridgeshire, and was born on November 18th, 1808. As a child his great amusement was modelling in clay animals and various other objects. His first work of any importance was the model of a human skeleton, which now stands in the museum at Guy's, and this he made when seventeen years of age. He modelled it secretly, and at night by candle-light. He was recommended to bring it to London and to compete for the medal offered by the Society of Arts, but before doing so he thought he should like to show it to some well-known anatomist. He took it to Sir Astley Cooper, who was so pleased with the work that he gave him a certificate as to its accuracy, and sent him with a note of introduction to Mr. Harrison, the Treasurer of Guy's Hospital. It may be mentioned that the Society of Arts had for some years been offering prizes for works of this kind, naturally asking why they could not be done in England as

well as on the Continent. The first candidate who was rewarded by the Society for anatomical wax-modelling was Mr. J. Rutherford Alcock, to whom was given the gold medal, and the second prize was given to young Mr. Towne. In the report of the Society for May 29th, 1826, which was read by the Secretary, Mr. A. Aikin, it was said: "It was considered desirable to introduce into this country the art of modelling in coloured wax the parts of the human body in their natural and morbid or dissected state, the many advantages of which will be manifest to all conversant with such studies. Mr. Alcock has sent in a model in coloured wax which well entitles him to the medal, and the silver medal is awarded to Mr. Towne, for a very beautiful small model of a skeleton." This model, now in the museum, is accompanied by the letter of recommendation from Sir A. Cooper. In the following year he executed some models of the brain in wax, and these gained him the gold medal of the Society.

We may regard the work of Mr. Towne as the first real or serious attempt to introduce wax-modelling into this country. It is true that some attempts had been made by Sir Charles Bell and Mr. Elderton, of Northampton, but all important models had come from abroad. For example, Trinity College, Dublin, contained wax models as long ago as the commencement of the last century, the work of M. de Roue, and these were bought for a large sum by the Earl of Selborne. Another donation was made by the Duke of Northumberland to the College of Surgeons of Ireland, in order to purchase a series of anatomical figures in wax, and the curator was sent to Paris, Vienna, and Florence for the purpose. Long prior to this there had existed wax models in Florence, made by Zambo, a Sicilian artist, and also some in Paris, made by Dupont; his models of the sympathetic nerve, nerves of the face, and some diseases of the skin

being justly admired. It was the wish of the Society of Arts to encourage similar work in this country, and Mr. Towne considered himself fortunate in first obtaining the silver medal of the Society, and then the gold medal. In the same year (1826) he was appointed modeller to Guy's Hospital, and rooms were found for him to work in. From this time until his last illness, fifty-three years afterwards, he continued his art. For the museum he must have constructed more than a thousand models, and several copies of these he was allowed to repeat for foreign countries; these may now be found in India, Russia, America, etc. His earlier models were copied from dissections made by Mr. Hilton, and these, for beauty and accuracy, may be justly compared with similar ones in all parts of the world, some of them being quite unsurpassed. These gained for Towne a prize at the first International Exhibition of London in 1851.

Having early modelled the brain, he continued with the sections of the several parts, and then made a complete series of the development of this organ from the first traces in the ovum until birth. He also constructed models of the brains of the principal types of mankind. His models of skin diseases are equally celebrated; indeed, amongst the profession they are more highly valued than the anatomical, being of great practical use owing to their thorough accuracy. An amusing instance of this appreciation was given by the celebrated Hebra, the Viennese specialist. It may be mentioned that most of the models were taken at the instigation of Addison, he being the best authority on the subject in London; Addison had been a pupil of Bateman, and naturally adopted his classification. This continued to be used until Addison's death severed him from the Hospital. Whenever Addison heard of an interesting case, he would send to Towne to have it modelled, first describing its

nature and then adding the name. When Hebra went round the museum and examined the models he was delighted, and exclaimed how good and truthful was the artist, but how unfortunate it was that the doctor did not know what to call them when they were made. Towne also made a large number of models of new growths and diseases of different organs, but these are not so satisfactory as those of the skin, it being scarcely possible to exhibit morbid processes in wax.

Mr. Towne was likewise a sculptor; he made the marble busts of Sir A. Cooper and of Dr. Addison which now adorn the museum. A bust by Towne may be seen in Chichester Cathedral of Bishop Otter, who was the first Principal of King's College. It is dated 1844.

Towne was also interested in many other subjects besides his own special art, as may be seen by his papers on vision and the stereoscope in the "Guy's Hospital Reports."

He was a good talker and fond of metaphysical discussions, but at the same time he was reserved and self-sustained. On arriving in the morning he would shut himself up all day in his studio, into which no one dared enter, so that no one had ever seen him at work or had had an opportunity of knowing how he developed his art; and yet, as regards colours and material, he was always making improvements. No doubt he accomplished much by quiet labour, but this he never talked about. Consequently many of the staff never knew Towne beyond the complimentary "Good morning," and regarded him and his workshop as a hidden mystery.

Towne had not been long at Guy's before Hodgkin perceived his great merits, and in his lectures said: "Towne is an artist who has the signal merit of having both created his art for himself and arrived at such a proficiency in it that his works, already numerous,

rival, if not surpass, those of the best or most distinguished masters of Florence and Bologna.”

He continued at work until near his death, which took place on June 25th, 1879, at the age of seventy-one. His wife died in 1881, leaving several children. Of the character of Towne's work there never have been two opinions; all those who know it testify with one accord to both its realistic and artistic value.

MR. C. J. CANTON.—At the time that Guy's School was founded the Treasurer, having a comprehensive view of its wants, obtained the services of Mr. C. J. Canton. His ability as an artist was well known, and his drawings, now in the museum, testify to the accuracy and skill of his pencil. He illustrated Bright's famous “Medical Reports,” and those who are acquainted with this work are agreed as to the correctness and beauty of the drawings contained therein. Like many other men of artistic nature and possessing a spark of genius, he was somewhat eccentric in his habits.

Mr. Bransby Cooper, writing of him, said: “Canton was one of the cleverest but at the same time one of the idlest fellows in existence. In his room there was not an inch of wall that had not some skeleton of rabbits, kangaroos, etc., drawn upon it. His painting box appeared one mass of cakes of paint, their colours blending in such chaotic confusion that it demanded considerable knowledge of the art to select from the mass that which might be required. Pieces of stale bread, rind of cheese, and a pint pot (hid somewhere to prevent its being detected by Sir Astley) formed a still-life interior of the Canton boudoir.”

Canton was certainly one of the best-natured creatures in the world. He remained the draughtsman of Guy's Hospital until his death in 1840, the cause of which we believe was a tumour of the brain.

MR. WILLIAM HURST succeeded, and it may be said literally that Canton's mantle fell upon him, unless it be that he was selected on account of his resemblance, both in his art and manners, to his predecessor; for, judging from Mr. Bransby Cooper's description of Canton, no two men could be more alike—that is, not in appearance, but in character and habits; both excellent draughtsmen and colourists; at the same time indolent, careless, dirty, and fond of beer.

Hurst was always regarded as a handsome man, of good figure and black, bushy, and curly hair; a most devoted admirer of the fair sex, who, it was said, reciprocated his adoration. He was several times married, frequently being seen in the black dress of a widower; and we remember once, when Addison was more than usually irritated by his carelessness, that he turned round and exclaimed, "What can you expect of a man who has had four wives!" As an artist he was admirable, as the drawings in the museum and in the "Guy's Hospital Reports" show, and whenever any work of Hurst's was exhibited at the medical societies there was a general expression of assent as to its accuracy and beauty. This more especially applied to his watercolours, which had a delicacy of touch not often seen in anatomical drawings.

Personally he had the character of his predecessor—indolent and quite careless of gain, so that he missed several opportunities of advancing his interests. He had a yearly salary at Guy's and a spare day for himself. On this day he might be seen adding to his coffers by making a copy of a picture at the National Gallery, and these copies were so good that a rich American would have employed him at this work for some years at a high salary, but Hurst declined. He also had a good offer to copy the Flaxman models in

University College, but failing in his engagements the business fell through. It was impossible for him to get work, for when his patron called at a given time he would have forgotten the appointment and be out fishing. And yet, with a house and family at Hampstead, he was often impecunious, requested that his salary might be paid monthly, and before long asked the further favour that it might be paid in advance. His rooms were a picture of confusion, his portfolios filled with half-finished drawings, and his tables covered with every imaginable substance in the way of colours, brushes, chinks, dry bread, rusty knives, bottles, oil varnish, and medicines for the gout. It was perfectly impossible to bring his room to order, and great was the trouble to get his drawings finished or to discover for whom they had been made.

We are sorry to think that he was much imposed upon, and asked to make drawings which were wanted for private purposes and ought to have been separately paid for. Indolent and slovenly, he never soared above making friends with those of an inferior station in life. One scarcely ever escaped meeting him in the grounds of the Hospital either coming or going to the "Ship and Shovel" for a glass of beer. It seemed most lamentable that a man with Hurst's talents should never have raised himself into a higher position; but he was quite destitute of ambition, had no push, and, being the best-natured man possible, was at every one's beck and call—was ready to do anything for anybody, or at least he promised to do so, but as often failed. Nothing could be done with a man who was naturally indolent, who would leave his work unfinished and not care to undertake a remunerative job if there were a chance of a day's fishing. He continued to work until almost the last, dying of apoplexy on February 8th, 1886, aged seventy-five.

Hurst had a colleague who did work for Guy's. This was JOHN LUCAS TUPPER, a man of a very different stamp. He was a most excellent draughtsman, and his drawings were faithful, but he had not the delicate touch of Hurst, some of whose transparent tissues were most beautifully displayed, whilst Tupper worked mostly with body colour. Tupper belonged to the "Pre-Raphaelite Brethren," and carried to an extreme the tenets of the school. He would rigidly draw what was put before him, and if you asked him to portray a particular part in order to display some special feature in the case, he would regard it as an affront, as if he had been requested to tell a lie. He assisted Holman Hunt and Rossetti in the publication of their journal the *Germ*, the organ of the "Pre-Raphaelite Brethren." A poem by him on Spring, as well as essays on the subject of Art, may be found therein. He was appointed drawing master at Rugby in 1865, where he died on September 29th, 1879, leaving a wife and a son and daughter.

CHAPTER XI.

SURGERY ATTENDANT.

MONSON HILLS.—Those who remember Guy's during the days of some of its most distinguished surgeons would not consider the picture of the Hospital complete without a prominent position being given to the first Monson Hills. His reign was previous to the time of house-surgeons, and therefore one of great distinction. From the time the School was founded until his death no one was better known at Guy's than Monson Hills. He was born in Suffolk in 1792, and being known to Dr. Babington, was appointed cupper to the Hospital. In 1832 he published a little book on cupping, in which he introduced a mode of simplifying the operation. On the publication of this work he received the following testimonial: "Sir Astley Cooper thanks Mr. Hills for his able work on cupping, which he considers highly creditable to himself and to Guy's Hospital." During the years of his office he attended diligently to the practical part of surgery, especially to the diagnosis of fractures and dislocations, and soon acquired such a proficiency that Sir A. Cooper advised him to qualify for the College of Surgeons. On four separate occasions he received testimonials from the dressers for his able assistance in cases of emergency and his readiness to communicate practical information.

In this position as cupper he was resident at the Hospital, and consequently always in contact with

those students whose duty it was to act as clerks and dressers to the physicians and surgeons. The experience of Mr. Hills and his possession of all that knowledge requisite to meet emergencies as they daily occur in a large hospital was duly appreciated and sought after by the student. With Mr. Hills at his right hand he would act with coolness and decision, without him with trembling and doubt. When we remember that the house-surgeon at Guy's was merely a dresser, it will be seen that a great responsibility rested upon his shoulders, and when we think how few mishaps occurred we shall know what was due to the supervision of Mr. Hills. The Hospital authorities were perhaps hardly aware how much of the general order of the establishment was due to him. In the dead hour of the night perhaps, when a bleeding insensible body was brought in from the streets, and the dresser at his wits' end to know whether it was a case for the stomach pump or the trephine, or whether or not the case was one of apoplexy—at such a time could the presence of the "Governor" alone restore calm and decision to the troubled mind of the dresser. We speak of the "Governor," for by this name was he best known at Guy's, and those who have experienced his fatherly care and regard will feel how well his actions responded to this honourable title. Only those who were acquainted with him could know and appreciate the kind and affable way in which he dropped a hint or suggestion into the pupil's ear when he saw him in a strait, or how he could direct his mind into the right channel, without even the student being aware that he was being instructed or had acted upon another's will. This modest method of imparting his knowledge was a remarkable trait in Mr. Monson Hills' character.

What difficulties, what blunders have been avoided, and what consequent annoyances spared the authorities, by the presence of the ever watchful "Governor"

within the walls of Guy's! At all hours of the night he was ever ready to give his friendly advice. To a stranger his position in this respect might have appeared anomalous, but the circumstance is explained by his affability of manner and great surgical experience. Ever recognising his own position in the due deference he paid to the medical officers, his gentlemanly behaviour and professional knowledge were ever tending to make them forget it. The friendly shake of the hand with which he was greeted by all testifies more than words can do to the feeling which animated those who came in contact with him. The students, too, made him their confidant, for free as is the intercourse between officers and pupils, still the connection seldom goes beyond purely professional matters. All those questions which have to do with the pupil's prospects in life, his hopes and his fears, are not suited to the time or the occasion of the professor's visit. Mr. Hills was there, however, with an open ear to listen to all the private wants of the pupil, and ever ready to caution and advise. Thus he became most intimately acquainted with the students, and dwelt closer to their hearts than any officer in the establishment. For this reason they respected him, they revered him, they loved him.

When at last his pupilage had expired and the young practitioner was looking abroad in the world for a position in which to start, the "Governor's" advice was once again sought, for his observations of the rise, progress, and success of so many men had given him an experience of the utmost value. His benignity was equally displayed towards the patients, to whom he was remarkably kind and indulgent, and so far from growing callous from a constant association with disease, the suffering of others only increased his sympathy. He gave his children a good education; his

eldest son succeeded him in his post at the Hospital, but has since died, and another Dr. William Hills became medical superintendent of the Norwich Hospital. Monson Hills died of bronchitis, in January 1853, aged sixty-two. All the students formed a double line, through which the coffin passed, and more than a hundred members of the profession were present at the grave.

The *Lancet* said of him: "In our frequent visits to Guy's Hospital, whilst collecting facts for the 'Mirror,' we often came in contact with Mr. Hills. He had won for himself the esteem of all the medical officers, and was very much liked by the pupils; and it affords us much pleasure to state that we found him ever ready to assist us, in the most kind and willing manner, whenever an opportunity presented itself. We often had occasion to convince ourselves how extremely useful Mr. Hills made himself in the surgery, the operating theatre, and the wards, and to what extent he had dignified a secondary station by his gentlemanly manners and respectful courtesy."

