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ON
THE PRINCIPLES AND PRACTICE
OF
MEDICINE.

A LECTURE DELIVERED AT
ST. BARTHOLOMEW'S HOSPITAL.

DR. NORMAN MOORE.



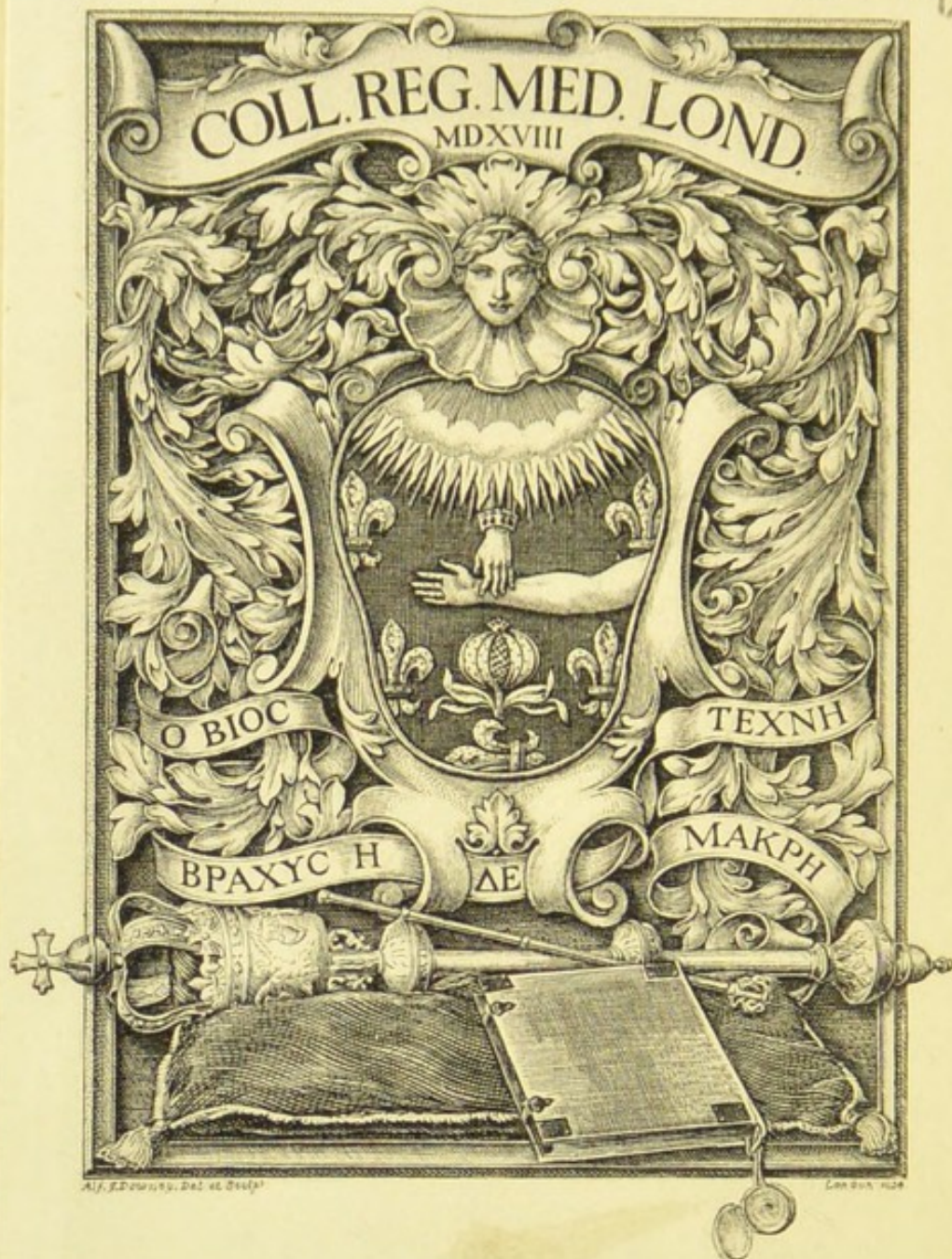
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PRINCIPLES AND PRACTICE OF MEDICINE

AN INAUGURAL LECTURE

DELIVERED AT ST BARTHOLOMEW'S HOSPITAL ON
OCTOBER 8 1893

BY

NORMAN MOORE, M.D.

