THE
FitzPatrick Lectures for 1905.

DELIVERED IN THE ROYAL COLLEGE OF PHYSICIANS,
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LECTURE I.

JOHN MIRFELD (1393), AND MEDICAL STUDY IN
LONDON DURING THE MIDDLE AGES.

MR. PRESIDENT,—It is right that these lectures should begin with a commemoration of Dr. Thomas FitzPatrick, the member of this College in whose honour they were founded by Mrs. FitzPatrick.

He was born in 1832, at Virginia, in Cavan, received his school education at Carlow, and graduated in the University of Dublin. His medical career at Trinity College was distinguished, and is fitly commemorated there by a scholarship bearing his name. He had an inborn love of learning, which was, of course, increased in the college of Burke and Swift and Goldsmith, and which continued without abatement to the end of his life. I had the advantage of knowing him and of enjoying his conversation, which was that of a man who had read and re-read the great books of Greek and Latin, of English, French, German, Italian, and Spanish literature till they had become part of his mind. He was devoid alike of love of display and of pedantry, and his one desire in knowing much was that it might help him to know more.

The history of medicine is a subject which has never been neglected in this College. Dr. Richard Bartlot, of All Souls' College, Oxford, our President in 1527, was learned in the particular part of it on which I propose to lecture to-day. It was included in the profound and varied attainments of Dr. John Caius, President in 1555. Sir Hans Sloane, our President from 1719 to 1735, made collections of materials for medical history which begin with twelfth-century manuscripts of Hippocrates and Galen, and extend to the letters of the physicians of his own time.

Dr. Baldwin Hamely, a Censor in 1640, and for forty-two years a Fellow of the College, wrote in Latin a biographical history of the physicians of his time from the year 1628, entitled *Bustorum Aliquot Reliquiae*. He endeavours to give the grounds of the celebrity or the character of each physician in a few sentences, and though he never sacrificed truth to brevity, he is not always free from the conceits which had been the fashion of his youth, and which the majestic composition of Milton and Dryden's perfect use of English had not yet driven from literature at the time of Hamely's death. His account of Harvey is an example:

Of William Harvey, the most fortunate anatomist, the blood ceased to move on the third day of the Ides of June in the year '57, the continuous movement of which in all men, moreover, he had most truly asserted.

What more: His statue in his robes, and the marble carved with his epitaph in his museum in our College, as well as his annual celebration will easily atone to Harvey for this my brevity.

Unless perhaps it may be pleasing to add an epigram I made: That according to the opinion of Copernicus as to the motion of the earth, and of Harvey as to the movement of the blood, we are here:

Ἐν τε τροχῷ πάντες καὶ ἐνὶ πᾶσι τροχοῖ

n Latin

Tunc agit atque agimus nos rota nosque rotam.

Or in English:

Then are we all in a wheel and a wheel in us all.

Books, like living teachers, not only give instruction in their subject but lead to future work in it, and the modest little book of Hamely, which only exists in manuscript, was probably the origin of Dr. William Munk's *Roll of the Royal College of Physicians of London*, a well-arranged collection of medical biography.

Dr. MacMichael, Censor in 1820, wrote part of the *Lives of British Physicians*, in which Dr. Munk also had a share, and which is a piece of good literature containing much information. The light and entertaining style of MacMichael's *Gold-Headed Cane* must not exclude it from consideration as a contribution to medical history.

* In accordance with the terms of the foundation, these lectures are to be published at length in a separate book. The present report is to be regarded as a statement of the chief subjects considered.

Dr. John Freind of Christ Church, Oxford, was elected a Fellow of our College in 1716. He was already known for his classical learning, and soon became eminent in the practice of his profession. In 1725 and 1726 he published *The History of Physick from the Time of Galen to the Beginning of the Sixteenth Century*. He begins with Oribasius and Aetius and ends with Linacre, our founder. He had studied every author whose works he describes, and was as learned in the Arabian and mediaeval writers as in the Greeks.

He is always interesting even in his accounts of the most prolix writers of the least brilliant periods, and his book is valuable because he was skilled in the practice of medicine, as well as deeply read in the medical treatises of classical, mediaeval, and modern times. His history is one of those few writings on the subject of a particular profession which, like Sir William Blackstone's *Commentaries on the Laws of England*, deserve a permanent place in general literature.

I need only remind you of the numerous works of our Harveian librarian, Dr. Payne, of his FitzPatrick lectures, of his introduction to the reprint of the Cambridge edition of Linacre's Latin version of the *De Temperamentis* of Galen, of his numerous contributions to the history of epidemics, of his admirable biography of Linacre, and his many other medical lives in the *Dictionary of National Biography*, to convince you that the history of medicine is not neglected among the present Fellows of this College. Like Freind, Dr. Payne has illuminated the history of medicine by his sound knowledge of the pathology of his own day. It is a difficult task to lecture in the place of so learned a physician.

A few months ago, while watching the excavations necessary for the foundations of the new out-patient rooms of St. Bartholomew's Hospital, I saw dug up from many feet below the surface a piece of Samian ware and a coin of the Emperor Nero. Some few days later another coin of the same Emperor was found. These bronze *dupondii* had been used in that commerce of which their contemporary Tacitus speaks in the first passage in literature which contains the name of the famous city in which we live:

At Suetonius mira constantia medios inter hostes Londinium perrexit, cognomento quidem coloniae non insigne, sed copia negotiatorum et comestuum maxime celebre.

Such relics of the business transactions of the Empire and the numerous examples of mosaic pavements, of Roman inscriptions, pottery, glass, and coins discovered at various times throughout the city, as well as the fragments of Roman walls and roads, help us to realize that in the time of Galen London was within the influence of Roman civilization.

Lucretius is the first author whom we know to have been mentioned in our island, and if Quintus Cicero, in the army of Julius Caesar, feeling its way among the southern tribes of Britain, had the leisure and taste to think over that great poet we may believe that in the more settled times of the Antonines there were Roman citizens in London to whom the writings of Galen were known.

London had some share, however small, in the intellectual life of Rome, and through Rome felt the influence of ancient Greece in literature and in science. There is nothing improbable in the supposition that men who had consulted Galen as to their health may have walked along the Roman causeway in Cheapside, on which fifteen hundred years later Wren placed the foundations of the present tower of St. Mary-le-Bow, or may have watched the Britons bringing products of fishing or of the chase up Walbrook from the Thames in skin-covered wicker boats.

The tides of the world's mind ebb and flow, but however great the ebb some tide-marks generally remain, showing where the waves of intellect have been. Among the few traces left of the intellectual life of the Romano-British period are the *Confession* of Patricius and the *Epistle against Coroticus*. The "imperitia" and "rusticitas" of which the writer complains, take nothing from the interest of these compositions as the authentic literary remains of Britain in the fifth century. As the letter in which Quintus Cicero wrote of Lucretius from the camp of Julius Caesar is the first indication of the spread of the literature of the civilized world to our island, so the *Confession* and the *Epistle* to the Christian subjects of Coroticus, the work of a Roman citizen, seem the last remains, however remote, of living literature of the classical period in Britain.

When the son of Calpurnius set forth on his missionary travels the legions had already been withdrawn, and the tribes from whose union the English nation is mainly derived were pouring into Britain, making settlements after their own manner, and destroying the Romano-British civilization.

Kent and Sussex, Essex and East Anglia, Wessex, Mercia, and Northumbria were carved out of Britain, kingdoms still marked in the vowel sounds and accents of their natives as we may observe them in the out-patient rooms or wards of our hospitals. After constant wars a *Rex Anglorum* arose strong enough to maintain his supremacy, and an Anglo-Saxon nation was formed and grew in strength. My learned predecessor in this lectureship has shown what progress was made in our subject, and incidentally how it was studied, and has maintained that the medicine and general science of that time were not unworthy of the countrymen of Caedmon, of Bede, and of Alcuin.