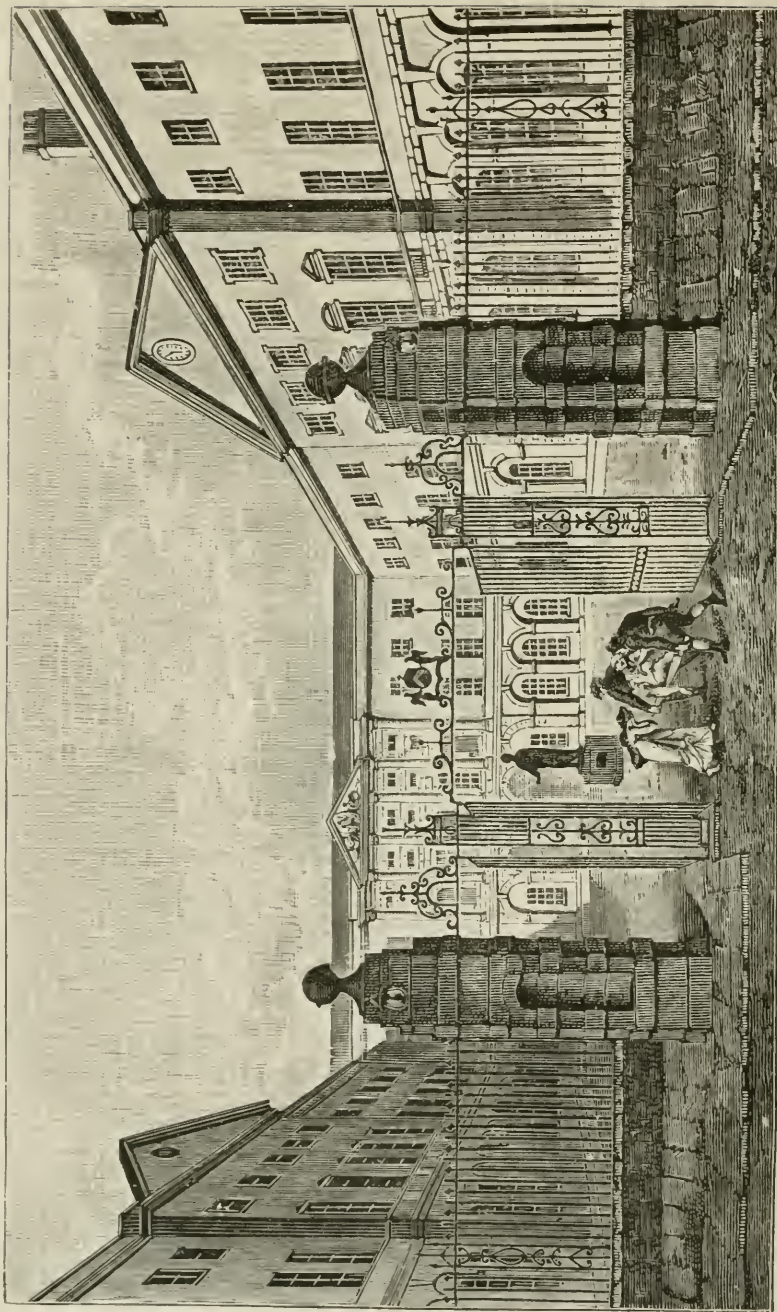
CHAPTER XII.

OTHER DISTINGUISHED MEN CONNECTED WITH GUY'S.

IN so large a School as Guy's, it is evident that it must have sent out into the world a great many students who afterwards rose to celebrity and held offices and appointments elsewhere. It would be a pleasant task, therefore, to look around and select all those men of eminence in every part of the world who might at one time have been styled Guy's men; but it would be beyond the scope of this work to attempt, even were it possible, to go on such a voyage of discovery. We should have liked, however, to have enumerated all those who have at any time been connected with our own School, even for a short period; but unfortunately our records do not allow us to do even this, and therefore we must be content to mention the names of one or two men known to fame, more especially those which appear in our "Guy's Hospital Reports."

Amongst the eminent men of former times was SIR JAMES EDWARD SMITH, the founder of the Linnæan Society, and the most famous botanist of his day. He it was who bought the collection of Linneus, and published a splendid work on botany. He lectured at Guy's in the beginning of the century.

He was succeeded by DR. ROBERT JOHN THORNTON,



"Entrance into that most noble Public Charity and admirable Medical Establishment, Guy's Hospital, 1799."

who was also a celebrated botanist. He entered at Guy's as a medical student, and took his degree at Cambridge in 1797. He gave as his thesis a discovery which he himself had made contrary to the received opinions—that the animal heat arises from the oxygen imbibed from the air in the lungs by the blood flowing through them, and that in its circulation through the body the blood becomes decomposed. He gave lectures on botany at Guy's about 1804. His portrait may be seen in the celebrated picture at the rooms of the Medical Society already mentioned. He is seen on the right side, with his hand to his chin. In 1807 Dr. Thornton published an illustrated folio entitled "New Illustration of the Sexual System of Linnæus," the frontispiece of which contains an engraving of the author, together with a representation of the "Entrance into that most noble Public Charity and admirable Medical Establishment Guy's Hospital." The latter is a beautifully clear line engraving of the front quadrangle, with its iron railings and gates. The handsome central façade seems to be much the same as it is now, except that its outline is not spoilt by the skylight of the present operating theatre. An injured man is being carried through the front gates on a stretcher by two stalwart youths, and at his side walks his weeping wife. The clock over the chapel is shown. The date of publication on the plate is May 1st, 1799, and the engraver is W. Woolnoth; but at the foot of the frontispiece stands the name of Bartolozzi.

Most of the older Guy's men will best remember Mr. Charles Johnson, who was lecturer on botany for a great many years.

Amongst the chemists the name of Dr. BOSTOCK ought to be mentioned. He was a Liverpool man, son

of Dr. John Bostock, sen., and came to London in 1817, when he succeeded Dr. Marcet, joining himself afterwards with Mr. Aikin. He did much analytical work of the animal secretions for Dr. Bright. His name will be seen in connection with that of Mr. Brett, a rising young chemist who died early.

The name of DR. THOMAS WILLIAMS will be known to the readers of the "Guy's Hospital Reports" as the author of some very original papers.

He entered Guy's in 1837, and soon showed the great talents with which he was possessed. He took several prizes and his M.D. at the University of London. At an early period of his life he had renal dropsy, from which he recovered, and he recorded his case in the medical journals. He was a most remarkable man, striking in his appearance and manner; indeed, he came under the denomination of genius. It was grand to see him at the Physical Society standing up with long, flowing, black hair, making a speech on some abstruse question, having an air of inspiration as the eloquent phrases flowed from him. But it was not all talk: he was eminently scientific, and was one of the first at Guy's who could be said to have understood the full powers of the microscope. Having grasped the new cell-doctrine of Schwann, he wrote some capital essays on the subject in the "Guy's Hospital Reports," 1846-48; also another paper on aquatic breathing. Showing how extensive his physiological knowledge was, we will merely quote from one of his essays a few sentences proving, as already mentioned in connection with the names of Blundell and Hodgkin, how the doctrine of evolution was beginning to be considered. He says: "It is now a fundamental principle in the science of embryology that the ovum of the mammiferous animal during the progress of development exhibits

phases of structure which, although transient in duration, present the most remarkable correspondence with types of structure which belong persistently to animals inferior in the scale. It is therefore admitted to be necessary, in order to the attainment of the greatest perfection in the detail of organic structure, that nature should first realise the simplest formative idea, and subsequently make advance along the typical gradations of the extended scale which so remotely separates the most simple from the most complex and perfect of living forms," etc.

Dr. Williams being only tutor at Guy's, and seeing no opening for any higher position, joined Grainger's School in Webb Street as demonstrator of anatomy. We remember seeing him dissecting the body of Richard Carlile, after Grainger had pronounced an oration over it. Richard Carlile, who was a bookseller in Fleet Street, had been prosecuted for his infidel publications. He left his body for dissection. This was February 14th, 1843. Dr. Williams edited for the *Lancet* lectures on the ear by Pilcher, the principal aurist of that day. When Grainger's School broke up, Dr. Thomas Williams went back to his native country, South Wales, and commenced practice at Swansea. He soon got into a large practice, and even became famous in the neighbourhood, but never ceased to work at science in the department of natural history. His life was short, however, for he died at the age of forty-six, on May 23rd, 1865.

No more valuable and original papers are to be found in the "Guy's Hospital Reports" than those by Dr. NORMAN CHEVERS, especially those on diseases of the pulmonary artery. Had he remained at Guy's he would have been one of its most distinguished physicians, but he accepted an appointment in the Indian Service and remained in it the whole of his life. He was Secretary

to the Medical Board and wrote a book on medical jurisprudence, and contributed otherwise to medical literature.

DR. EDWARD BENTLEY entered as a student at Guy's in 1842, and afterwards took his degree at St. Andrews. He was secretary of the Clinical Society, and published a report in the "Guy's Hospital Reports" for 1846. He was remarkable in always being occupied with the organisation of the profession rather than with the scientific study of medicine. During the few years of his life he always had some project in hand for the formation of clubs and societies. Amongst these was the Pathological Society. He saw an opening for such an institution, and called a meeting at his house in Trinity Square, Borough, with Dr. Barlow in the chair, according to a circular which we still possess. After two or three meetings the society was founded, and Dr. J. C. B. Williams was invited to be President, and the first general meeting took place at 21, Regent Street, at the end of the year 1846. Bentley undertook the duties of secretary together with Mr. Nathaniel Ward.

Dr. Bentley then seeking for another outlet for his special talents, conceived the idea of a consumptive hospital for the City. He at once set about getting subscriptions and was eminently successful, and in 1848 the City of London Hospital for Diseases of the Chest was founded in Victoria Park. He, of course, was one of the first physicians. He died soon afterwards of spinal disease.

Another contributor to the "Reports" was DR. GUY, who afterwards became physician to King's College Hospital. His paper on the pulse became classical. He wrote a book on medical jurisprudence, and was President of the Statistical Society.

Readers of the "Guy's Hospital Reports" will have

observed that the second volume, published in 1837, had for its editor JAMES P. BABINGTON, M.A. Cantab. and M.R.C.S. To this volume he wrote a preface setting forth the value of the work and of the Clinical Society which was providing materials for it. It seems that he was a candidate for the assistant surgeoncy which Mr. Birkett obtained. Failing in fulfilling his wishes, he left the profession and gave himself to scholastic pursuits. We believe he was a younger brother of Dr. Benjamin Babington. He died in 1890.

DR. THOMPSON DICKSON was lecturer on mental diseases before Dr. Savage succeeded to the chair. He was M.A., M.B., Cantab., 1867, and M.R.C.P. 1868; he was also medical superintendent of St. Luke's Hospital. He gave the lectures at Guy's from 1871 to 1873, and they were in course of publication at the time of his death. He had suffered from mitral disease since an attack of rheumatic fever in childhood, but had fairly good health until his death at the age of thirty, which took place on January 5th, 1874. He was with his wife in his brougham, when he suddenly fell forward dead. Dr. Dickson was a very acute thinker, and wrote many excellent papers in the *Journal of Mental Science* and elsewhere. A leading article in the *British Medical Journal* called "A Social Blot," and written by Dr. Dickson, called forth some angry remonstrances. There is a paper in the "Guy's Hospital Reports" by him well worth perusal on the "Dynamics of Epilepsy and Convulsions." Herein he controverts the opinion of Dr. Hughlings Jackson that convulsion is due to an explosion of nerve force in some region of the brain which affects certain muscles, arguing that it is rather the failure of a part of the brain over certain muscles which allows them to undergo convulsive movements under the influence of reflex excitation.

The REV. FREDERICK DENISON MAURICE was elected Chaplain of Guy's Hospital in March 1836, when he was thirty-one years of age. It is stated in his biography that, having previously paid a visit to the Hospital, he wrote to a friend as follows: "I was delighted with the establishment, and I think I should prefer it to a parish, because I am not skilful in suggesting improvements in the temporal condition of the poor; a serious deficiency in the country, but one that will not affect me here. If I could get any influence over the medical students, I should indeed think myself honoured, and though some who have experience think such a hope quite a dream, I still venture to entertain it." After being at the Hospital a month he wrote: "I like Guy's increasingly." He was much interested in the students, and, with the approval of Mr. Harrison, gave some lectures on moral philosophy. Some of these the present writer remembers to have heard. Mr. Maurice's sister, Priscilla, kept house for him until his marriage, and his relatives and friends often came to visit him, such as Mr. Sterling, Mr. Carlyle, etc. In 1840 he was appointed Professor of English Literature and History at King's College. In 1845 he was appointed Boyle Lecturer, and the writer remembers hearing him deliver his lectures on "The Religions of the World" in Guy's Chapel. In 1846 he resigned his appointment at Guy's, on being elected to the Chaplaincy of Lincoln's Inn.

In mentioning some of the celebrated men who have been connected with Guy's Hospital, it is impossible to overlook the name of JOHN KEATS, the poet—"A loose, slack, not well-dressed youth, with large and lustrous eyes, and hair of golden brown." He was born at Moorfields, October 29th, 1795, went to school at Enfield, and was apprenticed to a surgeon at Edmonton. He afterwards entered as a student at the United Hospitals, and became

a pupil of Mr. Lucas. In South's "Memoirs" we read the following account of Keats as a student: "George Cooper, of Brentford, told me that whilst at Guy's Hospital, where he was dresser to Sir Astley Cooper for eighteen months, he lived in St. Thomas's Street, at a tallow-chandler's named Markham, and where John Keats the poet lived with him, having been placed under his charge by Sir A. Cooper." Lord Houghton says: "It soon became apparent that the profession for which young Keats was destined was too unsuitable to be maintained. There remain careful annotations of the lectures he attended, but when he had once entered on the practical part of his business, he found his mind so oppressed with an overwrought apprehension of doing harm, that he determined on abandoning the course of life to which he had devoted a considerable portion of his small fortune." Although he served a long apprenticeship and was diligent as a student, he apparently abandoned the profession before he took any medical qualification. Professor Masson has clearly shown that there is no reason to suppose that Keats was at all affected in health or that he was in any way touched by the harsh and ignorant criticism of his poems which appeared in the *Quarterly* and *Blackwood* magazines; that, in fact, he was not "snuffed out by an article," according to Byron's fancy. Keats had long suffered from consumption, and died of this disease on February 23rd, 1821, at Rome, in which city he was buried.

"Oh, weep for Adonais—he is dead!
 Like a pale flower by some sad maiden cherish'd
 And fed with true-love tears, instead of dew.
 The Soul of Adonais, like a star,
 Beacons from the abode where the Eternal are."