LECTURER ON THE HISTORY OF MEDICINE
AND ASSISTANT SURGEON OF ST BARTHOLOMEW'S HOSPITAL

LONDON

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1893

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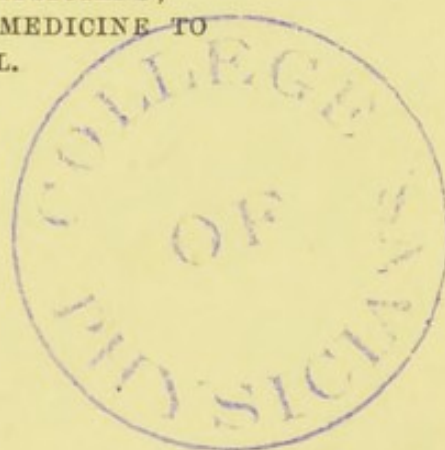
AN INAUGURAL LECTURE

DELIVERED AT ST. BARTHOLOMEW'S HOSPITAL ON
OCTOBER 3, 1893.

BY

NORMAN MOORE, M.D.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS;
ASSISTANT PHYSICIAN AND LECTURER ON MEDICINE TO
ST. BARTHOLOMEW'S HOSPITAL.



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THE PRINCIPLES AND PRACTICE OF MEDICINE.

GENTLEMEN,—Let me begin my first lecture on the Principles and Practice of Medicine by reading to you a passage from a medical text-book once famous, but long since gone out of use. The writer, Bernard of Gordon, Chancellor of the Faculty of Medicine at Montpellier, explains the nature of his work in a preface at once apologetic and confident, and ends with the sentence, which I will translate from his Latin:—“This book was begun with the help of Almighty God in the illustrious university of Montpellier at the end of the twentieth year of our reading. In the year of the Lord 1305, in the month of July.”* I quote him because this remark is suitable to myself. I am beginning to lecture to you on medicine at the end of the twentieth year of my reading in this hospital, for exactly that period has passed since the

* B. Gordonii Omnium Ægritudinum a Vertice ad Calcem. Opus Præclarissimum quod Lilium Medicinæ appellatur. Paris, 1542, p. 2.

termination of my house physiciancy, a time which may justly be regarded as the beginning of the adult life of a physician, and from which he ought to be competent to find his own way along the paths of medical learning. During these twenty years this hospital has been the place of my study, and what I propose to-day is to explain to you how I can best help you to attain a knowledge of medicine in this place. It is impossible not to feel some pride in being a teacher of medicine in such a hospital as this, where for more than seven centuries and a half the original purpose of our honoured founder Rahere has been carried out with ever-increasing efficiency. It is no inconsiderable honour to teach in a seat of medical practice and learning older than any college in either university, a foundation more venerable than nearly every institution of this ancient city. Our hospital was already flourishing when Henry Fitz-Elwin, the first mayor, began to preside over the citizens of London. Magna Carta is, according to Sir William Blackstone,* the earliest extant statute of the realm, and at the date of its first draft our doors had been open to the sick for more than ninety years. Patients had been admitted and discharged here for 140 years before the first Parliament—with knights, citizens, and burgesses—was elected. Our wards

* 'Commentaries on the Laws of England,' vol. i, p. 85. Oxford, 1765.

have received the subjects of every English dynasty since the Conquest. The antiquity of St. Bartholomew's Hospital is, however, but a small part of its glory. The greatest consists in the vast numbers of the sick poor whom it has relieved, and in the large additions to medical knowledge which have been made within its walls. I need hardly remind you that it was whilst he was in charge of this hospital that Harvey laboriously worked out his discovery of the circulation of the blood. It was here, too, that Pitcairn first showed the relation between rheumatic fever and affections of the heart ; here that Pott elucidated the effects of disease of the bodies of the vertebræ ; and here that Blackall took the first step towards a true pathology of renal disease. Where such great men have obtained instruction we may all be proud to learn and to teach. You have most of you been here for some time, have already advanced some distance in your studies, and have learned to care for the place.