The Norman Conquest placed England once more in direct and constant relation with the rest of the Western world. For more than a hundred years London was a city in which foreign influence predominated. Though the Conqueror granted a charter (still preserved in the custody of the City at Guildhall) to Deorman, a prominent Saxon of London, and though the districts which ultimately made up the city and were very early called wards, were presided over by men with the Saxon style of Alderman, it is nevertheless clear that soon after the Conquest the chief influence in London was not that of the Saxons.

The Bishops of the See, the Deans of St. Paul's, the Canons of that Cathedral, the Deans of the College of St. Martin-le-Grand, many of the secular clergy, the magnates of London, the officials of the Exchequer, the justiciars were almost all of Norman, or French, or Breton, or Italian birth or descent.

The charters of the time show the predominance of foreigners by the way in which the preambles so frequently mention the French first. A grant to St. Bartholomew's Hospital, made in London by John, Earl of Moreton, afterwards King John, on the eve of All Saints 1193, begins:

Johannes comes Moretonie omnibus hominibus et amicis suis Francis et Anglis presentibus et futuris salutem.

Another somewhat earlier charter of a great landowner in Essex begins:

Serio de Marci omnibus hominibus suis Francis et Anglis presentibus et futuris salutem.

Another written in London and copied into the *Cartulary* of St. Mary of Dunmow:

Walterus filius Roberti omnibus sancte matris ecclesie filiis et omnibus hominibus suis Francis et Anglis salutem.

The civil institutions of London assumed a French complexion and the terms "*Communa*" and "*Maior*" were introduced from France.

I have dwelt upon this close relationship with France because it has an important bearing on the nature of our early hospitals.

In this time, when foreign influence was predominant in London while the great English nation of the future was slowly being formed, physicians are now and then mentioned in records still extant.

King Henry I had a physician named Grimbald, who appears as a witness in a very solemn Charter of 1105, in which Henry, King of the English, with the consent of Matilda, his wife, grants ten hides of land in Lifesholt to the Abbey of Abendon. The witnesses' names succeed their crosses or marks, and begin with: "*Ego Henricus rex redicionem et donacionem hanc signavi.*" Ranulf, Bishop of Durham; John, Bishop of Bath and Wells; Hervey, Bishop of Bangor; Robert, Bishop of Lincoln; Roger, Bishop-elect of Salisbury; William de Werelwast; Waldric, the King's Chancellor, are the first eight witnesses, and their names are followed by the record, "*Ego Grimbaldus medicus interful.*" Two standard bearers, or dapifers, important officers in the Feudal Court, come next, and four other witnesses follow. Another grant of the same king to the same abbey, giving a hospice in Westminster Street, London, to the Abbot, has as its witnesses Grimbald, the physician, and Nigell de Albini. It was made at Windsor.

The next charter in the beautiful register of the Abbey of Abingdon¹ is addressed to Richard, Bishop of London, and grants land to the Abbey. Its first witness is that Roger, Bishop of Sarum, who afterwards took so active a part in the early wars of King Stephen, and the fourth is Grimbald the physician. It was witnessed at Westminster. Another charter of Henry I to the same Abbey, addressed to the Sheriff (Vice-Comes) of Oxfordshire and executed at Romsey, is witnessed by the Chancellor and by Grimbald. Yet another charter, addressed by the King from Woodstock to Herbert, Bishop of Norwich, the builder of the present choir and transepts of Norwich Cathedral, has for its two first witnesses Ranulf the Chancellor and Grimbald the Physician. A grant of Queen Matilda to Farltius the Abbot and the Abbey of

Abingdon is witnessed by Roger the Chancellor (afterwards Bishop of Salisbury) and Grimbald the Physician. An ordinance of King Henry I, issued from Oxford, addressed "*Omnibus constabulariis et omnibus fidelibus suis de curia.*" orders that no one shall stay at Abingdon without the Abbot's leave, and its sole witness is Grimbald the Physician. A charter of Henry I about land at Winicfeld belonging to the Abbot of Abendon is witnessed at Northampton by Roger Bigot and Grimbald the Physician.

Thus it is clear that Grimbald lived in the royal court and travelled about with the King.

Two charters of the reign of Henry I now at St. Paul's Cathedral mention other physicians of the time. William, Dean of St. Paul's, grants to John, the physician, and his heirs, some land in Aldermansbury, at a rent of three shillings a year, eighteenpence at Easter, and eighteenpence at Michaelmas. The last witness is Gilbert, the physician. William was Dean of St. Paul's from 1111 to about 1136, so that Aldermansbury may be regarded as the earliest recorded residence of a physician in London. It is clear by the position of the physician among the witnesses, and by the absence of any indication of clerical office, that Gilbert was a layman.

Another charter, also at St. Paul's, mentions a physician who, like our founder Linacre, and our original Fellow Dr. Ohambre, was in holy orders. It is an agreement made about 1127 between William the Dean and the Canons of St. Paul's, and William de Marci, a member of a great family whose territorial designation survives in the name of the Essex town of Mark's Tey. After Otnel, son of the Earl; Hugh de Redvers; Aldewin, the Queen's Chamberlain; and Giffard, the Chaplain, Clarumbald, Physician and Chaplain, occurs as a witness, followed by nineteen other witnesses.

The first large monastic foundation in London was the Augustinian Priory of Holy Trinity, Aldgate, and its cartulary is preserved in the varied collection of books and antiquities which William Hunter bequeathed to the University of Glasgow. It contains a copy of a charter addressed to the Bishop of London by Geoffrey de Mandeville the Earl of Essex, who died in 1144, the remains of whose Castle of Pleshy may still be seen in Essex. He was Chief Constable of the Tower, and in this Charter he restores to the Priory of Holy Trinity a mill and some land next the Tower which he had taken from them. The first witness of this charter is his wife Rohesia, and the two last are Ernulf the physician and Iwod the physician. Mr. J. H. Round, in his history of Geoffrey de Mandeville,² conjectures that the presence of these two physicians and of a Templar indicate that the restoration was made when this Earl, who was one of the great lords who made the state of England intolerable in the reign of Stephen, was on his deathbed slowly dying of an arrow wound in the head. This document, though connected with London by its address to the Bishop, was probably attested near Burwell, where the Earl lay.

An original charter, written later in the same century, was undoubtedly attested in London and by a London physician. It chances to be the earliest document relating to St. Bartholomew's Hospital in which a physician is mentioned, and is a grant of some land on the south side of Newgate Street in London from Gilbert, Prior of the Augustinian Canons of Butley in Suffolk to the brethren of the hospital. It was written between 1186 and 1189. The physician is the last of nineteen witnesses to this charter. Hubert Walter, Dean of York, is the first witness, who, though not a physician, was a man of science. This great man was first a clerk in the service of his relative Ranulf de Glanville, Chief Justiciar of England, and the earliest of English legal writers. Hubert was a Baron of the Exchequer in 1184, was Dean of York in 1186, and in 1189 became Bishop of Salisbury. He went to the Holy Land with Richard Coeur de Lion, and was one of the first band of pilgrims admitted by the Mussulmans to the Holy Sepulchre. In 1193 he became Archbishop of Canterbury and Chief Justiciar of England. In May, 1194—when Richard, after his release, left England—Hubert Walter was left as Chief Governor of the country. Having thus risen to the highest rank as an ecclesiastic, a statesman, and a lawyer, he appears, in November, 1197, in the chronicles as a man of science, the first reformer of the standards of England. He engaged in the difficult task of making uniform throughout the realm all weights and measures, whether of capacity or of length, "*in bladis et leguminibus tam in civitatibus quam extra,*" of wine and of cloth. It is no detraction from the wisdom of his ordinance that, like many similar measures of later times, it failed to produce the uniformity intended, owing to the tenacity with

which men adhere to the familiar things of the household, the farm, and the market.