APPENDIX.

MR. EDWARD COCK.

WHILST this work is going through the press there has passed away the Nestor of our medical staff, one who has held a prominent position in the school since its establishment, and one who has occupied the warmest place in the heart of every student for the last half-century. Mr. Edward Cock died at Kingston-on-Thames on August 1st, 1892, at the ripe age of eighty-seven. We have more than once alluded to him in this work as still amongst us, but before we end its pages it behoves us to devote a short space to his memory, leaving a fuller biography to be written for the "Guy's Hospital Reports." No Guy's man now living ever speaks of him but with esteem and love. His large experience as a surgeon, his clearness of vision in unfolding any difficult case before him, his natural abilities and sense of humour, combined with a supreme kindness of heart, made up a character and name which met with universal veneration. Moreover, his general appearance and manner were such as to prevent his assumption of a superiority over others—an attitude always conducive to a feeling of antagonism. Although he had a noble head and handsome face, his figure appeared mean as he stooped and shuffled along; associated with this was a hesitation in his speech which made all that he said and did characteristic of the man. His drooping, slouching gait caused him to be called "old" Cock in

his early years, although the more familiar and endearing name of "Teddy," which he retained to his latest days, is sufficient to show the place he held in the hearts of all.

Mr. Cock was the nephew of Sir Astley Cooper, and, as may be supposed, worshipped the name of his uncle. Unlike the latter, however, who in his early life was a Radical in politics, and in his profession was ever in search of new physiological truths and improved methods of treatment, Mr. Cock was an extreme Conservative in most things, and therefore did not look with much favour on innovations in surgery, whether they had reference to operations or other modes of treatment. His name is not, therefore, known in connection with any great advancement in his art. What he did, however, he did well, so that his clinical lectures were models of precision and distinguished for their practical aim. They were also most excellent in style, for Mr. Cock was possessed of much literary power, and his reading was extensive. When he warmed up after a public dinner, no one could make a better speech, for he then became fluent, and his stammering was hardly noticeable. He was a man of cultivated taste and a connoisseur of painting; possessing an excellent collection of pictures.

For some reason which he could never himself explain (except in humorous and colloquial phrases) he fell into the practice of a speciality. This in one sense was fortunate, for he made a good income by it, which probably he never would have done as a general surgeon. Almost of necessity this speciality extended to the treatment of diseases of the urinary organs, and of these he had a good practical knowledge. Consequently it might be surmised that stricture became a subject of interest to him, and that his name would be associated with its treatment. For some time

he practised the puncture per rectum for retention of urine, but afterwards he elaborated a more perfectly contrived "perineal section," which has since borne his name. On this and allied subjects he published several papers in the "Guy's Hospital Reports."

Mr. Cock became attached to the school about the time of its opening, and contributed to the formation of the museum by his dissections and other work. He afterwards became demonstrator of anatomy, and was regarded as one of the best anatomists of the day. His "Head and Neck" became a favourite book with students. His lectures were exceedingly good in spite of his hesitation of speech, and these he continued for many years, until it was considered advisable to separate the anatomical from the physiological course. Whilst assistant surgeon, from 1838 to 1849, he spent a large part of his time in the hospital, and in this way gained the vast experience for which he was famed, his colleague, Mr. Callaway, doing very little of the work. He lived for many years in St. Thomas's Street, until the governors of St. Thomas's Hospital turned him out to make room for one of their own younger men. Then he took consulting rooms in Dean Street, and went to reside at Kingston. His house there was well known as the home of hospitality, for Mr. Cock was never so happy as when surrounded by his friends at his dinner table. After having lived there some time as a bachelor, he married about 1870 Miss Nunn, the sister of Mr. Nunn, of Colchester; she predeceased him by several years.

We have said that Mr. Cock was universally beloved not only by his professional brethren, students, and friends, but by all who came in contact with him, especially the poor and the needy. This was owing to his excessive kindness of heart. The irritability of his manner was mainly due to his difficulty in speaking.

His interlocutor often answered him before his sentence was complete ; then followed a sharp or contradictory word, which somehow never produced annoyance, but on the contrary much mirth, for the oddity of the expression delivered with a stammering tongue was often extremely ludicrous, or in common parlance "funny." It may well be imagined that there are a large number of stories afloat about Mr. Cock, given in his own hesitating manner ; many, no doubt, are fictitious. His real benevolence was so remarkable and so unostentatious, that we feel not a tithe of it can be known. He was not content with seeing his name figure in a charitable subscription list, but he would seek out the individual who was in want and place his guinea or five-pound note in his hand. His old hospital patients he never seemed to forget. By chance one day he was found in an obscure street in Rotherhithe, where it appears he paid occasional visits to give alms to a young man who had been crippled for life by an accident. His mode of giving was so graceful that he seldom allowed the recipient to feel himself a debtor. One case may be mentioned as an example of Mr. Cock's behaviour to the poor and needy. A patient who had had all the front part of his face eaten away so as to leave a large hole in the middle of his countenance, was obliged in consequence to give up his post as gardener to the Greenwich Hospital. Mr. Cock took compassion on him, fitted him up with a new nose and spectacles, and thus embellished he subsequently became a well-known, though not an inviting, object to the inhabitants of St. Thomas's Street. When thus improved, Mr. Cock informed him that he should be his gardener. There was then, as now, a plot of ground consisting of a few square feet in the rear of St. Thomas's Street, where once stood, we believe, Mr. Churchill's bookseller's shop. This was covered

with grass, and had a fountain in the middle, in which a live eel disported itself; a fig tree grew against Mr. Cock's house, and beneath it was a seat on which the surgeon could repose; a few flowers and shrubs scattered about, the biggest of which, the students said, was a copaiba tree, completed the rustic picture. Mr. Cock gave the man weekly wages, and fed him at his own house. In the early summer morning the old gardener might be heard merrily whetting his scythe, and during many weeks managed to excite a rustic feeling in the minds of Mr. Cock's neighbours by various innocent devices. By keeping the grass plot closely shaved, continually scraping the flower beds, putting in the ground flowers full blown, and sowing seeds which never came up, he managed to get through a day's performance. Whether Mr. Cock or the gardener believed most in this arcadian illusion, we cannot say, but we do know that both master and man were made happier by it.

When a man's right hand knoweth not what his left hand doeth, it is quite impossible to ascertain the extent of his good acts, and therefore we may take it for certain that such a story as we have related of Mr. Cock does not stand alone. We remember well at one of the Hospital dinners, we had near us an old student who was accompanied by a friend. There was the usual acclamation from the company when the different members of the staff were toasted, but the name of Mr. Cock brought out the most tremendous applause. The guest inquired of his friend the reason, seeing that all Mr. Cock's colleagues were equally renowned professors and teachers. The answer was significant: "Because he has a heart."

Not a word need be said as to Mr. Cock's high professional character, for since all quackery and ungentlemanly acts arise from attempts at self-

aggrandisement in some form or other, these could have had no place in one so kindly disposed to his fellows and so thoroughly unselfish as Mr. Cock.

Edward Cock became a member of the College of Surgeons on March 28th, 1828, and was one of the first twenty-seven members on whom the diploma of the Fellowship of the College was conferred, on December 11th, 1843. He was subsequently a member of the Council and of the Court of Examiners, and in 1869 he was elected President of the College of Surgeons.

BOOK V.

LATER HISTORY OF GUY'S HOSPITAL AND THE MEDICAL SCHOOL.

CHAPTER I.

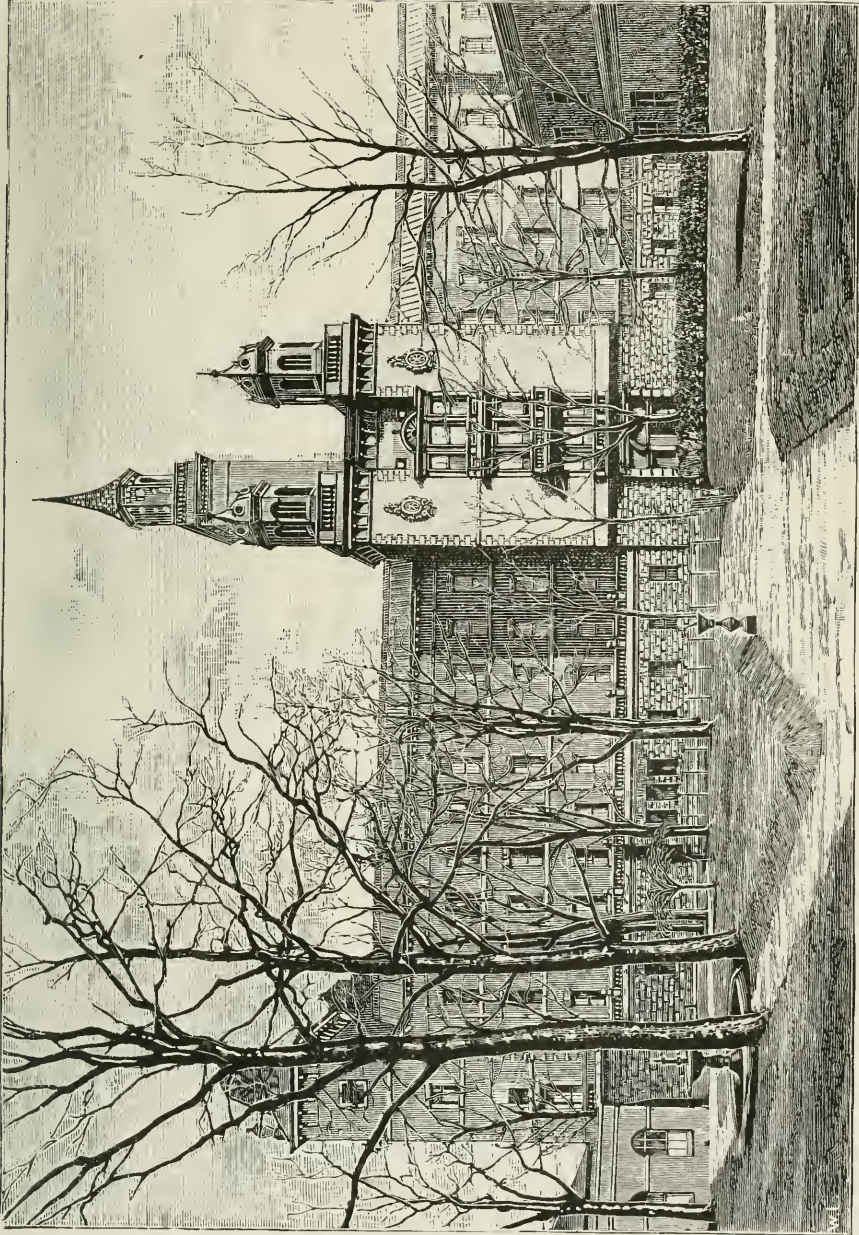
THE HOSPITAL AND SCHOOL BUILDINGS.

THE most important addition to the buildings of Guy's Hospital made during the latter half of the present century is the handsome edifice known, in memory of its founder, as Hunt's House, to which allusion has been previously made. In pursuance of Hunt's will, a certain number of patients were at first accommodated in temporary wards, made out of old warehouses, which occupied the site of what is now the Park ; but about 1850 the small houses standing between Maze Pond and King (now Newcomen) Street, which had been used latterly for various offices connected with the school, as well as for the obstetric and children's wards, were pulled down, and an entirely separate and modern hospital was erected.

HUNT'S HOUSE consists of a large central block, with north and south wings, of which the central portion and south wing were constructed in 1853 from designs by Mr. Rohde Hawkins. The main entrance to these buildings, which overlooks the Park, is flanked on each

side by a square tower one hundred and fifteen feet high, and surmounted with an octagonal turret. In the rear of the grand staircase, which occupies the central block, there is another tower two hundred feet in height, which bears an octagonal lantern and a spire of open iron work. Five separate floors open directly from the main staircase; of these the ground-floor provides accommodation for the various out-patient departments, offices and dispensaries, while the first, second, and third floors are entirely devoted to the reception of in-patients. The upper or fifth floor is reserved as a dormitory for nurses. The space on the ground floor is supplemented by a projection which extends round the base of the building, and contains several rooms used in connection with the out-patient work. The building is made of brick with stone facings; the base-ment projection is faced with rough sandstone, and surmounted with an elegant balustrade, which encloses a terraced walk along both sides of the edifice. Its spacious staircase in the central block is made of iron and Craigleith stone. As regards the cost of construction, the expense of this portion of the building amounted to £33,846.

In 1871 Hunt's House was completed by the addition of a north wing. The original designs of the architect were in the main carried out, but it was found necessary to modify several of its internal structural arrangements. Thus the space which occupies the centre of each ward in the south wing was omitted, and the dividing wall was replaced by supporting columns and arches. Owing to these alterations the symmetry of the building is not perfect, the north wing being fifty feet shorter than the south. Two square towers flank the end of the new wing, one of which is occupied by the bath-rooms and lavatories attached to each ward, while the other contains private rooms for special cases. On the ground



HUNT'S HOUSE.

floor of this part are the ophthalmic wards and the anatomical museum, while the four floors above this are appropriated as in the south wing. The kitchens and sculleries, situated in the basement, are in communication with the old buildings, or Guy's House, by means of a subway. On a level with the kitchen, at the end of the north wing, is the nurses' dining-hall, a spacious and lofty apartment, with a hammer-beam roof and large skylight. One of its walls is decorated with a beautiful fresco representing "Spring." The artist, Mr. H. J. Draper, who had gained a prize for a design for the decoration of a public building, was commissioned by the President and Council of the Royal Academy to carry it out in fresco; it was completed in 1889. The picture measures eighteen feet in length, and is seven feet high. Some years before this event, in 1868, ten large pictures were presented by Mr. John Absolon for the adornment of the new hospital. They are copies of well-known pictures by himself, such as "Sunday Morning in the Olden Time," "Burns Extracting a Thorn from the Arm of a Highland Beauty," "Mercy at the Wicket Gate," etc., and may be seen upon the landings and staircase of Hunt's House.

The ventilation of this building is carried out by a special system devised by Mr. Sylvester. The fresh air from a high level is introduced into the wards by means of the two smaller towers near the front entrance. The air flows down to the basement, where it passes through heated chambers, and ascends by a separate series of flues to the wards, entering through gratings placed in one wing of the building near the ceiling, and in the other wing in the floor. A corresponding series of flues in direct communication with the main tower gets rid of the vitiated atmosphere, together with the smoke from the numerous fireplaces. The erection of the north wing, including additional expenditure incurred

in excavation and structural alterations, cost about £32,900.