The progress of studies has from the earliest times been compared to a road, and every one as he travels likes to pause now and then to consider how far he has gone and what he has yet to see. "Show to me, O charioteer, in what land I am," says a hero in a very old tale when he reaches an unknown plain. Let us, therefore, consider the position of medicine in that long career of study which you all began some years

ago and have since continued in various distant seats of learning and at St. Bartholomew's Hospital. The old universities grew up exactly as the schools of medicine of London have grown up; from the teaching, first, of isolated individuals, and then from voluntary associations of teachers. Their oldest system of study was suggested by the academic ideas of the Greeks as they appear in Aristotle and Galen. The first group of studies was called the Trivium, or three roads, and consisted of grammar, rhetoric, and logic. The second group of studies was called the Quadrivium, or four roads, and consisted of the branches of mathematics: arithmetic, geometry, astronomy, and music. At Paris and in many other universities the students following the trivium and quadrivium were divided into groups called nations for purposes of general control, which more or less discharged the function of the colleges at Oxford and Cambridge in relation to university life. Each nation had a chief official or proctor of its own. The faculties of theology, law, and medicine formed separate bodies, over each of which a dean presided, and men of all nations belonged to each. The members of the faculties were no longer *in statu pupillari*. A trace of this superiority of the faculties exists at Cambridge to this day, where it is the custom for a master of arts or any lesser graduate, in signing a list as examiner, to add to his degree the name of his college, whilst a

doctor, as if too well known to need such description, merely puts his degree. This, then, is the position of medicine; it is one of those subjects which are at the summit of a learned education, not used merely for the preliminary training of the mind, but fit to be its actual occupation for life. Different as is the method of medical study now from what it was in the infancy of universities, medicine occupies at this day exactly the same place in the scale of learning. You have all of you begun by an education based on the old trivium and quadrivium. You have learnt grammar, and some part of the literary studies to which it is the introduction. You have studied several branches of mathematics, and then you have passed through a second trivium of chemistry, biology, and physics, and a second quadrivium of anatomy, physiology, histology, and pharmacology. All this has prepared you for the study of medicine, a study complex and far extended, including all the work of the physicians and assistant physicians, surgeons and assistant surgeons, and of the lecturers and demonstrators of medicine, surgery, midwifery, therapeutics, pathology, forensic medicine, psychological medicine, and public health. The part in which I have, in conjunction with Sir Dyce Duckworth, to instruct you is called "The Principles and Practice of Medicine," and I will try and explain what that department is. Your long scientific trivium

and quadrivium have given you a knowledge of animal life as a whole, of the human frame, and of the natural forces which affect it within and without. You have endeavoured to attain some knowledge of man as a constant. You have now to consider him in endless varying aspects as actually affected or likely to be affected by disease.

There is no such thing in nature as that exactly described body, whose minute details we have all carried in our heads from the dissecting room to the examination hall. You may satisfy yourselves as to this by examining day after day any particular organ in the post-mortem room. Take, for example, the heart. If you will count the tendinous cords inserted into the edge of the tricuspid valve, you will find that their number and the details of their arrangement vary indefinitely. There may be seventy-three points of insertion or eighty, or many fewer, or a few more. If in every heart which you see opened you look at the orifice of the coronary sinus, you will see that it sometimes has a large crescentic valve, sometimes a small one, sometimes a single thread instead of a valve, sometimes two or three threads, and sometimes a valve with one perforation, and sometimes with several perforations. These are not results of disease, but varieties of healthy structure. From anatomical writers you may learn the prominent varieties of distribution of particular arteries, but if the arterial