A charter in the British Museum relating to the hospital of St. Cross at Winchester, dated April 10th, 1185, of which the first witness is King Henry II himself, "*Henrico illustri rege Anglorum*," and which is also witnessed by Hubert Walter, has two physicians among its witnesses. "*Magistris Hamone et Ricardo medicis*."

King Henry was going abroad with Heraclius, the patriarch of Jerusalem, and Roger de Molins, Master of the Hospitalers, and these physicians were accompanying him, and were not the attendants of the Hospital of St. Cross; that hospital, indeed, was from the first intended as a refuge for the relief of poverty and not of sickness. Its inmates are called not *infirmi*, but *pauperes*. In this charter Richard, formerly arch-deacon of Poitiers and a distinguished official of the Court of Exchequer, but then Bishop of Winchester, increases the number of those relieved from 113 to 213. The seals attached to this fine specimen of the penmanship of its period are perfect, and on one of them is a figure in a canopied bed with a hard-looking bolster, a representation of a twelfth-century bed such as the poor of that hospital and the patients of other hospitals of that time may have occupied.

Master Ranulphus Besac, that is of Bisacia, a contemporary of Dr. John of London, who was physician to King Richard I in Palestine, and afterwards lived to old age in London, related to Matthew Paris how when Saladin took the Prince of Antioch prisoner (Reginald de Chatillon is probably intended) he was sent to try and arrange his release. Saladin was sitting in his court, and the captive Christian knight was led in with his arms bound.

"What," said Saladin, "would you do to me were I your prisoner as you now are mine?"

"I would cut off your head, and do it myself because though an infidel you are some kind of king," said the Christian knight.

Saladin said "*Et ego te incontinenti decollabo*," rose, and asked for his sword.

"Take, dog, this my head, thou shameful hairy bearded lean-faced and vile-eared Pagan. I have no more to say for myself than that I commend my soul to God."

Saladin said "*O pertinax nec adhuc moriens vinceris*," and with a light blow cut off his head.

Dr. Reginald de Bisacia, who witnessed this terrible scene, lived to the middle of the reign of Henry III, and while he filled the stall of Newington in St. Paul's Cathedral another Dr. Reginald was also known to Matthew Paris.

John of Hertford was elected Abbot of St. Albans on March 27th, 1235, and Matthew Paris, then himself a monk of that abbey, records that two monks, both in priests' orders, were sent to Rome to obtain confirmation of the election. One of these was Magister Reginaldus Physicus. They took formal letters with them, and later in the year came back with the document they sought from Pope Gregory IX. In the obituary of the Abbey of 1212-53 it is noted that this Reginald physician and priest (*physicus, sacerdos*) died September 21st, 1251.

Matthew Paris⁴ in 1255 records the death of three trusted officials of the Queen of King Henry III. Robert Muscegras, her seneschal; Walter de Bradele, her treasurer; and Master Alexander, her physician, "*tres viri omni laude dignissimi*."

Queen Eleanor had also another physician, Magister Reginaldus de Bathonia,⁵ she sent him to see her daughter the Queen of Scotland, and when he came "*ad castrum puellarum quod vulgariter dicitur Edenburg*," he showed his letters to the Scottish Court and was well received. He asked the young queen, when he had a private audience, why she was so pale and depressed, and she admitted the Scots did not treat her kindly. He spoke severely to them as to their treatment of her. After a few days he fell ill, and took to his bed so that some said he was poisoned. When he knew he was dying he wrote to the King and Queen of England and said he had come to Scotland on an unhappy day and that the queen was inhumanly treated by the Scots. Matthew Paris thus records his death.

Magister autem physicus cum virus discordiae et magni venturi mali et dampni irrestaurabilis evomisset animam miseram exhalavit.

In a charter belonging to St. Albans Abbey and of about the year 1259 of John son of Alexander the Carpenter of Walthamstede, the seventeenth of nineteen witnesses is Adam, the physician, and he is followed by William, his son. Another charter of the same period in the same register is that of John, son of Walter le Lever, granting a rent of six shillings to St. Albans Abbey. William, the physician, is the sixth of the

twelve witnesses and it seems possible that this is the son of Adam the physician.

Matthew Paris, friend of King Henry III and of many magnates of the realm in Church and State and living in the premier Abbey of England in the midst of the intellectual life of the time, knew personally five physicians and may have seen two more. From the writings of this historian we can draw up a sort of Medical Register of the time of King Henry III.

ADAM, physician practising at St. Albans.

ALEXANDER, physician to Queen Eleanor of Provence.

BATHONIA, Reginald de, physician to Queen Eleanor of Provence, sent on a mission to the court of Scotland.

BISACIA, Reginald de, Canon of St. Paul's (1217-1243). Served in the crusade with King Richard I: was sent as envoy to Saladin.

JOHN de Sancto Egidio. Doctor of medicine, doctor of laws, doctor of theology: a Dominican: studied at Paris and at Montpellier. Professor at Paris and at Oxford. Sometime physician to the King of France. Physician to the Bishop of Lincoln.

REGINALD, physician: a priest; resident in St. Albans abbey: sent on a mission from the abbey to Rome (1235-1251).

WILLIAM, physician at St. Albans, son of Adam the physician.

That physicians were not numerous in London is suggested by the rarity with which they occur as witnesses in London charters in the long reign of Henry III.

It is clear that considerable attainments were necessary before a man was styled *medicus* or *physicus*. His study chiefly consisted in reading books and hearing lectures on books in the university.

Most learned men had read some medicine, or knew something about it, and some ecclesiastics had specially devoted themselves to a study the use of which was so suitable to their profession. Of this kind was the Abbot of Crokestone "*in arte medicina erudito*," who attended John, in 1216, at Newark. The King had been marching through Suffolk and Norfolk, ravaging the districts which had shortly before yielded to Lewis of France, and reached the Abbey of Swinestead in Lincolnshire, where he slept. He was deeply dejected by the loss of his baggage and treasure in quicksands. He had severe rigors, "*acutis correptus febris*," yet, hungry after the march, ate a large meal and drank much new beer. His temperature continued to rise, "*febrilem in se calorem acutius fortiter et accendit*." Next day, nevertheless, he went on to the Castle of Sleaford. After a night there he was drawn in a horse litter to Newark. He took to bed and was conscious enough to receive the Holy Eucharist and afterwards to nominate his son Henry as his heir and to order the great seal to be affixed to letters patent addressed to the sheriffs and castellans of the realm commanding them to be "*ei intendentes*." He was obviously getting worse, and the Abbot of Crokestone, in guarded terms, asked him where he wished to be buried, should he die. The King, speaking, no doubt, in French, said, "*To God and St. Wulstan I recommend my body and soul*." This seems to have been on St. Luke's day, and he died the night following.

His illness thus terminating within a week and beginning with a violent rigor, and aggravated by his moving on from Swinestead instead of staying in bed, may have been acute pneumonia, or an acute gastro-enteritis, aggravated by exhaustion mental and physical. The Abbot of Crokestone "*qui Medicus regis tunc temporis extiterat*" made an autopsy "*facta anatomia de corpore Regio*," not for pathological purposes, but "*ut honestius portaretur*." He carried the viscera "*copioso sale conspersa*" to his own religious house and there honourably buried them. The body with its proper ornaments was carried to Worcester, where the royal tomb may be seen to this day.

Roger Grosseteste, Bishop of Lincoln from 1235 to 1253, knew Greek as well as Latin, and in his extensive reading he had not neglected medical books, and was able to apply his knowledge. To a preaching friar whose health was imperfect he recommends sufficient food, proper sleep, and good humour, clearly having in his mind the Salernitan lines:

*Si tibi deficiant Medici, Medici tibi fiant
Hæc tria: mens hilaris, requies, moderata dieta.*

He advised a friar who had a tendency to melancholia to drink a cup of good wine; and his insistence on its quality when his own ascetic life and the context are considered, shows that he had another verse of the *Regimen Sanitatis Salerni* in his thoughts:

Gignit et humores melius vinum meliores.