The number of beds available for in-patients was further increased in 1860 by the conversion of the LUNATIC HOUSE into two clinical wards. This house was built, after the custom of the time, in two separate galleries, with cells on each side opening into them. It was completed in 1774, and afforded accommodation for twenty confirmed lunatics. Nearly a hundred years afterwards the governors, acting upon the discretionary power given them by Guy's will, decided to discontinue the reception of lunatics into a general hospital. The cell-walls were removed, the loophole iron-grated windows were enlarged and extended to the level of the floor, and two fireplaces were planted back to back in the centre of each gallery. A room attached to the middle of the building was fitted up for the use of students acting as clinical assistants. It contains a portrait in oil of an old gentleman, who bequeathed it to the Hospital along with his body, which he desired should be used for the purpose of dissection. These two new wards, called Miriam and John, were opened on May 1st, 1860, and provided between forty and fifty beds. They at once became the "clinical wards," that title having previously been borne by Lydia and Job wards. The appropriation of the Lunatic House to the general purposes of the hospital allowed the airing grounds for the lunatics and other patients, which were separated by a high wall, to be thrown together. It appears from Mr. Turner's report, to which we are indebted for much information on this subject, that the governors about this period purchased property in Queen Street, which, when cleared, formed, with the airing-ground belonging to the Lunatic House, an extensive area, now known as the Park. In one corner of it was erected an alcove obtained from old

London Bridge on its removal in 1831 ; it was furnished with a stout seat made from portions of the old oak piles used in the foundations of the same structure. The date of its erection is 1861.

In 1858 the CHAPEL, which had for some time stood in great need of renovation, was repainted and decorated by Mr. Crace, and numerous alterations were made in the arrangement of the galleries and pews. Three painted glass windows, executed under the direction of Mr. Crace, were erected by the governors as a memorial to Mr. Hunt, the second great benefactor of the hospital. A marble tablet was at the same time put up to the memory of Sir Astley Cooper, whose remains were deposited, at his particular request, in the vault beneath the chapel, in company with those of Thomas Guy, William Hunt, and others previously mentioned. Memorial tablets have been subsequently erected to Dr. Addison, Richard and James Stocker (father and son, who held in succession the post of resident medical officer at Guy's Hospital for more than eighty years), Sir William Gull, Bart., and two members of the nursing staff, who died from diseases contracted in the discharge of their duties.

The following year Mr. Crace undertook the repainting of the governors' court room. The portraits of Thomas Guy and Mr. Harrison were sunk into the panels of the wainscoting, and the whole interior of this handsome apartment was renovated. The decoration of the ceiling, which represents the apotheosis of Guy, was the work of Sir James Thornhill. Since the date mentioned the portrait of the late treasurer, Mr. Thomas Turner, has been placed there. Another portrait of Guy, painted by Vanderbank in 1706, and bequeathed to the Hospital by Mr. Harry Butterworth in 1860, is hanging in the treasurer's drawing-room.

In the old Hospital buildings the most important

changes have been the enlargement and re-modelling of the medical library, and the construction in 1867 of a new operating theatre on the north side of Guy's House; the latter was a work of considerable difficulty and expense. At the same time the windows near the entrances of Luke and Naaman wards were carried outwards, and a stone staircase, with a wide landing, was erected in place of the old wooden one. About 1870 the accommodation on the first floor of this part of the Hospital was somewhat diminished by the removal of Esther ward, formerly known as Chapel ward from the fact that the services were originally held there. Its place is now occupied by a narrow corridor, extending between Job and Lydia wards, and some small rooms for the use of the nurses. The present surgeries and the adjacent end of the Accident ward were constructed on the site of the old out-patient rooms when that department was removed to the south wing of Hunt's House. At the same time (about 1853) the apothecaries' shop, which occupied the position of the present superintendent's offices and the store-rooms in the basement, was taken to the large dispensary near the out-patient department.

The water supply of the Hospital has often caused anxiety, but in 1858 it was materially increased by the sinking of an artesian well on the premises to a depth (including the boring into the chalk) of about three hundred feet. For many years this afforded a sufficient supply, but latterly, owing to the sinking of other wells in the neighbourhood, the quantity has gradually diminished, until now it barely suffices for one half of the requirements of the hospital. About the same year new washhouses, drying-rooms, and laundries were erected on a portion of a freehold site near Petersham House, in place of inconvenient and dilapidated buildings. The mortuary and post-mortem theatre, which originally stood near the medical library, were taken down in 1879,

and new buildings of a larger type, and more suitably arranged, were erected in the rear of Petersham House. To these a laboratory was added in 1888 for pathological and microscopical research, and it was subsequently fitted up for demonstrations in bacteriology.

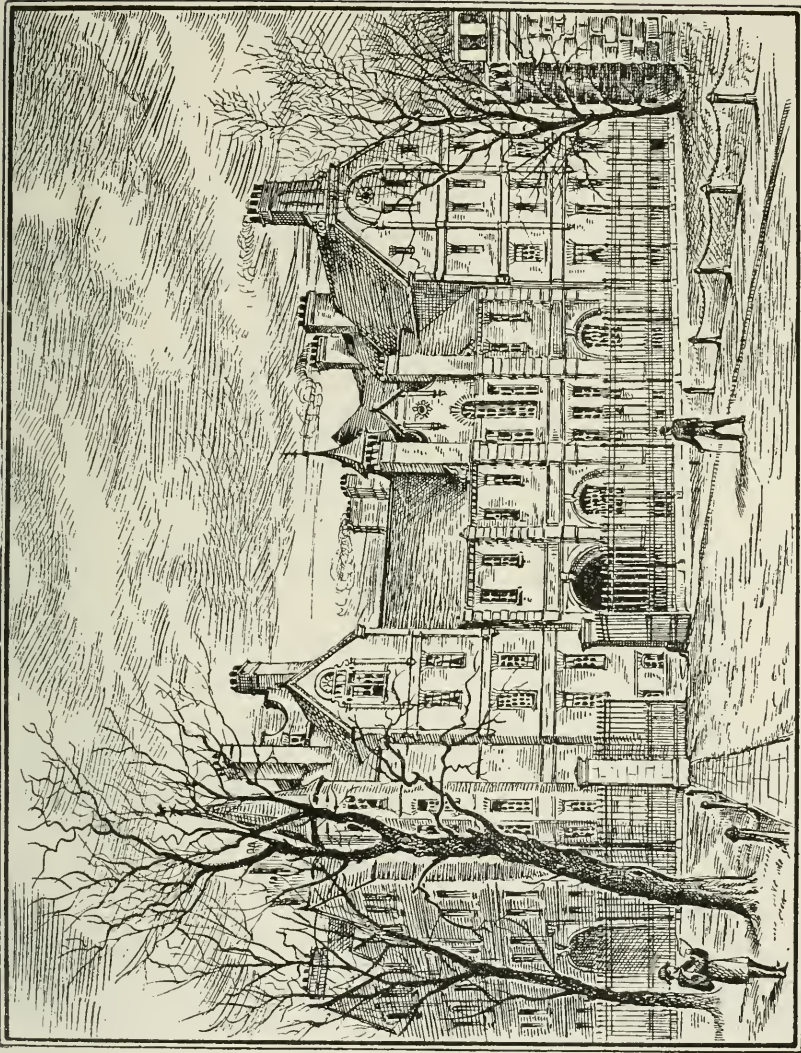
The alterations and additions which have been made in the school premises during the last few years are very numerous, and need not be fully described. The original dissecting room formed a part of the museum buildings erected in 1825. A coloured elevation by the architect, Mr. Samuel Robinson, is still preserved. But in 1850 these buildings were greatly enlarged. The front wall was carried forwards, while the dissecting room was thrown into the museum, of which it now forms the south wing, and a new one was built on adjoining ground. In 1873 this dissecting room was very much enlarged, and provided with a theatre for demonstrations. When Hunt's House was completed the anatomical wax models by Mr. Towne, together with other specimens, were removed from the museum to the large room on the ground floor of that building, which they still occupy. Large class-rooms were added to the museum buildings in 1878, and still more recently (1888) two physiological laboratories were erected near the dissecting room, and provided with the necessary apparatus. The laboratory behind the medical library, specially designed and furnished for practical chemistry, was built in 1871. The growth of the medical school and the additional requirements for teaching have now rendered the accommodation insufficient, and necessitated further extensions. For this purpose a large block of buildings is in course of erection on land adjoining Petersham House—the site of the old fives' court and carpenters' workshops. It will comprise laboratories for chemistry, experimental physics and bacteriology, together with a lecture

theatre and extensive apartments required for the dental school.

THE COLLEGE.

Ever since Guy's has had a school a college has always been in contemplation, but circumstances of various kinds have prevented the fulfilment of our wishes until the present time. In the year 1840, when Dr. Ashwell delivered the introductory lecture, he thus alluded to the previous introductory given by Dr. Addison: "On the last occasion when we assembled in this theatre Dr. Addison, amongst other plans for giving increased efficiency to the education prosecuted in this Hospital, mentioned the treasurer's wish and intention to erect a suitable building for the lodgment of students, in which each individual should enjoy the privileges and advantages afforded in these particulars by Oxford and Cambridge. Such a plan is still in existence, and I am authorised to say it only waits the result of certain legislative enactments connected with the profession to justify its commencement."

Again in 1877 the project was discussed between the governors and the staff, and plans were actually made by the hospital surveyor, but further negotiations were abandoned. It was not until the winter of 1887, when it was found necessary to increase the number of resident appointments at the Hospital, that the matter was once more brought forward. A committee of the Medical School recommended the erection of a college to lodge the resident staff, together with other students, and the court of governors sanctioned the scheme. Fortunately the Hospital was in possession of a piece of ground close to the Maze Pond Gate, and it was found that a college built on that site could be put into communication with Hunt's House, as well as the old building, by means of a short subway. The scheme likewise afforded a means



THE COLLEGE.

of providing premises for the students' club, an institution which was founded in 1887, and was at that time occupying an empty ward. A college committee was formed, consisting of the president, treasurer, and three governors, with four members of the medical and school staff; and the ground above mentioned was leased to this committee on favourable terms by the Hospital. Excavations were begun in August 1888, and the building was formally opened by Mr. Gladstone on March 26th, 1890. The cost of building and furnishing amounted to £21,000, the money being raised by debentures, the interest upon which was secured on the school fund. Dr. E. C. Perry, who was appointed the first warden, has published in the "Guy's Hospital Reports" a full account of its foundation, from which the foregoing particulars are taken.

The college is built of red brick, in a quadrangular form, with its front entrance opposite to the Maze Pond Gate of the Hospital. The residential portion consists of a house for the warden, and rooms for the house-surgeons, house-physicians, obstetric residents and externs, together with accommodation for about fifty other students. The apartments for the use of members of the students' club comprise a lofty smoking room on the ground floor, a handsome well-ventilated dining-hall, and a reading room and library on the first floor. The hall, which is capable of accommodating one hundred and twenty persons at dinner, has an open pitch-pine roof with a central *flèche*, and is in direct communication by a lift with the kitchens in the basement. The college library of general literature was founded in 1890 at the suggestion of Mr. Gladstone, the money being raised by liberal subscriptions from the governors and old students of the Hospital. In the quadrangle of the college a gymnasium has been built, for the most part beneath the level of the ground, with a raised roof of

iron-work and glass. A brass tablet on the wall bears the following inscription, "This Gymnasium was built and furnished by the liberality of F. W. Pavy, Esq., M.D., F.R.S., LL.D., October 1890." There is ample lavatory accommodation adjoining it.

CHAPTER II.

THE HOSPITAL AND ITS WORK.

DURING the period now under consideration—the latter part of the present century—the relief afforded by the Hospital has been greatly extended by the creation of departments for the treatment of diseases of the ear, throat, and teeth. When dealing with the rise and progress of the Medical School in an earlier part of this book, the foundation of the eye infirmary, the obstetric and children's wards, the electrical department, and the lying-in charity was described. These institutions have on the whole steadily kept pace with the growing influence of the Hospital, and their number has been increased from time to time as the need for special departments developed. Thus in 1863 Mr. James Hinton was appointed the first aural surgeon to the Hospital, and was deputed to take charge of patients affected with diseases of the ear. Dermatology had for many years received special attention at Guy's. Dr. Addison in particular was an authority on the subject, and was in the habit of selecting cases from the out-patients suitable for the demonstration of cutaneous diseases, and exhibiting them to his class held in the chemical theatre. This practice was followed by Sir William Gull and other physicians, until in December 1866 a day was set apart for seeing this class of patients only, and Dr. Hilton Fagge was appointed in charge of the skin department. Likewise in 1887 a special day

was appointed for the attendance of patients with diseases of the throat, under the control of Mr. Charters Symonds.

THE DENTAL SCHOOL.—The importance of this institution and the rapidity of its growth are reasons for describing in some detail the circumstances which led to its foundation.

It has already been noted that the first lectures on dentistry at any medical school in England were delivered at Guy's Hospital by Joseph Fox: at a time too when its separate medical school had not been founded. Fox left his specimens and models to the Hospital, which are preserved in the museum, and was succeeded in 1825 by Thomas Bell—a man who “had the great merit of applying the general rules of surgery to the art of dentistry.” From that year until his retirement about 1861 Mr. Bell lectured regularly on the structure and diseases of the teeth. But though Guy's Medical School was foremost in creating a dental department at the very beginning of its existence, and in regarding dentistry as an important branch of surgery which should be taught by scientific lectures and practice, yet progress in the mode of treatment adopted in the out-patient department seems to have been very slow, and little beyond extraction was ever attempted. Indeed the arrangements did not admit of the satisfactory application of those conservative principles in dental surgery now so well established. Such advantages could only be obtained at special dental hospitals, where patients were admitted solely by subscribers' orders. To fulfil the requirements of the examining boards, a dental student was bound to attend the practice of a general hospital as well as that of a dental hospital for a period of two years, and as this work was carried on contemporaneously much inconvenience and waste of time resulted. Towards the end of 1888 it

was proposed to establish a dental school at Guy's Hospital, with the twofold object of increasing the efficiency of the Hospital as a charitable institution by providing the poor of the neighbourhood with the benefits of conservative dental surgery, and of offering a complete education to dental students under the most favourable conditions for obtaining a diploma. The scheme received the sanction of the Governors on December 19th, 1888, and suitable rooms and laboratories were erected near Petersham House at the expense of the Hospital, the entire cost of furnishing the apartments being borne by the Medical School. A staff of dental surgeons, lecturers, and demonstrators was appointed, and in October 1889 the Dental School attached to Guy's Hospital was opened. Since that date the requirements of the department have so rapidly increased that it has been found necessary to provide more commodious workrooms. These will form part of the block now being built near Petersham House.