After a prescription in a fourteenth century manuscript (Mirfield) is written "*Et dicitur hoc esse probatum per Robertum (leg. Rogerum) Grosseteste Episcopum Lincolni-*

ensem." We may be certain that Grosseteste had read the chapter on medicine in the *Liber Etymologiarum* of Isidore of Seville and the *Flos medicinae* of Salerno. His chief friend was a physician, Dr. John of St. Giles, sometimes called John of St. Albans.

The libraries of monasteries and cathedrals always contained books on medicine, and as reading was thought the chief source of medical knowledge, books were even more important to a physician in the middle ages than they are at the present day.

The catalogue of the library of Chaucer's physician is familiar to every one:

Well knew he the olde Esculapius,
And Deiscorides and eek Rufus,
Old Ypocras, Haly, and Gallien;
Serapyon, Razis, and Avycen;
Averrois, Damascien, and Constantyn;
Bernard, and Gatesden, and Gilbertyn.

Some such book as *Trismegistus ad Asclepium*, one leaf of which begins with the words "*Asclepius iste pro sole*," was perhaps in Chaucer's mind when he placed Esculapius in the list.

A copy of *Trismegistus* was in the library of Dover Priory, and the same library, which had in it some 118 medical treatises, contained amongst them works of Hippocrates, Galen, Rhazes, Bernard, and Gilbert, as is shown by the catalogue of the library written in 1389, and thus almost exactly contemporary with the *Canterbury Tales*.

The library of St. Augustine's Abbey at Canterbury contained ten of the fifteen authors mentioned by Chaucer in a collection of 230 or more medical works. Aesculapius, Rufus, Averrois, Damascien, and Gatesden are the writers who were not in the library. The catalogue was written towards the end of the fifteenth century.

The catalogue of the library of Christ Church, Canterbury, contains the names of over 280 medical treatises, including nine of those of Chaucer. The catalogue was written in the time of Prior Henry de Estria, whose name is known to every visitor to Canterbury at the present day, from the beautiful stone screen with finely proportioned geometrical tracery with which he enclosed the choir of that noble church. De Estria ruled from 1284 to 1331, so that he had been prior for twenty years before two of the authors in Chaucer's list had risen to fame, Bernard and Gatesden. Esculapius, Serapion, Rufus and Gilbert, are the others of Chaucer's list absent in the Christ Church Library.

These three catalogues have been printed by Dr. Montague Rhodes James, whose learning we may hope will long continue to produce works which add so much to the fame of the University of Cambridge and of the ancient foundation of which he has recently been elected the head, a foundation to one member of which, Henry Bradshaw, I should indeed be forgetful if I did not express my gratitude when lecturing on my subject of to-day, since he first opened to me the stores of mediæval literature.

At St. Paul's Cathedral a solitary manuscript of Avicenna remains, given to it in May, 1451, by John Somerset, Master of Arts and Doctor of Law, Chancellor of the Exchequer of England.

Reading and hearing lectures were the chief means used to acquire medical knowledge, but hospitals existed which contained patients with various diseases, and so gave opportunities for observation.

Jacobus de Vitry, Bishop of Acre in Palestine, and a Cardinal, in his *Historia Orientalis*,⁶ written about 1220, shows the nature of the hospitals of his time in France, and consequently of similar institutions in England. He is giving an account of the state of society in the West of Europe:

There are, moreover, very many associations of men and of women renouncing the world and living by rule in houses of lepers or hospitals of the poor, humbly and devotedly ministering to the poor and the sick. They live according to the rule of St. Augustine. . . . These servants of Christ, sober and sparing towards themselves, and rigid towards their own bodies, abound in compassion towards the poor and sick, and at once minister to them all necessities to the best of their ability. For Christ's sake they bear the filth and impurities of the patients and the annoyance of almost unbearable smells. He ends with a eulogium of several good hospitals, and says they are

a refuge to the poor, an asylum for the wretched, consolations for the mourning, nourishment for the starving, a kindness and diminution of suffering for the sick.

The societies following the rule of St. Augustine were often devoted to the care of the poor, the sick, and the leprous. The frequent contrast in their statutes between

sani and *infirmi* shows that the sick, and not merely the poor, were their care.

The statutes of the hospital of Angers (Hôtel-Dieu), founded in 1175, ordain that messengers shall be sent twice a week through the town seeking sick persons to be admitted.

If it chanced that at the gate any sick man be found desiring admission, the porter, if a brother (as we should say, one of the staff), shall admit him. If not he shall send word to the prioress, and she shall come at once or send another sister, one not hard or rough, but kindly, and she, if the patient ought to be received, shall admit him.

After he has confessed his sins and received the Holy Communion, if with due devotion he desires to receive it, he shall be carried to bed. The brethren and sisters and the poor are to have the same diet and the same wine unless the weakness of the sick should require better bread and better wine.

The following persons are not to be admitted to the hospital: Lepers, permanent cripples, blind, thieves whose hands and feet have been lately cut off, or foundling children.

Lying-in women are to be received and cared for till well.

The statutes of the Hôtel-Dieu of Amiens of the year 1230 mention that the patients may stay in the hospital seven days after they are convalescent, if they wish.

These passages are sufficient to prove that in France, including the French dominions of the English Kings, there were many hospitals containing such patients as are to be found in our hospital wards at the present day.

In England it is clear that many hospitals were from the first intended for the care of the sick and maimed as well as of the poor. A few were restricted to some particular kind of poor person just as the leper hospitals were restricted to a particular kind of patient.

Several ancient records indicate that St. Bartholomew's in London was arranged on the same plan as the French hospitals. A husband and wife, for example, might be received as a brother and a sister of the hospital. Ralph de Quatremares and Albreda his wife, in the reign of John, gave to St. Bartholomew's Hospital a holding which they held of Westminster Abbey, next the church of All Hallows in Bread Street, with the house on it and all its contents, as well as an orchard which they held of the church of St. Paul in free and perpetual alms.

And if poverty should come upon us, the brethren of the aforesaid hospital shall minister to us all necessary things as if we were a brother and sister of the hospital in our own house; and further, when it pleases us, they shall receive us into their society.

This last clause may be compared with a statute of the Hôtel-Dieu of Troyes⁷ drawn up in 1263:

Nullus recipiatur cum uxore sua nisi per dispensationem.

This statute shows that in earlier times it had been customary to receive a husband and wife as stipulated by Ralph and Albreda de Quatremares in London, and with other resemblances of arrangement justifies the view that the hospitals under care of the Augustinian order in France and England were foundations identical in function.

Some hospitals in England before the dissolution had become simply homes for poor men and women who had no other infirmity than that of age, but many continued to treat the sick. A passage in the close rolls of the 26th of Edward III shows that St. Bartholomew's Hospital was one of these. It was:

Ad omnes pauperes infirmos ad idem hospitale confluentes quousque de infirmitatibus suis convalescerint ac mulieres pregnantes quousque de puerperio surrexerint, necnon ad omnes pueros de eisdem mulieribus genitos usque septennium, si dicte mulieres infra hospitale predictum decesserint.

The last part of this extract from the close rolls shows that in the middle ages the benefit of the revenues of a hospital were not always restricted to the sustenance and treatment of patients, but were sometimes extended to the support of orphans whose mothers had not survived their birth. This was naturally done "*caritatis intuitu*," as the old charters say, just as, equally, at the prompting of charity, we add museums and other means of increasing knowledge, and so relieving not only the patients of our own hospitals but sick men all over the world in ages to come as well as in our own time.

A passage in the will of the charitable Gilbert Chaumpneys, dated 1375, and preserved at St. Paul's Cathedral, suggests that there were patients, in our sense, in the Hospital of St. Thomas the Martyr in Southwark, which now flourishes in Lambeth under the tutelage of St. Thomas the Apostle, and of which my predecessor in this lectureship is so distinguished an ornament. Chaumpneys left a shilling to every leper in London, three beds with linen to the hospital of St. Mary without Bishopsgate, and three to St. Thomas's, and sixpence to every sick person (*infirmus*) in each of these hospitals.

This charitable man also left sixpence to every prisoner in Newgate and £20 to get debtors out of Newgate, twenty shillings to the prisoners in the Marshalsea, and the same to those in the King's Bench, twenty shillings to every nun in the Convent of Sopwell, with gifts to other nuns and to St. Paul's Cathedral, to fifteen parish churches, and to the fabric of a bridge in the country.

John Mirfeld belonged to the period when the practice of medicine was sometimes exercised by a layman, sometimes by an ecclesiastic, when some medical books were to be found in most libraries, and when in London there were some hospitals in which diseases were treated and might be observed. He was a resident in 1379 in the Convent of St. Bartholomew in Smithfield. This priory was founded in the reign of Henry I, shortly after the hospital of St. Bartholomew by Rahere, the founder of both. The priory had certain relations to the hospital, of which the most important were that the brethren of the hospital had to present their master on his election to the prior and canons for confirmation, and must obtain the same consent for the admission of members into their society, and that a certain share of the food and drink left by the canons must be given to the hospital.

In his medical writings Mirfeld speaks of "magister meus," his instructor in the practice of medicine.

My master operated (he says) in an original way in a case of hydrocephalus in a girl. He rubbed in sulphur ointment twice a day. Then bound a bandage of warm wool on the girl's head and kept it there a month or more. Then he tapped by a cautery in front—water came out slowly. After a time he did the same at the back of the head, and more water came out. In less than a year the girl was well. He closed the wounds with tents.

His master was called to a man in gaol who had stabbed himself so that when he swallowed, food and drink and air came out of the wound. Mirfeld's master joined the parts of the wound carefully, and covered the place with powders and bandages. The man recovered within a month.

His master once treated a woman who had lost her speech. He rubbed her palate with a preparation known as theodoricon emperiticon and with a little diacastorium. She recovered her speech and bore witness to his skill. Was this a case of hysterical aphonia?

An apothecary brought to his master a youth with a carbuncle on his face. His whole neck and throat were swelled beyond belief, and the sick man had already tokens of death; he had no pulse and was fainting. My master said to that apothecary that the youth should go home, for he was about to die in a short time. The apothecary said, "Is there no further remedy?" The physician replied, "I believe most truly that if thou mightest give tyriacum in a large dose there is a chance that he may live." Having heard this the apothecary took him home, and was barely able to get there, and he gave to him about a drachm of tyriacum and put him to bed. His head and the affected part broke into profuse perspiration, and after a little there was a general perspiration and his pulse returned. And the apothecary gave him the dose again of his own accord, and that day he was made whole, except for a little sore place, which afterwards healed up, and my master said that he had never seen any one else who had recovered after being in a faint and tremor and especially without pulse.

It is clear that Mirfeld's master was a physician and that, like Chaucer's doctor of phisic,

Ful redy hadde he his apotecaries
To send him dragges and his letuaries.

The tyriacum which his master used was a preparation attributed to Mithridates, King of Pontus, which from the Augustan age to the eighteenth century was used by physicians. It did not come from Mithridates, says Quintus Serenus Samonicus, for when that King was vanquished by Pompey the medicine found in his casket was worthless.

Antidotus vero multis Mithridatit fertur
Consociata modis, sed Magnus scriinia regis
Quum raperet victor, vitem deprendit in illis
Synthesin, et vulgata satis medicamina risit,
Bis denu rutae folium, salis et breve granum,
Juglandesque duas, totidem cum corpore fectus.

Mithridatium, afterwards called theriaca, contained opium. It began with thirty-eight ingredients, then had fifty-three, and later still seventy-five, and continued to be made and prescribed long after the identity of many of its ingredients had been lost. Dr. William Heberden, one of the greatest of English physicians, wrote in 1745 an essay entitled *Antitheriaca*, relating its history and attacking its use.

From another passage in the *Breviarium* it may be inferred that Mirfeld had studied at Oxford. One Master Nicholas Tyngewich, he says, related in his lecture theatre at Oxford that he rode forty miles to an old woman who had cured innumerable men of jaundice, and gave her a sum of money for teaching him her method of treatment. This seems like the statement of one who had heard the lecture.

Nicholas Tyngewich was King Edward I's physician, and he is mentioned in two documents of 1306. One is the King's request that he may be allowed to hold the living of Reculver, and the other Pope Clement V's letter confirming the presentation. His name also occurs in a charter of the same period at St. Paul's Cathedral.

The late Mr. J. L. G. Mowat, who edited in the *Anecdota Oxonienses* in 1882 the "sinonima" or glossary, the only part of Mirfeld's works which has been printed, points out that John Mirfeld represented the Convent of St. Bartholomew in Court in the reign of Richard II, in 1392 and 1393. Mr. E. A. Webb has discovered that he gave the convent the manor of Walhale in 1392.

His chief medical work, as is shown by the calendar which is attached to it in its finest copy, was written before the year 1387. If Mirfeld was at Oxford when 16—a not uncommon age of university life at that time—and if at the time he appeared as one of the seniors of the Priory of St. Bartholomew he was about 70, he may easily have attended the medical lectures of Nicholas Tyngewich between 1336 and 1340.

The general impression left after reading his medical writings is that his magister was a layman, and that it was after his medical studies that Mirfeld entered the Convent of St. Bartholomew of Smithfield. The clerical subsidy rolls for 1379 show that he was then a layman (Webb).

The course of his studies was, perhaps, similar to that of Joannes de Sancto Egidio, a learned Englishman of the reign of Henry III, the friend and physician of Bishop Roger Grosseteste of Lincoln. John of St. Giles studied at Oxford and then at Paris and at Montpellier, where he pursued medicine with such distinction that he became physician to Philip Augustus, King of France. He lived in Paris in the Hospital of St. James, which he had bought, and later gave it to the Dominicans, hence called in Paris "Jacobins." It was the meetings of a section of the Revolutionists there which had led to the use of the word "Jacobin" in a sense so very different from that which it had for several centuries. He was, no doubt, in holy orders, as he became a doctor of divinity and lecturer on philosophy and theology, as well as on medicine. About 1222 he became a Dominican, and is said to have been the first Englishman to join that order. He came back to England in 1235, and stayed till his death, which took place in or after 1258. He became an intimate friend of Roger Grosseteste, Bishop of Lincoln. Their relations were chiefly ecclesiastical, but John was certainly Grosseteste's physician, attended him when he was supposed to be poisoned, and was sent for and went to the Bishop in his last illness. Matthew Paris, who had probably known John, says that he was an elegant scholar and teacher, skilled in medicine and in theology.

Mirfeld, like John, began life in the study of medicine, and was always devoted to it, but after his youth he became also a learned theologian and a member of a regular order. That Mirfeld knew something of the patients in St. Bartholomew's Hospital seems certain from some passages in his works.

Leland (1506-52), in his *Commentarii de Scriptoribus Britannicis*, mentions having a conversation with "Bertholetus Medicus," who had certainly studied the medical writings of Mirfeld. This Bertholetus was Dr. Richard Bartlot, an Oxford man, who was the first Fellow elected into our College (March 12th, 1523), and whose learning Caius praises. He was President in 1527, 1531, and 1548. He died in 1556-7, aged eighty-six. The President, Dr. Caius, and the College attended his funeral in the church of St. Bartholomew the Great. This was in the reign of Queen Mary, when that church, from which the Augustinian canons had been expelled under Henry VIII, was in the hands of the Dominicans. He had read the very copy of Mirfeld's book now at Pembroke College, Oxford; indeed, it seems to have belonged to him, for on a blank leaf of it is written "Richard Bartlet. in Medicinis Doctor."