THE HOSPITAL STAFF.—The ever-increasing work of the Hospital, the natural result of the creation of these departments of practice and the rapid growth of the neighbourhood in which Guy's is situated—a growth which may be roughly estimated as twenty-fold when the present population is compared with that existing at the time of the foundation of the Hospital—has necessarily led to a corresponding increase in the number of medical men attached to the institution who constitute the Hospital Staff. At the beginning of its history two physicians and two surgeons were appointed to the Hospital at a salary of £40 a year each. In 1745 a third physician was appointed, and in the *Medical Register* of 1779 we read that the staff consists of three physicians and three surgeons, and of an apothecary and his assistant. No doubt the number of patients seeking admission and attending as out-patients had

considerably increased, for a few years after the date above mentioned new wards were opened in the original building by making use of the corridors on the ground floor.

The first mention of an assistant medical officer appears in the minutes of the Court of Committees, dated 1795. The Treasurer having received an application from the physicians of the Hospital for assistance in the case of the out-patient department, it was resolved that "an assistant physician (without any salary) was necessary to take charge of the out-patients" and to act during the illness or absence of the other physicians. Many years elapsed before an assistant surgeon was appointed; in fact the office was specially made by the Treasurer for Mr. Aston Key in 1821, though ostensibly for the better treatment of the surgical out-patients. During the next seventeen years no change in the number of the staff took place, but in 1838 the late Mr. Edward Cock was appointed as a second assistant surgeon, Mr. Callaway being his colleague. Two years after this another assistant physician was elected, so that in 1840 the staff included three full and two assistant physicians and surgeons. The opening of large wards in the south wing of Hunt's House and the enlargement of the out-patient accommodation doubtless rendered the work of the medical staff heavier, for in 1851 three assistant physicians are mentioned, the senior staff remaining as before. Except for the short time during which Dr. Gull was appointed by the Treasurer to be a fourth assistant physician, no important change took place in the Hospital staff until 1862, when the number of the full surgeons was increased to four. Nine years later a fourth full physician was added; the present arrangement of four senior and four assistant physicians and surgeons, making sixteen in all, dates from 1877. The beds are so allotted that each full

physician and surgeon has the charge of from thirty-five to fifty cases. The assistant officers have the control of the whole of the medical and surgical out-patient departments, and for this they receive a salary of £100 per annum from the Hospital. To each assistant surgeon a few beds are allotted, and he is called upon to fulfil the duties of his senior officer in the event of the illness or enforced absence of the latter, as well as to direct the treatment of cases of emergency occurring at night. Though the assistant physicians have no beds permanently under their care, yet during the summer months they have sole charge of the clinical wards in rotation, and at all times they fulfil the duties of their seniors in the general wards when so required.

It was not until about the year 1850, or at the time of Mr. Turner's appointment as treasurer, that separate wards were allotted to the medical and surgical cases. Previously they were mixed, so that physicians and surgeons had patients in the same ward—an arrangement which was very detrimental to the physical examination of medical cases.

Patients are admitted to the Hospital at any hour and are placed as far as possible under the care of the full physician or surgeon who is on duty for that week. The taking-in week begins on Wednesday morning, that day having been set apart for the admission and discharge of patients when the Hospital was first established. As explained elsewhere, a committee of the Governors met on that day and received applications for admission, while at the same time patients who were about to leave the Hospital were presented to the committee that they might return thanks for the benefits they had received. Though this custom no longer prevails as regards the discharge of patients, a certain number of new cases are still admitted by a committee which meets every Wednesday morning. In John

Howard's account of Guy's, from which we have already quoted, there are some interesting remarks on the payments made by the patients at that time. He says, "I saw a woman bring her child, and with tears leave the fee of 2s. 9d. for the nurse and 6d. for the steward. The foul patients pay seven shillings. Every patient on admission must lay down twenty shillings or find security for their burial." St. Thomas's Hospital was even more expensive. "Every clean patient pays a fee of 3s. 6d. at admission, and a foul or venereal patient pays 10s. 6d., besides 4d. a day; and all pay the nurses for washing their linen." It is scarcely needful to add that these regulations do not obtain at the present day, and that, with the exception of a few beds which are reserved for those who can afford to pay, patients are admitted to all parts of the Hospital free of expense. The steady growth of the work of the institution is seen in the following figures: in 1727, two years after the opening of the Hospital, 1,080 patients were admitted; in 1831 the number was 3,279; and during the last twelve months the total number of in-patients was 6,136. As might be expected, the increase in the number of out-patients attending the Hospital has been far more rapid. Maitland tells us that on July 27th, 1738, there were 16 out-patients; during the last year there was an average of nearly 200 a day. The total number of out-patients in 1891 was 59,871; in these figures the minor casualties, the extern cases, and the dental patients are included.

No account of the management of the Hospital would be complete without a reference to the resident appointments which have been established as the result of the intimate association of the Hospital and Medical School, to the manifest advantage of both. The earliest of these was the resident obstetric clerkship. When the lying-in charity was opened in 1833, its management

was in the hands of a physician accoucheur, two assistant accoucheurs, and a female attendant; and the work of the institution was carried out by selected pupils of the Hospital under the supervision of the assistant accoucheurs. In 1849 it is recorded that three pupils or students—two of whom were senior men, and had obtained legal qualifications to practise—were appointed resident obstetric clerks and provided with lodgings and commons within the walls of the Hospital. Their duties were invested with much responsibility, and required them to be ready at all times to assist with their counsel and co-operation the body of junior students who attended the cases. Except that there are only two obstetric residents at the present time, no important change has taken place in the character of this office since it was instituted.

Next in chronological order is the house-surgeoncy. The arrangements prevailing in the surgical department of the Hospital at the end of the last century are well described in Mr. Joseph Warner's letter (p. 88). It is definitely stated that there was at that time no house-surgeon either at Guy's or St. Thomas's Hospital. For many years the post of resident medical officer was filled by the Stockers, father and son; in that capacity Mr. Stocker saw and prescribed for every new case taken in during the absence of the physician or surgeon. But the dressers depended more on the advice and help of the resident surgery attendant, Mr. Monson Hills, to carry them through any difficulty that might arise in respect of the minor casualties. Towards the end of 1856 a house-surgeon was appointed from those students who had obtained the diploma of the College of Surgeons. He held office for six months, and in the absence of the surgeons and assistant surgeons the general superintendence of the surgical department of the institution was committed to his care. Board and lodgings were

provided for him within the Hospital. In the Treasurer's report for 1868 the very large increase which had taken place in the number of the out-patients was commented upon, and to meet this demand it was stated that a second (or junior) house-surgeon had been appointed. This occurred in 1865, and at the same time the period of office was reduced to four months. The junior had the supervision of the surgical casualties and rendered assistance in the administration of anæsthetics, but he did not reside in the Hospital. Again, at the beginning of 1878 more help was required in the out-patient department, and a third house-surgeon was elected for that purpose. This was a non-resident appointment, and the second house-surgeon, whose duties were somewhat altered whereby his constant attendance became necessary, was henceforth provided with rooms and commons. The most recent change with regard to the appointment of house-surgeon—an appointment which has always been highly valued by Guy's men on account of the opportunities which it affords of becoming proficient in the art of the anæsthetist, of acquiring experience in the treatment of emergencies, and of performing many minor surgical operations—was made in 1890, when the Residential College was opened. The alteration involved a considerable increase in the number of house-surgeons, house-physicians, and dressers, as well as a reorganisation of the duties of these offices. Four house-surgeons were appointed, each of whom was attached to a surgeon and the corresponding assistant surgeon, and was entrusted with the care of all in-patients under the charge of those medical officers. The term of office was fixed at six months, board and residence being provided in the College free of expense. At the same time two assistant house-surgeons (non-resident) were elected to supervise the treatment of minor emergency cases, both surgical and medical, and to render help to the assistant

surgeons in the out-patient department. Also the number of dressers attached to each full surgeon was doubled. Numerous were the reasons which induced the majority of the Hospital staff to recommend the appointment of more dressers and a house-physician and house-surgeon to each of the four physicians and surgeons. Briefly it was felt that the change would ensure for the patients "a more complete and systematic observation and a nicer adaptation of treatment" than had always been obtained in the past, and would supply a much larger number of students with the opportunity of gaining a practical knowledge of surgery. This arrangement has been in operation since April 1890, and is found to work well.

The house-physiciancy was instituted long after the corresponding post on the surgical side of the Hospital. In 1868 it is noted that a resident house-physician is appointed every six months to assist the permanent resident medical officer (Mr. Stocker) in attending the patients in the wards, and on three days of the week to help in the work of the medical out-patient department. The latter duty was entrusted in the following year to a junior non-resident house-physician, and the senior was thus enabled to devote his whole attention to the in-patients. It is worthy of remark that the evening clinical observations of temperature were chiefly made by him. In 1873 the duties of the senior house-physician were apportioned between two qualified students, who had separate rooms near the clinical wards and were boarded at the expense of the Hospital. From that time until the introduction of the scheme above mentioned no change was made in the appointment. There are now four house-physicians, each attached to a physician; they hold office for six months, and during that period they are provided with board and residence in the College free of expense. The work in the

medical out-patient department formerly done by the junior is now in the hands of two assistant house-physicians.

Of the early history of other appointments held by pupils of the Hospital we shall speak in a subsequent chapter.

CHAPTER III.

THE MEDICAL SCHOOL—ITS CLINICAL WORK.

AT the foundation of the Medical School an acquaintance with disease was gained by what was called "walking the hospitals," which amounted to little more than looking at the cases and hearing the remarks of the medical attendant. Clinical lectures, it is true, had long been established, for in an advertisement of 1772 we read that "clinical lectures are delivered at Guy's Hospital on the cases of patients, by means of which the student may enjoy every advantage that actual practice can afford in the study of his profession." But what is now known as clinical teaching, instruction given at the bedside upon the mode of investigating individual cases, was at that time very rudimentary in character. The appointments in the Hospital open to students were of two kinds, dresserships and clinical clerkships. The holders of the former offices dressed the cases under the charge of the surgeons—a privilege for which they paid heavily; while the clinical clerks worked in two of the medical wards specially reserved for interesting cases, where, under the guidance of experienced physicians, they were taught to make and record observations upon the patients. From these two classes of appointments—the one dealing directly with the treatment of the patients, the other with the record of scientific investigations of diseases as seen at the bedside—the whole series of those now open to students

at Guy's has in process of time developed. Let us see how this was brought about.

A regular method of systematic case-taking was established in 1828 by Dr. Addison, in connection with his clinical lectures. The clerks were selected from the senior students, and had generally been dressers. They were appointed at the discretion of the physicians, and held office for three months. Speaking of the value of these clerkships in the long-established clinical wards, Mr. James Babington says: "Never have their merits been more justly appreciated than at the present time (1837); and never did the names of so many candidates for clinical clerkships appear upon the books. Each student who has passed three months in the clinical wards is ready to admit that that period has proved the most profitable portion of his medical education, and regrets the necessity for resigning his office at the moment when he has just learnt to turn it to the best account. Under the guidance of experienced physicians, the student is instructed how to make observations upon the sick, and to interpret the signs of disease." The next step in the progress of clinical work at the Hospital was the establishment of the Clinical Report Society, the constitution of which has been fully described (p. 191). At first its members were students in the third year of their medical curriculum, and thus having some knowledge of their duties they were competent to carry on the work of the association; and so well was it organised that not only the medical and surgical cases, but also those in the ophthalmic and obstetric departments, were more or less thoroughly recorded. But a few years later the actual work of writing out the reports fell into the hands of the junior students, and as an inducement to perform their duties satisfactorily the dresserships and clinical clerkships were offered to the best reporters.

The clinical clerks who had charge of the clinical wards were quite independent of this Society, and distinct from the reporters. In their own sphere they were supreme, and allowed no one to enter without their permission. They prescribed for the patients if necessary, and as they had usually been dressers and were the oldest and most experienced students, often being qualified, they performed any needful surgical operations without calling in the dressers. Dr. Barlow has given an account of the duties of these clinical clerks, written in 1844; and as they closely correspond with those of their successors, the present "clinical assistants," it will be of interest to quote his description. He says:—
"There are generally four clinical clerks, selected from the more advanced pupils, who have distinguished themselves by their ability and diligence in reporting in the general wards. On the admission of a patient a careful report is made, by the clerk who has the care of the case, of his history and symptoms, and a subsequent daily report is added whilst the patient is under treatment. These reports are read by the clinical physician, and form the subject of conversation between the physician and pupils in the clerks' room, and also of a more formal lecture delivered weekly in which the case and its treatment are fully discussed. The books of these reports are kept in the clerks' room."

The Clinical Report Society continued its good work for many years; but about 1852 the system was incorporated into the general scheme of medical education adopted by the School. Henceforward every student became a reporter, and a title, distinctive of the particular department in which he was engaged, was assumed, such as "ward clerk" (the present medical ward clerk), "dressers' reporter" (the present surgical ward clerk), "post-mortem clerk," and in course of time (about 1866) "out-patient clerk," and several others.

The notes of the cases taken by the reporters of the Society were entered in a large book by an amanuensis, Mr. Snape, who was paid by the Hospital; and an apartment was appropriated to the meetings of the Society and the preservation of its books. Every facility was given to those desirous of consulting these records. When the Clinical Report Society came to an end, the separate forms on which the records were made were no longer used. Small green books were substituted, many of which, dating from 1847, are still preserved in the registrars' rooms. The reporters took these books home to enter their notes, and as a result they were rarely supervised and often lost. The general management of the system of reporting was placed under the superintendence of Dr. Gull, who was appointed a clinical censor, and kept lists of the clerks to each medical and surgical officer, as well as a register of those who from standing and capability were fitted for the offices of reporters or dressers. But when Dr. Gull obtained a lectureship he gave this up, and clinical reporting fell into great disorder until the present system was introduced.

This sketch of the development of the system of clinical reporting at Guy's Hospital would not be complete without a reference to the medical and surgical registrarships. When the Medical School adopted the scheme of the Clinical Report Society and reorganised the appointments, the two honorary secretaries of the Society, Dr. Wilks and Mr. Poland, were deputed to carry out the supervision of the new arrangements, to assist the students in their reporting, and to prepare statistical records of the work of the Hospital. This occurred at the beginning of 1853. Matters continued thus until 1866, when the duties of the medical and surgical registrars, as they were called, were somewhat modified, and their services were remunerated partly

from the Hospital and partly from the School funds. From that date up to the present time the reports written by the medical and surgical ward clerks have been examined, corrected, and classified by the registrars, and bound in yearly volumes, which are kept for reference in rooms provided for the purpose. Thus for a period of nearly sixty years every facility and encouragement has been given to students to observe and study at the bedside, and to record their observations; so that they may acquire the ability of investigating, as well as experience in treating, disease. We cannot, in passing, omit to pay a full measure of praise to those enterprising students who, by founding the Clinical Report Society and carrying on its work with such earnestness, contributed largely to the future greatness of their Medical School.