The *Breviarium Bartholomei* is Mirfeld's greatest work, and as the first book on Medicine in any way connected with the oldest hospital in London deserves particular consideration.

I have examined two complete copies of the work: one in the British Museum and one in the library of Pembroke College, Oxford, as well as some fragments of a third copy also in the British Museum. The Oxford copy is in its original binding. The manuscript begins with a calendar which with some scattered notes occupies the first nineteen leaves. The *Breviarium* then has an illuminated page. At the foot of the page is a shield of arms: argent four martlets and a cross; and at the top of the page is a saint in a brown

tunic and with a lamb in his left hand, obviously St. John the Baptist. These ornaments show to whom the manuscript originally belonged, for the arms are those of the Abbey of Abingdon, and at the gate of the abbey was a hospital dedicated to St. John the Baptist. The possession of such a book by it is a sign that it was not as it afterwards became a mere almshouse but a hospital for the sick.

I had the opportunity of examining the book during several successive weeks in the rooms of the late Professor Henry William Chandler, a Fellow of Pembroke College and Waynflete Professor of Moral Philosophy at Oxford. I ought here to express my gratitude to this most learned man, who died in 1889, for his literary hospitality to me. His profound knowledge of Aristotle, his attainments in bibliography, and his untiring devotion to study, were well known at Oxford. His stores of mediæval learning, his thorough acquaintance with English literature, his interest in human nature, his kindly disposition, made his conversation as delightful as it was full. After my perusal of the *Breviarium Bartholomei* I enjoyed his friendship to the end of his life. When I went to Oxford I always went to see him, and noticed on each occasion that before our conversation had lasted five minutes I had learned something hardly to be attained anywhere else, and that however long the conversation lasted it continued to the end as rich in learning as it had begun.

The British Museum copy is also a fine manuscript, though not so large. On fol. 21B is a note which has not hitherto been observed:

Ordine peractato si connumerer capitales
Nomen factoris demonstrabunt tibi tales.

Following this injunction the capital letters from fol. 21B make the words:

Ora pro nobis sancte bartholomee ait iohannes dde Mirfeld ut digni
efficiamur promissionibus Cristi.

There are slight variations in the text of these two copies. Both belong to Mirfeld's lifetime. The index of the Oxford copy is headed with a fine illuminated "I," and the words:

Incipit tabula libri Johannis Mirfeld quem ipse composuit et
Breviarium Bartholomei vocavit,

Et compilavit in monasterio sancti Bartholomei London eundemque
divisit in partes quindecim.

The first of the fifteen parts is of fevers; the second, of affections of the whole body; the third, of affections of the head, neck, and throat; the fourth, of the chest; the fifth, of the abdomen; the sixth, of the pelvic organs; the seventh, of the legs; the eighth, of boils; the ninth of wounds and bruises; the tenth, of fractures and dislocations; the eleventh, of joints; the twelfth, of simple medicines; the thirteenth, of compound medicines; the fourteenth, of purgatives; the fifteenth, of the regimen of health.

As in most mediæval systems of medicine, the part on fever follows the general arrangement of the subject in Galen. Mirfeld's chapter, "De febris pestilentialibus," begins with the statement that such epidemics come in rotten and sterile seasons, when the crops are blighted and the air and water corrupted so that they infect human bodies. The infected air goes to the heart and round the whole body, and to it is added infected food and drink. Men and vermin and brute animals are attacked; and sometimes animals only, while the epidemic avoids men. Of all fevers these are the worst.

Signs of the approach of plague are comets and irregular seasons—too much cold in the hot season, too much heat in the cold season—thick and foggy air, the threatening of rain without rain. Also a warm and damp summer, a time when birds desert their nest and eggs, and when many reptiles appear on the surface of the earth. All these are signs that an epidemic is about to come. The symptoms are that the heat of the body is moderate externally and great internally, with thirst and dry tongue, and difficulty of breathing and precordial pain and fetor of everything coming out of the body. The prognosis is bad, and there are terrible and deceptive complications, and after these small-pox and measles may follow. Physicians are often deceived, and when they expect a good turn after the crisis then comes death. A person may be preserved from infection in a cold season by smelling and swallowing musk and aloes, wood and storax, calamita and amber, and such-like aromatics. If the season is warm, sandal wood and roses, camphor and citric acid—"acetositas citri"—sour milk, all kinds of sour herbs, and vinegar. Repletion of food and drink is to be avoided. If the extremities are cold they are to be rubbed. Purgings and bleeding are protective. Warm baths are to be avoided. Sweets made with honey, green fruits, and sweet fruits are to be avoided.

Veal, fowls, and partridges may be eaten with lettuce, vinegar, and acid herbs. Syrup of vinegar is to be taken in the morning, and at midday syrup of violet in cold water.

Brother John Helme, who was probably one of the brethren of St. Bartholomew's Hospital, recommended against the plague a mixture of aloes and myrrh, to be taken out of warm wine, the bulk of a little nut of the powder to be the dose. Water distilled from diptamius, pimpernel, tormentil, and scabious, equal parts of each mixture are to be drunk daily. "Est enim optima et nobilissima medicina." Camphor 3 or 4 gr. avails against pestilential air, according to Hali Abbas.

To take warm bread a few morsels only, prevails against pestilential air and against fetid morbid vapours. This is also good against the fetor of the sea, and if you have not warm fresh bread, says Mirfeld, "da tostum."

I may here remark that our idea that sea air is wholesome has not always prevailed; for, in an account of Northamptonshire published in 1738, the author remarks:

The air of Northamptonshire is exceedingly pleasant and wholesome, the sea being so remote that it is not infected with its noisome fumes.

Scented wine should be drunk; and on going out of the house throw an aromatic on the fire and smell it.

One proceeding difficult to explain is recommended in cases of fever.

A little twig of hazel, 1 ft. long, is to be broken in the middle. The two parts are to be held a little way apart, and certain words repeated, and by virtue of the words the twig becomes united in some place. Here it is to be held by finger and thumb, and the rest cut away so that there a little cross. This the feverish man is to hold above him, and to say some words in French, and five paternosters, and he will be healed, as has often been proved, says the *Breviarium*.

This therapeutic method does not seem less rational than the method of discovering subterranean water by the movement of a hazel rod in the hands of a water-finder which has been gravely defended and widely practised in our own time. The opinion that this method of cure of fever was sound because people who had used it had often recovered, and that the hazel rod in the hands of a water-finder is a true discoverer of water because it has often pointed towards it are conclusions of precisely equal logical value.

Among the medical books of Mirfeld's time were treatises on the diseases of horses, of cattle and of hawks.

Epidemic disease in cattle may be warded off by hay prepared in a very harmless and charitable way. Three poor travellers are to be entertained on Christmas Eve and beds of hay are to be made for them. The hay is to be placed daily between the oxen from Christmas Day till Twelfth Day and by the goodness of God they will be safe for the whole year. To recommendations of this sort Mirfeld usually adds some such phrase as "so it is said."

Mirfeld had witnessed the long wakefulness of some cases of fever. His prayer to be used in such cases is based upon the legend of the Christians of Ephesus who outlasted the age of persecution. The mention of the names of the seven sleepers of Ephesus in relation to insomnia was not confined to Christendom. It extended to the Mohammedan nations and is still in use among the Arabs in Algiers.

Mirfeld was not afraid to bend over the patient in fever and recommends that the thickly furred tongue should be wiped with a linen rag, moistened in acid juice. If uncertain whether the patient was alive or dead he put a little burnt lard to the nostrils. If alive he found that the patient thereupon scratched his nose.