But to return to the other class of appointments in the wards of the Hospital, the dresserships. In the early days of the School, as we have before said, the dressers paid for the privilege of attending the cases in the surgical wards. But it soon became evident that a change was needed, and that the opportunity of becoming practically acquainted with the art of surgery should not depend upon the depth of the pocket. In 1846 a great reform took place. Nearly all the smaller schools of medicine were closed, and an attempt was made to keep medical students to one hospital. The fees for separate courses of study were given up, and the payment of a sum of money inclusive of all educational expenses was instituted. The appointments of dresser and clinical clerk were, in future, to be given solely on merit. This plan was soon followed by other medical schools. No doubt the general spirit abroad of the extension of the competitive system for appointments in the public services had influenced the authorities. Hitherto positions in the army, navy,

and the much coveted East Indian service had been given by nomination, but about this time one of the directors of the East India Company, Mr. J. H. Astell, broke through the rule, and offered to bestow his patronage upon the most deserving man at Guy's. Fortune favoured him, for Dr. Addison, after a severe test, gave the name of Mr. J. Ewart, who was forthwith appointed as an assistant surgeon. He proceeded to India, and soon after was promoted to a professorship at the College of Calcutta.* Dr. Gull had much to do with this reform, and by his influence with the Treasurer the Hospital was regarded as a college, like those of Oxford and Cambridge, so that the advertisements in the journals of 1847 were simply headed "Guy's," and did not announce the names of the lecturers. The payment of a stated sum of money was declared to admit the student to the lectures, practice, and all the privileges of the Hospital for that year only. The dressers and clinical clerks were to be selected according to merit from those students who had attended a second year, the selection being made by a committee of the staff which took the name of the "Medical and Surgical Examining Council."

In a full account of the Hospital practice, published in the *London Journal of Medicine* for 1851, it is stated that each surgeon on visiting the wards was followed by four dressers and four surgical reporters. The cases on which the surgical clinical lectures were delivered came from any ward in the Hospital, the clinical surgeon for the time being having the liberty of choosing his material from all the patients admitted into the Hospital. For these cases there were special reporters. Clinical instruction was also given in the ophthalmic and obstetric departments.

The duties of the dressers forty years ago were inducted

* Now Mayor of Brighton.

with much responsibility. They were students in their third year, and twelve were appointed every six months, four to each of the three surgeons. As they all retired from office at the same time, their successors had not the advantage of being taught by those who had learned how to surmount the difficulties which beset the path of the surgical tyro. It must be remembered also that there was no house-surgeon, but only a resident medical officer, whose multifarious occupations left him little time for instructing the young and inexperienced dresser. Much kindly help was received from the good old surgery-man, Monson Hills, and in cases of emergency the surgeons were sent for. However, as might have been expected, grave mistakes were occasionally made by the dressers; and in consequence of complaints as to their inefficiency it was resolved, in 1854, that six men should be appointed every quarter, so that each surgeon should always have two competent dressers on duty, who would be able to instruct those recently elected. Very shortly afterwards a fully qualified resident house-surgeon was appointed to have the general superintendence of the surgical department of the institution in the absence of the surgeons. This opened the way for resident dressers, who were required to take charge of cases admitted during the night and to render assistance in the event of emergencies.

The rooms occupied by the dressers were those in the right-hand corner of the front quadrangle, adjoining the chapel and the Hospital buildings. Three men resided there, one for each surgeon; the dresser for the week was thus within easy call, and if the case that was brought in at night needed more help his fellow-dressers were summoned to assist him. Commons for the residents were provided by the Hospital, but such expenses as dessert, newspapers, tips, etc., were defrayed by the

residents themselves. This led sometimes to little disagreements. The writer remembers Dr. Habershon saying he would not on principle contribute to "Bell's Life," which came every Sunday morning. The dressers were, as a rule, unqualified students, but amongst them there were always one or two superior and older men, who gave their advice and helped to keep things straight. At that time the Hospital still preserved the watchmen, or old "Charlies," as they were called, although the police had long superseded these functionaries in the control of the streets. The front gates were closed at night, and within was placed the watchman's box. Another watchman had his box at the opposite entrance. During the last illness of one of these men, the patient in his delirium continually called the hour, so that he had to be removed to Petersham House, especially as he disturbed Mr. Toole, the father of the famous comedian, who was then under Mr. Callaway's care. Many Guy's men will remember old "Barney," the last of this race, who died only a few years ago. Every night he was to be seen emerging from his box at the Newcomen Street lodge, and with slow, tottering steps walking round the buildings, at times calling in a feeble voice, "Past ten o'clock, and a fine night." The residents not unfrequently gave him beer, in order to extract from him his one and only toast:—

"Here's health to the sick, honour to the brave,
Success to the lover, and freedom to the slave."

It may be added that one of the functions of the watchmen was to put down the names of all students who left the Hospital after the closing of the gates, having spent the evening in the dressers' rooms. These names were given to the Treasurer, but they were of little use to him, as few of them were to be found in

the register, and others were unpronounceable. This reminds us that at one time Mr. Dobree, the Treasurer, in his endeavour to make everything work like his city office, obliged the dressers to put down all particulars of the casualty out-patients in a book provided for the purpose, but this was soon given up when he found the names of himself and many of the governors occurring on almost every page as suffering from the most loathsome complaints. Soon after a house-surgeon was appointed, apartments and board with him were provided for two dressers in rotation, the dresser for the week and the ex-dresser, or the one who had just finished his take-in; at the same time "the rooms" were transferred to quarters adjoining the superintendent's house, and there, as the number gradually increased, every member of the resident staff was boarded. The staff ultimately consisted of the senior and second house-surgeons, the senior and second house-physicians, the senior and junior "charities," and the dresser for the week and "his ex."—an arrangement which continued until the College was built and the resident appointments were reorganised.

With regard to the junior and other dresserships in the Hospital, it may be stated generally that they owed their origin to the steady growth of the work of the institution and to the demand for clinical appointments made by the ever-enlarging Medical School. The increase in the numbers of the out-patients led to a corresponding increase in the surgical staff, and dressers were appointed to help the assistant surgeons in their work. The dressership in the surgery dates from about 1864. Previously the work of the casualty department had been done by the full dressers in rotation; but as their duties became more onerous, junior students were appointed to attend the minor accidents under the supervision of a senior dresser. Finally

the ophthalmic clerks or reporters in time became the dressers in the eye-wards, and as other special departments have been created, so the need of more assistance from the Medical School has arisen, until at the present time there are no less than twenty separate appointments (exclusive of residents) in the School, capable of providing occupation for nearly two hundred students. By the changes made in 1888, alluded to above, the number of qualified residents and full dresserships was considerably increased, with the result that every student has now an opportunity of gaining that experience in the practical work of surgery which before was only to be obtained by a small and privileged class, the full dressers.

CHAPTER IV.

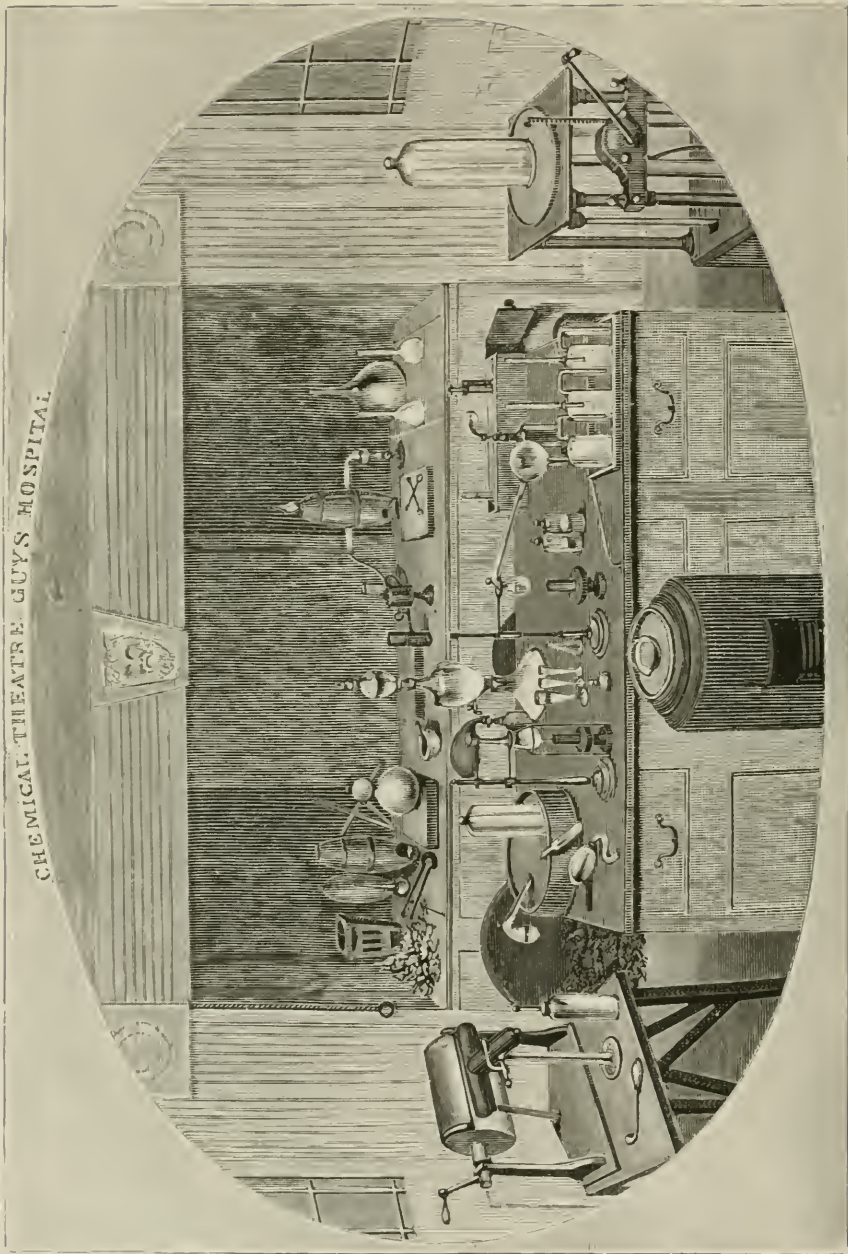
THE MEDICAL SCHOOL AND ITS CURRICULUM.

WHEN the independent Medical School of Guy's Hospital was established in 1826, the curriculum was founded mainly on the requirements for obtaining a qualification from the Apothecaries' Company. Not unnaturally, a knowledge of drugs and of their compounding was considered of paramount importance, whence arose the necessity for lectures on botany, in order to teach the recognition of the plants from which they came; on materia medica, to teach the nature and preparation of medicaments; and on chemistry, to show the constitution of inorganic substances and how they might be combined. But each of these subjects and several others had been taught for many years previously, long before the passing of the Apothecaries' Act in 1815. Indeed, when Dr. Saunders began about 1770 to give systematic instruction to medical pupils of Guy's and St. Thomas's, his course of lectures included the subjects of medicine, physiology, chemistry, and materia medica; to these midwifery and botany were soon added. The lectures were given "in the theatre of Guy's Hospital"; that is, the present chemical theatre. At that time the Borough Hospitals were united, but it must be remembered that this amalgamation never extended beyond the surgical practice of the two institutions. Anatomy, surgery, and ophthalmic surgery were taught at St. Thomas's, but up till 1825 all the

branches of medical study enumerated above were lectured on at Guy's, and no physician of St. Thomas's was allowed to share them.

In comparing the teaching of the Medical School of to-day with that of its predecessor in the last century, the changes which we recognise seem to be chiefly due to two causes: firstly, the institution of examining corporations from which legal qualifications to practise, or it may be degrees, can only be obtained by the fulfilment of certain requirements; and, secondly, the tendency to supplement professorial teaching of any branch of science by practical demonstration of the methods employed in its investigation. The multiplicity of classes and demonstrations, which now form so large a share of the curriculum of any medical school, is partly the result of the former cause, but is mostly due to the discovery that scientific instruction can be more readily conveyed by actual work at the subject than by the older and decaying method of formal lectures upon it. In this estimate the great additions to scientific literature of recent years must not be overlooked. A short sketch of the history of the most important subjects included in the medical curriculum will best explain these modifications in the mode of teaching.

The earliest lectures on chemistry were not confined to things of medical interest alone; they endeavoured to give a comprehensive survey of that science, as well as information of a more general character. Dr. Babington, in the preface to his "Lectures" (1802), says: "As the course is necessarily designed for medical students, particular attention has been bestowed on those parts which relate to their profession. It is not, however, confined to this object alone," but "is rendered additionally illustrative of general science, by introducing occasionally, and in their proper places, such parts of experimental philosophy as it is more imme-



FROM BABINGTON'S "LECTURES ON CHEMISTRY," 1816.

diately connected with." Natural philosophy subsequently became a separate subject, and in 1825 the lectures upon it dealt with mechanics, hydraulics, pneumatics, optics, electricity, magnetism, and astronomy. Though some of these had a more or less direct bearing on medicine, the object of the course was principally to provide a broad scientific education; and accordingly the lectures were continued for many years, and were attended by other than medical students. Of late years this course has been adapted to the requirements of the London University and other examinations. The lectures on both these subjects were well illustrated by experiments, and Dr. Babington specially mentions the fact that the student has free access to an extensive laboratory, with the opportunity of seeing the various chemical processes conducted upon a large scale. In the second edition * of his book there is an engraving of the chemical theatre in 1816, which shows that the centre table, half-glass doors, and general arrangements were much the same as at present; in fact, the air-pump depicted on the right of the picture is still in use. Demonstrations on practical chemistry were introduced by Dr. Odling in 1852, and a large laboratory was fitted up for the purpose. It was soon found that nearly the whole of the students availed themselves of this opportunity for acquiring a practical knowledge of the subject, and attendance is now compulsory.

The lectures on surgery and anatomy at Guy's date from the separation of the Borough Hospitals. Before that time, as we have said, both these subjects were treated only at St. Thomas's, where a regular anatomical

* The copy of this edition preserved in the library is annotated in the handwriting of Dr. Babington or Dr. Marcet. On the fly-leaf there is a note by Dr. Stevenson to the effect that "the book was shown in 1886 to Mr. Cornelius Hanbury, of Plough Court, nephew of Mr. Allen, who said the handwriting was not that of Mr. Allen."

course was founded in 1768 by Mr. Else, and continued by Cline and Astley Cooper. The surgical teaching then formed an appendage to the lectures on anatomy, but when Astley Cooper was appointed he separated the subjects and gave a special course on surgery, which proved very successful and enhanced his fame. When Guy's School became independent, the principles and practice of surgery formed one set of lectures delivered by Key and Morgan, and anatomy and the operations of surgery were included in another course given by Key, Morgan, and Bransby Cooper. The commencement of practical instruction in surgery dates from 1859, when Mr. Bryant held classes in operative and manipulative surgery for senior students. These two branches are now separated, and so arranged as to fulfil the requirements of candidates for the various examinations.

The demonstrations on anatomy in the dissecting room were originally given by the lecturers on that subject, who, at the close of their lectures, came into the room and repeated much of the discourse with the dissected body before them, and pointed out the various parts to the pupils in attendance. When Astley Cooper taught anatomy he employed assistants to instruct the pupils in dissecting, and from the commencement of Guy's separate School demonstrators have been regularly appointed, Edward Cock and John Hilton being the first to hold office.

The teaching of physiology was for many years combined with that of midwifery, the first lecturer of note at Guy's being Dr. Haighton, the obstetric physician. He was succeeded by his nephew, Dr. Blundell, who separated the subjects and gave a distinct course of lectures on physiology, or "the laws of the animal economy," as it was termed. An advertisement of 1833 states that these were the only special lectures on physiology delivered in London, excepting the course at the

London University. After Blundell's resignation anatomy and physiology were combined until 1846, when Gull was appointed lecturer on physiology only. As the study of the minute anatomy of the tissues became more important, demonstrations on microscopic anatomy were given by Mr. Birkett on certain evenings of the week. Histology, as it is now called, was associated with physiology when Dr. Pavy succeeded to the chair in 1857. Classes on practical physiology, at which the use of the microscope was taught, were first given in 1871, in compliance with the regulations of the College of Surgeons.

Midwifery has been taught by lectures from the earliest days of the Medical School, but there was no means of gaining practical experience in the art at the Hospital until the lying-in charity was founded in 1833. For many years this institution, the working of which has always been regarded as excellent, was the largest in connection with any metropolitan hospital. The area embraced by the charity was formerly bounded by a two-mile radius from the Hospital south of the river, and was subdivided by the High Street, Borough; each division being superintended by a different obstetric physician. But about 1857 this area was curtailed to its present dimensions, having a radius of one mile from the Hospital.

The study of botany formed for many years an important part of the medical curriculum, and the lectures upon it at Guy's have been delivered by such eminent botanists as Sir Edward Smith and Dr. Robert John Thornton. The idea was that medical men ought to know all about the plants of which they made use. In 1826 medical botany was included in the syllabus prescribed by the Apothecaries' Society, at which time the lectures were delivered by Dr. Bright. When the writer was a student there was a long course of lectures and

HOURS OF ATTENDANCE AT GUY'S HOSPITAL, 1826.			
Practice of Medicine	Dr. Cholmeley and Dr. Bright	Mon., Wed., Fri.	10 a.m.
Theory of Medicine, comprising Pathology, Therapeutics, and Materia Medica	Dr. Cholmeley and Dr. Addison	Tues., Fri.	7 p.m.
Midwifery and Diseases of Women and Children	Dr. Blundell	Daily	8 a.m.
On the Physiology, or Laws of the Animal Economy	Dr. Blundell	Mon., Wed.	6.30 p.m.
Principles and Practice of Chemistry	Mr. Allen, Mr. Aikin, and Dr. Bostock	Tues., Thurs., Sat.	10 a.m.
Medical and Practical Botany	Dr. Bright		
Structure and Diseases of the Teeth	Mr. Bell		
On Anatomy and Operations of Surgery	Mr. Key, Mr. Morgan, and Mr. Bransby Cooper	Daily	12.45 p.m.
Principles and Practice of Surgery	Mr. Key and Mr. Morgan	Tues., Fri.	8 p.m.
Experimental Philosophy, comprising Mechanics, Hydraulics, Pneumatics, Optics, Electricity, Magnetism, and Astronomy	Mr. Allen and Mr. Millington	Thurs.	6 p.m.
Medical Out-patients	Dr. Addison	Fri.	11 a.m.
Surgical Out-patients	Mr. Callaway	Fri.	11 a.m.
Operations		Tues.	1 p.m.
Wards visited by	Physicians and Surgeons	Daily	12 noon
Taking-in		Wed.	10.30 a.m.

Sir Astley Cooper (Consulting Surgeon) goes round on Thursdays for the purpose of seeing the newly admitted patients.

practical demonstrations on botany given every other day throughout the summer session. "Old Johnson," a well-known botanist of his day, was the lecturer, and he used to begin his course with the following anecdote. A vessel was once wrecked upon an uninhabited island, and the store of provisions was lost. But fortunately there was a surgeon on board who had been his pupil. On searching about, he discovered one of the Liliaceæ, whereupon he exclaimed, to the intense relief of his fellows, "You may eat this bulb with impunity." The notion that an extensive knowledge of botany was necessary for the study of materia medica was carried to an absurd length; and when Pereira wrote his famous book, finding that certain substances were used in the pharmacopœia which were derived from the animal kingdom, such as lard and eggs, he described in full the anatomy of the pig, and the natural history of the cock and hen. Materia medica then meant a knowledge of drugs by sight, and many a candidate was rejected at the Hall because he could not recognise this bark or that ointment. When, however, the physiological action of drugs began to be investigated, and therapeutics came to be regarded as a definite science, the study of botany declined. Since 1886 the lectures upon it have ceased, though an elementary knowledge of it is still required at some of the preliminary examinations.

Although the systematic study of pathological anatomy is a comparatively recent institution, the records of post-mortem inspections at Guy's Hospital have been kept with considerable regularity from the beginning of the century. In dealing with the history of Guy's museum, the development of the study and mode of teaching pathology has already been sketched. The earliest post-mortem records are preserved at the museum in a volume called the "Red Inspection Book." This contains "Reports of Curious and Interesting Medical

and Surgical Cases, commenced at Guy's Hospital, 1814." The inspections were made by Mr. T. Callaway, and numbered thirty-seven in that year. In 1817 there are reports of only ten cases—a number which, when compared with the five hundred autopsies that are now made annually and reported in full, indicates the steady growth of this department and the large field for observation which it provides. There are also records of inspections made by Mr. Key, dating from 1821 to 1825. Then follow thirteen "Green Inspection Books," which seem to have been the exclusive labour of Dr. Hodgkin. A few of the autopsies were made out of the Hospital. These volumes extend from 1826 to 1836. Another series of post-mortem reports, extending from 1827 to 1845, was compiled chiefly by Mr. Wilkinson King. Both series are followed by careful analyses of the cases. From 1854 to the present time the records of inspections have been made on separate forms by the demonstrators of morbid anatomy, and when bound in yearly volumes have been preserved at the museum. Lectures on morbid anatomy were first given by Dr. Hodgkin in 1835, in compliance with the regulations of the Hall. Before that time the subject was included in the lectures on the theory of medicine. At the opening of the School post-mortem examinations, though not conducted with regularity, were tolerably frequent, and were free to all the pupils. But though they were styled demonstrations, their object was to verify or refute the diagnosis of the medical officer, rather than to teach students the appearances presented by diseased organs and the mode of performing an autopsy. The minute anatomy of morbid tissues was likewise in its infancy. In Dr. Barlow's account of the School (1843) he says that "an arrangement has lately been entered into for carrying on microscopic observations, by means of a powerful instrument, under the superintendence of an experienced

and skilful observer." A room was reserved for the purpose in one of the old buildings which formerly occupied the site of Hunt's House; when they were removed a small apartment adjoining the museum was fitted up with a Powell & Lealand's microscope, and a large collection of microscopic sections was made. Dr. Pavy first lectured upon minute anatomy as a separate course in 1855, and soon after the subject was included in his lectures on physiology; but practical instruction in the use of the microscope was first given by Mr. Birkett in 1845. In 1871 it formed an important part of the newly established course of practical physiology, with which subject it has ever since been combined. The practical teaching of morbid histology, or the minute anatomy of diseased tissues, began about 1872; at these classes the methods of preparing and examining microscopic sections were demonstrated much as at the present time.

The establishment of a course of lectures on medical jurisprudence took place in March 1831, and Dr. A. S. Taylor was appointed to the chair. In the introduction to his "Elements of Medical Jurisprudence" (1836), he thus traces its history: "It was not until the beginning of the present century that the attention of the Government was directed to the importance of this subject; and a chair was soon afterwards endowed in the University of Edinburgh, in order that it might be publicly taught. So little, however, did this succeed in diffusing sufficient information in this quarter of the island on the nature and objects of the newly introduced science, that there were probably but few in the medical profession who were acquainted with the useful principles which it inculcates, until the recent regulations issued by the Apothecaries' Company drew general attention to the subject." At that time it was excluded from the course of education prescribed by the Royal College of Surgeons, and Dr. Taylor does

not fail to point out the anomaly that a knowledge of botany should be deemed of higher importance to the surgeon than that of medical jurisprudence. These lectures have been delivered regularly since their foundation, the chief changes in them being such as have resulted from the growth of a very important branch of the subject known as toxicology, and the exclusion of all questions dealing with insanity, which now forms a separate course.

In 1870 the attention of the School was drawn to the fact that at Guy's there was no special teaching on the subjects of hygiene and mental diseases, as at other hospitals. To remedy this, in the summer of the following year Dr. Fagge began a course of lectures with the object of teaching students the main facts of sanitary science and the laws relating thereto. Since that time the subject has become one of great importance, and the lectures are now supplemented by practical work in those branches of chemistry and bacteriology with which it deals. In the same year Dr. Thompson Dickson lectured upon mental diseases and gave clinical instruction upon cases in the Peckham House Lunatic Asylum. When Dr. Savage succeeded to the chair in 1874, the wards of the Bethlem Royal Hospital for the Insane were, by permission of the Governors, substituted for the purposes of clinical study, and this arrangement still exists.

Mr. Morgan was the first to lecture upon ophthalmic surgery at Guy's, that course having been previously given at St. Thomas's by Mr. Tyrrell. In the preface to his "Lectures" (1839) Mr. Morgan says: "Valid excuse for such deficiency (in the knowledge of diseases of the eye) cannot be found now; and I hope and believe none will ever be required by a student of Guy's Hospital; where an extensive Eye Infirmary, forming a prominent part of the medical establishment,

offers abundant opportunity for the conjoined study of ophthalmic with other diseases—an opportunity which, I believe, you may seek elsewhere in vain.” The special department alluded to was opened in 1828, and was the first of its kind in connection with any general hospital. The infirmary was eventually removed, and the ophthalmic department was accommodated in Hunt’s House, where it has since continued to flourish. To Guy’s also belongs the honour of instituting lectures on dentistry. Joseph Fox was the lecturer, and many of his specimens are still to be seen in the museum. He was succeeded by Thomas Bell, who continued the course, and advanced the subject in no small degree by his application of the general rules of surgery to the art of dentistry. On his retirement Bell was followed by his nephew James Salter. The greatest epoch in the history of this speciality, as regards Guy’s Hospital, was the establishment of the dental school in 1889, to which we have already sufficiently referred.

The influence exerted by the Apothecaries’ Society and other examining bodies upon the medical curriculum has been pointed out. Before the passing of the Apothecaries’ Act in 1815 students had not had the benefit of a prescribed course of study, and the facilities for teaching were very imperfect. The only requirements for the diploma of the College of Surgeons at that time were certificates of attendance on one course of anatomy and one course of surgery; to which was added, in 1813, a certificate of one year’s attendance on the surgical practice of a hospital. They accepted the statements of the candidates made at the time of the examination as evidence of a satisfactory general education. The first regulations of the Hall required a competent knowledge of the Latin language; certificates of attendance upon one or two courses of anatomy and physiology, the theory and practice of medicine,

chemistry, and *materia medica* ; six months' attendance on the practice of a hospital, infirmary, or dispensary ; and an apprenticeship of five years to an apothecary. From time to time these regulations were altered, fresh subjects were added to the syllabus, and the amount of attendance on lectures and medical practice was increased ; so that in 1835 the curriculum occupied at least three winter and two summer sessions. The Apothecaries' licence was the common bond of the profession, because every one was bound by law to possess it ; but many voluntarily became members of the College of Surgeons, partly to obtain a qualification for the practice of surgery, and partly because of the higher value of the diploma. A record of the examinations passed by students of Guy's Hospital in 1836 is preserved in the Reports of that year, and may be compared with similar records of succeeding years. From them it appears that the majority of students took both the licence and the diploma, and so matters continued for many years. When the University of London was founded, a few men aspired to its degrees in addition to the usual qualifications. The first London graduate from Guy's was Thomas Williams, in 1840, whose life has been sketched in a preceding page. In 1841 Jonathan Mason Waddy, of Guy's, became M.D.Lond., and gained a prize of £5 for being placed first in midwifery. The same year there were five graduates in medicine, and among them William Withey Gull. Since that time Guy's men have always held a good place in the competition for the honours conferred by the University. In 1843 the Fellowship of the College of Surgeons was created, and Cooper Forster was one of the first Guy's men to obtain the diploma by examination. The diploma of the sister institution, the College of Physicians, was then rarely taken, for it was required of those who presented them-

selves for examination that they should possess both a qualification to practise and the degree of M.D. from a recognised university. And as the dispensing of medicines was prohibited, the licence was only conferred on consulting physicians. However, about 1852, there was a small number of Guy's students anxious to possess a higher qualification, and for that purpose they took the degree of Doctor of Medicine at the St. Andrews, Oxford, or Cambridge University, and some of these afterwards became L.R.C.P. But the change that affected the largest number of medical students was the reorganisation of the licentiate of the College of Physicians in 1861, whereby the diploma was thrown open to those who intended to dispense their own medicines and fill the position of general practitioners. Candidates were admitted to the examination without an academic degree, and those who passed were allowed the title of Dr. by courtesy. The diploma accordingly became popular, and was commonly taken in addition to that of the College of Surgeons. The most recent modification was the introduction in 1884 of a scheme for the examination of candidates conjointly by the Colleges of Physicians and Surgeons, upon the results of which the diplomas of L.R.C.P. and M.R.C.S. were conferred. This scheme is still in vogue, and through it the great majority of Guy's men obtain their qualifications to practise. Degrees in medicine are now taken chiefly at the London, Cambridge, and Durham Universities.

To follow in detail the effects on the medical curriculum which these and many other changes introduced by the various examining bodies have wrought, is beyond the scope of this work. The general tendency has been to require of candidates a practical as well as a theoretical knowledge of the more important branches of the profession, and with this in view to

prescribe a longer period of time to be devoted to clinical work. All such regulations are now under the control of the General Medical Council, which was instituted by the Medical Act of 1858, and to their action many improvements in the scheme of medical education are due. They made it obligatory on those desirous of studying medicine to pass a preliminary examination in arts, and adopted a four years' curriculum, the time being equally divided between the study of the elements of medical science and clinical instruction in the practice of the profession. The present year (1892) has seen the addition of another year to the course, which will be chiefly devoted to hospital practice.