Mirfeld's account of plague is based upon the chapter on the same subject in the *Lilium Medicinæ* of Bernard of Gordon written at Montpellier in 1305. On all general questions Mirfeld uses Bernard's words, but his numerous remarks on protection from infection, as well as the way in which he leaves the reader to infer that treatment is of very little use in the plague, point to actual experience "tempore pestilencie." The greatest recorded epidemic of plague occurred during Mirfeld's lifetime, and he was probably old enough in 1348-57 to have observed its phenomena, and if not might yet have received accounts of it from many men living in his time who had passed through it.

His chapter "De febris pestilentialibus" reflects that time in the recommendations of numerous protective measures and in the observation that vermin and brute beasts as well as men died, and that the animals sometimes died when men did not; but he makes no original clinical notes.

In Part II skin diseases are described and couplets are often given to enable the memory to retain their names and symptoms. He is inclined to agree with Platearius (of Salernum)

that all kinds of leprosy are incurable, yet in one case by very severe purgative pills he did good and the leprosy was relieved for almost three years, yet after that it reappeared distinctly. The diet must be restricted. The patient's bread must consist of two parts rye and one part barley. He must drink clear well-scented wine, and may eat game and eggs. The flesh of domestic animals is to be avoided, as well as putrid food, cheese, salt meat, hares, and pulse.

Mirfield treated chronic rheumatism by rubbing the part with olive oil. This was to be put into a clean vessel while the pharmacist made the sign of the cross and said two prayers over it, and when the vessel was put on the fire the Psalm "Why do the heathen rage" was to be said as far as the verse "Desire of me and I shall give thee the heathen for thine inheritance." The Gloria and two prayers are then to be said and the whole repeated seven times. The mixture of prayers with pharmacy seems odd to us, but let it be remembered that Mirfield wrote in a religious house, that clocks were scarce and watches unknown and that in that age and place there was nothing inappropriate in measuring time by the minutes required for the repetition of so many verses of scripture or so many prayers. The time occupied I have found to be a quarter of an hour.

Scrophulu (scrofula) is, he says, according to Johannicius, nothing more than multiplied glands.

If other methods of treatment fail they go to King's, because by touch alone kings are wont to cure that infirmity thence called by many Morbus regius.

The chapter on epilepsy and apoplexy and that on hemi-crania are based upon the chapters on the same subjects in John of Gaddesden's *Rosa Anglica*. Verses are to be repeated in the ear of the epileptic man as he lies on the ground. The epileptic unconsciousness lasts but a short time and no doubt, as Mirfield and other writers of his time assert, the patient often got up after:

Gasper fert mirram: thus Melchior: Balthazar aurum.
Hec tria qui secum portabit nomina regum,
Solvitur a morbo Domini pietate caduco,

was repeated in his ear. To a man ignorant of the fact that, while the condition which produces an apoplectic fit is one involving actual destruction of a part of the brain, that of an epileptic fit is a transitory state, it must have seemed reasonable by analogy that verses should do good to an apoplectic patient. Mirfield recommends an empiric remedy of English Gilbert. The following two verses are to be tied round the arm, the Lord's Prayer being said the while. The verses are to be written with crosses above and below each word:

+	+	+
Amara	timi	taturi
+	+	+
Postos	sigalos	sicaluri
+	+	+
Ely	poly	carras
+	+	+
Polyll	pylini	lyvarras
+	+	+

There are several similar medical charms in "Marcellus Empiricus," and Professor Rhys¹⁰ has lately maintained with great ingenuity that they preserve sentences of one of the three chief Celtic dialects of Gaul. He shows how interesting such verses may prove on minute examination. I may give one example from "Marcellus" for purpose of comparison:

Omnia, qua haeserint faucibus, hoc carmen expellet:
Heilen prosaggeri uome si polla nabuliet onodienit idenelliton
Hoc ter dices et ad singula expues
Item fauces, quibus aliquid inhaeserit conficicans dices:
Xi exuericone xu crigrionaisus scriis mionelor exugri conexu grillau.

To trace to their origin the numerous lines of verse of which Mirfield recommends the repetition in various emergencies would take a long time, but I may point out the source of one couplet:¹¹

Sancte Columquille remove mala dampna faville
Atque Columquille salvet ab ique domus.

The lines were repeated as a charm to stop the burning of a house. In the life of St. Columcille or Columba in the *Leabhar Breac*, a fifteenth-century manuscript, occurs this passage:¹²

A great flame came towards him once in Iona. They asked him the cause of the flame. Fire of God from heaven (quoth he) came just now upon three cities in Italy so that it slew 3,000 men, as well as their wives and sons and daughters.

Mirfield observes that an injury on the right side of the head is likely to lead to paralysis on the left side of the body, and relates the case of one of the Canons of St. Bartholomew's Priory, who was treated by his master.

The Canon was about to get on his horse, and when the said Canon wished to seat himself in the saddle that horse arose on his two hind legs, and the Canon fell head downwards over the crupper of the horse to earth, and fell so heavily upon his head that straightway he lost the sensation and movement of his whole body. My master having been called by the friends of the patient, made them shave his head, and then rubbed in oil of roses with a quart of warm vinegar, and sprinkled it with a powder, and put over it a fine cloth soaked in the aforesaid oil and vinegar, and over that fastened linen stoups and bound with bandages his whole head and put over all the skin of a lamb. And every day he visited him twice, and rubbed in ointment into his neck and as far as the middle of his spine. On the second day the patient opened his mouth a little. Then one of his friends wished to try if he would eat, but the physician would not allow it, and said, "Even if he wished to eat I would not let him." On the third day, when a question was put to him he tried to answer, stammering, but he could not form the word. On the fourth day he spoke stammering, and then they handed him a thin warm drink, which he saw and swallowed. The fifth day he took a thin tisane. On the sixth day they gave him chicken broth. He then began to grow stronger, little by little, and to be able to move, but it was many days before he could walk. When he was able to take food my master began to prepare pills, to resolve by evacuation the residue of the material accumulated by the fall on his head. He recommended that he should eat the brains of birds and fowls and kids, and thus doing he was cured. But the poor Canon was never quite the same man again, as Mirfield says: "Nunquam tamen fuit ita subtilis ingenii et bone memorie sicut prius."

Hippocrates and Galen had observed that an injury to the left side of the brain may produce paralysis of the right side of the body and even a general man of letters like Plutarch knew this. Mr. J. D. Duff of Trinity College, in a letter to me of August 16th, 1895, says:

Here is something I noted for you from Plutarch's "Conjugalia Praecepta," so ε: ὡς περ οἱ ἰατροὶ λέγουσι τὰς τῶν ἐννοήτων πληγὰς τὴν αἰσθησιν ἐν τοῖς δεξιῶς ἀναφέρειν. What do you suppose he means? that an injury to the left side of the brain injured the right side of the body? and is that so? Plutarch was interested in medicine as in nearly everything and often quotes something from Hippocrates.

Cooke in his careful book on nervous diseases which appeared in 1820 tells as much and very little more of the relation of hemiplegia to destruction of part of the brain.

When he treats of injuries Mirfield regrets that medicine and surgery have become separate lines of practice. The well-informed he says are aware that he cannot be a good physician who neglects every part of surgery, and on the other hand a surgeon is good for nothing who is without knowledge of medicine. Mirfield times with precision the recovery of each broken bone. A rib will take twenty days. A humerus or a femur forty days. He had noticed that union is slower in the aged.

Mirfield is very full on materia medica, and I might easily give a separate lecture on this part of his work. He describes the drugs, names their common adulterations, discusses their effects, and gives many prescriptions.

The last chapter—that on preserving health—is based on the *Regimen Sanitatis Salerni*.

Another work of Mirfield's is the *Florarium Bartholomei*. It is to Mr. J. P. Gilson, a member of the learned staff in the MS. Department of the Library of the British Museum, that the discovery of the authorship of this book is due. At the foot of fol. 3 is written:

Ad Jesus incipiens capitulos inde notabis.
Nunc quo vado scies venio simul inde probabis.

Chapter 62 begins with the word "Jesus," and the initials of the following chapters make up the words

Johanni de Suthwelle per
Johannem de Mirfield
Ora pro nobis beate Bartholomee

ut digni efficiamur promissionibus cristii. Amen. Explicit.

Mr. Gilson was so kind as to point out to me this discovery of his, and I wrote down the first words of 114 chapters, from Chapter 62. Mr. J. P. Gilson has mentioned as indications of the date of composition, in his catalogue of the Royal MSS., that the constitutions of Simon Islip of 1362 are quoted, and that a sermon of John Grandison (written Cronson), Bishop of Exeter, 1328-69, is also mentioned. It is clear, therefore, that the *Florarium* was composed not earlier than 1362, and perhaps as late as 1369. The one medical chapter which it contains does not allude to the *Breviarium Bartholomei*, so I am inclined to believe that the *Florarium* was composed first.

The *Florarium* is a theological treatise with one chapter on physicians and their medicines. The manuscript in the British Museum once belonged to the library of the religious house (of the order of the Trinity) of Ashridge, in Hertfordshire, which monastery and its lands are now occupied by Lord Brownlow's house and park. It had been given to Ashridge in 1518 by Richard Hutton.¹³

The preface of the *Florarium* explains that the author has collected numerous passages from the Holy Scriptures and from sacred writers. A flower garden is a place where flowers abound, and so the name, he says, is appropriate to a collection of flowers from holy and spiritual writers, from doctors and wise men.

Sed quare cum hec addicione Bartholomei sic nominatur ad presens volo declarare non expedit quidem.

This secrecy is no doubt because it has pleased him to explain his name and place of writing by the acrostic already mentioned. There are 175 chapters, of which the first is on abstinence and the other subjects follow in alphabetical order.

The one medical chapter is of great length "on physicians and their medicines." Mirfeld urges physicians not to think too much of money, and relates as a warning the case of one to whom were owed £13 for his treatment of a patient during three years. The physician when dying, and exhorted to receive the Holy Eucharist, could say nothing but "£13 in three years."

He advised prelates to have a rope in their study hanging from the ceiling and knotted at the end on which they may take exercise, or to use weights in their hands if they cannot take enough outdoor exercise. He advises every one to bear in mind the verses:

Sit cena levis
Vel cena brevis
Sit raro molesta
Magna nocet
Medicina docet
Res est manifesta.

Gluttony slays more than the sword. Foods are not to be mixed, but a meal of bread to be taken in the morning and of meat in the evening. "And in this," he says, "all doctors of this faculty agree, but we English from long habit hold the reverse."

In the library of Lambeth Palace there is a manuscript which once belonged to Archbishop Sancroft, whose name (W. Saner.) is twice written in it. The volume contains several manuscript fragments, and among them four and a half pages on prognosis abstracted from medical authors, and digested into a treatise called "John Mirfeld's Mirror" (*Speculum Johannis Mirfeld*). It ends:

Explicit iste tractatus multum necessarius.

He does not mention his great contemporary Chaucer, nor any vernacular writer. The English men of letters with whose works he was familiar—Bede, John of Salisbury, John of Gaddesden, Ranulf Higden, all wrote in Latin. He was acquainted with Horace and Virgil and Ovid. He had read Boethius, and knew well the *Liber Etymologicarum* of Isidore of Seville. I am not competent to speak of his theological reading, but it was obviously extensive.

Mirfeld had read one medical book of his own time again and again, *The Lily of Medicine*, of Bernard of Gordon, and had a less profound acquaintance with the *Rosa Anglica* of John of Gaddesden and with the writings of Gilbertus Anglicus. These were the modern books of his time.

Of ancient authors he had studied the then current books attributed to Hippocrates and Galen. He had read a good deal in the continent of Rhazes, and was acquainted with some of the works of Serapion, of Avicenna, of Constantinus Africanus, and of Isaac son of Solomon. The works of Roger and Lanfranc and Platearius of Salernum and Arnaldus de Villa Nova were well known to him. The *Antidotarium* of Nicholas and Aemilius Macer *De Herbarum virtutibus* were his chief reading in pharmacology.

Mirfeld had observed patients for himself both in the world and in a hospital, and had formed independent opinions on the effects of treatment and on general prognosis.

In universal humanity towards the sick, and in the wish to alleviate pain, and to consider the feelings of the patient, those essential parts of our profession without which the highest skill in our art can never be attained, he was equal to the physician of to-day. He was imperfectly trained in the art of observation, and was inclined to accept without examination the dicta of great teachers of medicine. His test of the usefulness of methods of treatment was that patients were said to have been better after employing them. He did not consider whether the improvement was a probable event of the disease, or examine very closely into the accuracy of the diagnosis.

Such was John Mirfeld, a physician of wide reading, both within and without his profession, with a mind full of all

that was known in his time, a laborious and high-minded man, anxious to do all in his power for his patients, and to instruct others how to relieve suffering.

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A CASE OF TRAUMATIC ASPHYXIA.

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THE patient in this case, a child of 3, was knocked down on August 29th last by a cable car, and caught between the "cow-catcher" and the ground. He was tightly wedged between the two, and there was much difficulty in extricating him.

When picked up he was thought to be dead, but as he was being carried to the nearest medical man it was noticed that he was beginning to breathe, and that his face had assumed a peculiar bluish-black tint. A cut on his forehead was stitched by the surgeon, who sent him on at once to the infirmary. Artificial respiration was not performed.

State on Admission.—Temperature, 98° F.; pulse, 122 (weak); respirations, 40 (shallow and embarrassed). There was a small cut on his forehead, and an abrasion on the right side of his chest, extending in the anterior axillary line from the upper border of the third rib downwards for 6 in., and a corresponding abrasion on the back. With the exception of a bruise on the left thigh there were no other signs of violence.

The most striking phenomenon was the appearance of his face and neck, which were of an intense blue-black colour, much deeper even than in extreme cyanosis. There was a distinct line of demarcation round the neck, at the level of the middle of the clavicles, below which the skin was absolutely normal. The discoloration was rather less on the ears, and faded where the forehead met the hair. The skin of the hairy scalp seemed merely congested. The colouring on the face and neck was not homogeneous, but was seen to consist of a uniform blue tint, with a great many minute reddish-brown spots shining through it. These spots were most conspicuous near the line of demarcation on the neck and on the forehead, where the blue tint faded away. Pressure made no difference to the colour.

Under each conjunctiva there was a lozenge-shaped haemorrhage, extending from the border of the iris to the left angle of the eye. There were a few reddish-brown spots inside the inner surface of the eyelids. The pupils were normal, and there were no retinal haemorrhages. Vision did not seem to be affected, as far as the difficulties of testing it permitted to judge. There were also a few reddish-brown spots just inside the lips. Nothing abnormal was made out in the heart, lungs, or nervous system.

Progress.—The child was put to bed, and the question of bleeding was considered; but, since the patient was recovering rapidly, and the discoloration seemed due to something of the nature of haemorrhages into or under the skin, no treatment further than rest and a light diet was thought necessary. On the second day the intensity of the colour had diminished markedly, and the reddish-brown spots were less conspicuous. After the third day the colour faded steadily, but much less rapidly, and passed through none of the chromatic changes usual in extravasations of blood. The blue merely became less livid, then leaden, then faded gradually, until almost the normal tint was attained. On the second day there was a slight rise of temperature to 99.6° F., but otherwise recovery was uneventful.

Result.—He was discharged on the eleventh day, looking still somewhat swarthy. The conjunctival haemorrhages showed no change from their appearance on admission. Seen a week later, he still showed slight duskeness of the face. The outline of the conjunctival haemorrhages was irregular and rather more circumscribed.

Remarks.—According to an article in the *Annals of Surgery* for April, 1904, by H. H. A. Bach, M.D., of Boston, only 7 similar cases have been published, and the pathology of the question cannot be said to be definitely settled. The