CHAPTER V.

PRIZES AND SCHOLARSHIPS OF THE MEDICAL SCHOOL.

FOR many years after the foundation of the Medical School, each lecturer was paid by members of his own class, and to the most deserving student he offered a prize. The award was made upon the results of a voluntary examination, conducted by the teacher himself, in the subject of the lectures alone. Thus, in 1836 prizes were given for proficiency in the following subjects: medicine, surgery, ophthalmic surgery, midwifery, anatomy, chemistry, and comparative anatomy. Five years later the list includes no less than fifteen different subjects, for which gold and silver medals, prizes of instruments, and certificates of distinction were awarded. The distribution took place at the end of the session, the meeting being attended by the staff, the students, and their friends. On two or three occasions Sir Astley Cooper conferred the honours upon the successful pupils. Matters continued thus until 1846, when a feeling of discontentment arose because dresserships and other valuable Hospital appointments could only be obtained by payment, and this led to a re-organisation of the management of the Medical School, and in the end to the abolition of all prizes. For some time previously the prize system had not worked well. Dr. Addison was constantly denouncing a system which induced young men of peculiar aptitudes to take up some favourite subject at the expense of the rest. At

a meeting of the staff, he spoke most strongly against allowing a young man to leave the Hospital with a gold medal round his neck, which he had obtained for chemistry or botany, whilst he was quite destitute of a practical knowledge of his profession. It might please his parents and obtain for him a notice in the local papers, but he had been cheated. Hence from 1847 to 1859 no prizes were given, and the Medical School was conducted on the principle "of leaving all Hospital appointments open to the competition, on equal terms, of the whole body of pupils, and awarding them on the grounds exclusively of personal merit." But the rivalry of other medical schools soon began to be felt, and the number of students entering the Hospital gradually diminished. When Mr. Turner was appointed Treasurer, he at once saw that it was his duty to take an interest in the School as well as in the Hospital, and not to regard them, as his predecessor had done, as in some measure antagonistic institutions. He saw that young men were attracted to other hospitals by exhibitions and scholarships, of which Guy's had none; and with respect to prizes, although exception might rightly be taken to awards which were granted by examinations in separate subjects, he saw no evil in giving them for work done in all the subjects of a particular session, and said that no one was too old not to be pleased with a medal. With the aid of members of the School, he devised a system of scholarships and prizes, which is still in vogue. When the proposition was brought forward in 1859 for the establishment of annual examinations and prizes for the students, the Governors generously undertook to defray one half of the amount of such prizes whenever the net proceeds of the School fees fell below a specified limit. The success of the scheme, however, was such that they were involved in no outlay beyond the payment of the stipulated contribution for

the first year. The Treasurer himself gave prizes, and expressed a hope that other governors and benefactors would follow his example—a hope which was ultimately fulfilled.

The School prospectus for 1859 contained the first announcement that voluntary examinations would be held at four periods of the student's curriculum—viz., on entering the Hospital, and at the end of the first, second, and third academical years respectively. The entrance was an arts examination, while the others comprised the subjects of the curriculum up to the time at which they were held. Prizes ranging from £40 to £15 were offered, provided that sufficient merit were shown, and honorary certificates were to be given to those candidates who passed a creditable examination. It was further announced that two gold medals would be given annually by the Treasurer to students who had completed their third year, the subjects of the examinations being clinical medicine and clinical surgery respectively. Without tracing in detail the various changes in the mode of examination which have taken place during the thirty-three years which have elapsed since the introduction of this system of awarding prizes, it will be sufficient to indicate the most important alterations and additions. At the beginning of the winter session of 1875 two entrance scholarships, of £60 and £30, were offered, with the view of increasing the number of entries, and especially of attracting capable students from the universities. This examination, which included classics, mathematics, and certain branches of science, was substituted for the previous entrance examination. Two years later it was again modified, by separating the classical from the scientific subjects, and making the value of the prizes correspond with the entrance fee to the Medical School. These two open scholarships in science and arts, of the value of one hundred guineas,

tenable for one year, were first offered for competition in September 1877. The successful candidate in each case was required to enter at the Hospital as a perpetual pupil in the October immediately following the examination. Quite recently the number of these scholarships has been increased to four, and their money value somewhat altered. At the same time it was found necessary to restrict the age of the candidates, in order to render the competition fair.

The year 1876 was remarkable in that the three following prizes, which have since borne the names of the donors, were presented to the students of Guy's Hospital. A scholarship of £15, tenable for three years, was founded by Mr. Sands Cox, of Birmingham, a former student of Guy's, and was open to students in the second year of their curriculum at the Hospital, the subject of the examination being physiology. The "Michael Harris" prize of £10, to be awarded annually for a knowledge of human anatomy, was also given by a very distinguished student of Guy's, who died on September 28th, 1875, at the early age of twenty-seven. Lastly, Mr. Gurney Hoare, for some years a governor of the Hospital, bequeathed in the same year an annual prize of £25 for the best clinical reports of a series of cases, together with commentaries thereon.

The principle of giving a prize at the end of each year of the medical curriculum, after an examination in the whole work of that period, adopted in 1859, has been maintained up to the present time; and during the last few years the list of prizes has been much extended by donations from former students and friends of Guy's Hospital. The latest of these is the "Studentship in Pathology," of the value of £150, tenable for three years, founded in 1891 in memory of Sir William Withey Gull, Bart., by his son. The Astley Cooper Triennial Prize of £300, for an essay on a given

medical subject, must not be omitted ; for, though open to the whole world, except persons directly connected with Guy's Hospital, the preparations which illustrate the successful essay are required to be presented to the museum. It was first awarded in 1844 to Sir John Simon, F.R.S., the subject of the paper being "The Structure and Use of the Thymus Gland."

CHAPTER VI.

THE GOVERNMENT OF THE HOSPITAL AND SCHOOL.

SOON after the death of Thomas Guy a governing body was established by Act of Parliament in the session of 1725. It consisted of the nine executors and fifty-one gentlemen nominated by the founder's will, and was incorporated in the name of "The President and Governors of the Hospital founded at the Sole Costs and Charges of Thomas Guy, Esquire." An acting committee composed of the President, Treasurer, and twenty-one members of the governing body was appointed for the ordinary management of business, and, as mentioned in an earlier chapter of this book, the President or Treasurer and any seven of these members constituted a full Court of Committees. In them was vested the management of the whole estate of the Hospital, and they were empowered to choose and remove all officers and servants of the Hospital, except the physicians and surgeons, clerk and chaplain, whose appointment was left to the general body of Governors. All the transactions of the Court of Committees were to be subject to the inspection and control "of such Governors as shall by the laws of the Corporation be appointed for the purpose," so as to secure an effective audit of the accounts as well as the power of final decision to the general body of Governors.

At the present time the Court of Committees meets

every six weeks, and the general Court of Governors every four months.

For many years patients were admitted to the Hospital by a "Taking-in Committee," one of whose functions was to meet every Wednesday morning for that purpose. It consisted of the Treasurer and two of the Governors, who came on duty in rotation once a week. But in October 1880 this committee was reconstructed, and two members of the medical staff were elected as representatives of that body to act with the Governors in matters of Hospital administration. In its present form the committee consists of the President, Treasurer, and ten Governors, with the two representatives above mentioned and the Superintendent, who acts as secretary. Meetings are held once a month, and the minutes of the proceedings are brought for confirmation before the next Court of Committees, as the sole executive body authorised by Act of Parliament.

In 1881 it was considered advisable by the medical staff to form themselves into a Medical Committee "to advise upon those points of Hospital management and upon Hospital arrangements which more especially concerned the staff and the patients under their charge." This committee, which is composed of all the members of the medical and surgical staff, held its first meeting on November 30th, 1881. At the present time it meets on the third Thursday in every month, and by its nominations for the appointments of house-surgeons, assistant house-surgeons, house-physicians, and assistant house-physicians are made to the Treasurer. Recommendations from this committee with reference to the internal administration of the Hospital are laid before the Taking-in Committee above mentioned by its medical representatives.

The most important and oldest of the committees

connected with the government of the Medical School is that known as the "Medical and Surgical Examining Council." It was founded in 1847, when a new mode of distributing the clinical appointments was adopted, and the dresserships and clerkships were given "as rewards of merit and instruments of improvement." The council, consisting of part of the staff taken in rotation, was appointed to consider the fitness of the pupils for the various offices. Reports were received from the registrars and demonstrators, the cards denoting attendance at lectures were recorded, and the candidates who were judged to be the most eligible for the work were recommended to the Treasurer for appointment. The first record of the meeting of this council is dated February 19th, 1852, when Dr. Addison was in the chair. The term "Examining," which has reference to an early method of selecting candidates by oral examination, was subsequently dropped, and the "Medical Council" of the present time carries on the duties of its predecessor. By it all the School appointments, save those of house-surgeon and assistant house-surgeon, house-physician and assistant house-physician, are made, subject to the approval of the Treasurer.

The mode of election to the appointments upon the Hospital or School staff is somewhat different. Candidates are recommended to the Treasurer and Governors by a committee consisting of all the medical and surgical officers, together with two representatives of the School. The committee is summoned by the Treasurer through the dean of the School.

In addition to the above committees, a meeting of the whole School is called two or three times a year by the Treasurer, who presides. At this meeting the Medical Council and the various sub-committees are appointed, their reports are received, and all questions dealing with

the expenditure of the School funds are brought forward. Recommendations from the School to the Court of Governors are presented by the Treasurer.

The Dental School attached to Guy's Hospital, the establishment of which has been already described, is managed by a Dental Committee, subject to the control of the Treasurer and Governors of the Hospital, and consists of the surgeon, assistant surgeons, and teachers in the Dental School, with the dean of the Medical School. The recommendations to the Treasurer and Governors for appointments in this department are made by the medical staff after consultation with the Dental Committee.

It must be understood that the Medical School and the Hospital are financially two entirely separate institutions, whose funds are derived from different sources. None of the students' fees are used for defraying the expenses of the Hospital, and *per contra* the Hospital bears no part of the liabilities of the Medical School. All the buildings occupied by the School are the property of the Hospital, and are free of rent; but the cost of keeping the buildings in repair and of supplying the internal fittings is paid by the former. This rule applies to all recent extensions of the premises occupied by the School, with the exception of the new buildings in course of construction, upon which the School, in addition to providing the internal fittings, will pay to the Hospital a sum of money for a fixed term of years as interest upon the capital expended, in consideration of the straitened condition of the Hospital funds and the benefits which will accrue to the sister institution.

The mutual advantages derived from the association of the Hospital and School are fully recognised by all concerned, and by none more keenly than the Treasurer and Governors, who, in the words of the late Mr. Thomas

Turner, "are the patrons and upholders as well as originators of the Medical School." To the harmonious relations existing between these two institutions the proud position which Guy's Hospital now occupies and the brilliant past which this "History" represents may be in no small measure attributed.

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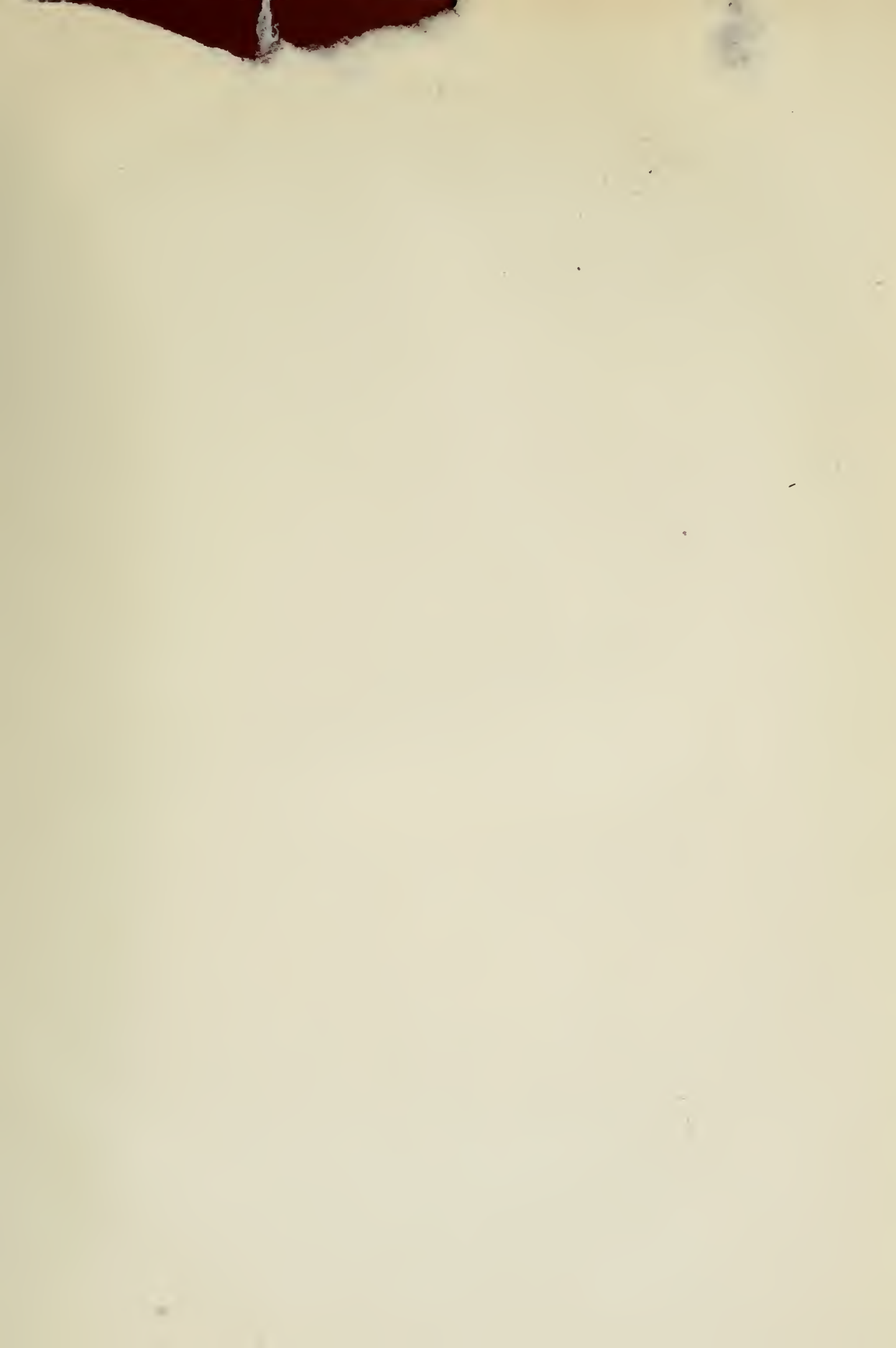
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