system as a whole is mapped out differences will be found in every body. The omphalo-mesaraic duct in the embryo joins the mesenteron. It usually disappears in the progress of growth, but sometimes part of it remains as a diverticulum from the ileum, called, from the anatomist who first demonstrated its true nature, Meckel's diverticulum. Examine all the cases in which it occurs—and it is not very rare—and you will find that it projects from the small intestine always in the same general region, but with much variety of exact position and of shape. The lower part of the ileum is its locality, and out of eighteen cases in which I have come across it post mortem it had a different shape in every one, and showed six varieties of position. We all know that every human face differs from every other; but the other structures of the body are scarcely less varied. The normal is to be looked on not as any single condition, but as a series with extreme limits between which there is indefinite variety. This applies to function as well as to structure, and hence there is no such absolute condition as health. We cannot define health in scientific terms, but we must use everyday language, and consider it present when a man looks and feels well, and is thought to be well by skilled observers. Whatever differs from this we call disease. Galen has a very sensible passage on this subject. “No

person," he says, "can, properly speaking, be said to be perfectly in health, but we usually say such persons are in health as have no particular complaint and are able to discharge the common offices of life."*

Having grasped the idea of what disease is, you are ready to understand what the practice of medicine is. I cannot describe it better than in the words of one of its most illustrious professors, Herman Boerhaave,† whose lectures from 1709 to 1738 made Leyden the most famous place of medical study in Europe. He says, "That part of the science of medicine which teaches how to find out and cure the disease that afflicts the patient is called the practice of medicine."

The word "principles"—in Latin *principia*—is used in Cicero for the beginnings or first truths of a subject, and this is the sense in which it is applicable to the title of this lectureship. The principles of medicine are sometimes spoken of as if they were far-reaching, immutable laws of practice. In such a complex subject as medicine very few far-reaching laws can be laid down, and he who thinks he has made out a method of treating a disease need not be deterred from trying it by any fear that it may be contrary to some "principle of medicine." The principles of medicine are its elementary facts. The first of

* 'De Sanitate Tuendâ,' lib. i, c. 5.

† 'Aphorisms,' ii.

Newton's Principia or Principles is a demonstrable statement of fact—viz. that a body will remain still or continue moving in one direction unless compelled to alter its condition by other forces. Principles of medicine are such statements as—that when one side of the chest is dull on percussion, and is on palpation devoid of vocal vibrations, it contains fluid; that when bright red alkaline blood mixed with air is brought up by a patient it probably comes from his lungs; that when dark red acid blood mixed with food is brought up it probably comes from the stomach; and that when a patient is jaundiced his common bile-duct is blocked.

Such is the nature of the subject of these lectures, the Principles and Practice of Medicine. It is concerned with man in every aspect, for we have to know not only whether disease is present, but also how to be certain that it is absent. We are thus entering upon a study which demands the most extended and the most minute observation of the human species in every circumstance, not only of outward life, but of inward thought. Every cell of the body is considered by it, and no less every turn of the mind and every occupation of man. From the very beginning you should keep before your minds the complex nature of man; no one can treat patients successfully who forgets it. Dr. Arbuthnot, who was a physician of the best kind, has put it very well :

"Am I but what I seem, mere flesh and blood,
 A branching channel with a mazy flood?
 The purple stream that through my vessels glides
 Dull and unconscious flows, like common tides;
 The pipes through which the circling juices stray
 Are not that thinking I, no more than they;
 This frame, compacted with transcendent skill,
 Of moving joints obedient to my will,
 Nursed from the fruitful glebe, like yonder tree,
 Waxes and wastes; I call it mine, not me.
 New matter still the mould'ring mass sustains;
 The mansion changed, the tenant still remains,
 And from the fleeting stream, repair'd by food,
 Distinct as is the swimmer from the flood."*

How many a man, without structural change, looks
 older than his years and feebler than his powers!
 Ovid,† writing to his wife, laments his failing vigour:

"Jamque meos vultus ruga senilis arat
 Jam vigor et quasso languent in corpore vires,
 Nec juveni lusus qui placuere placent,
 Nec, si me subito videas, agnoscere possis:
 Ætatis facta est tanta ruinæ meæ.
 Confiteor facere hæc annos, sed et altera causa est
 Anxietas, animi continuusque labor.

* "Gnothi seauton," by the late Dr. Arbuthnot, 'Dodsley's Collection of Poems,' vol. i, p. 209.

† 'Epistolæ ex Ponto,' lib. i, ep. v.

*Me quoque debilitat series immensa malorum
Ante meum tempus cogit et esse senem."*

He was in exile at Pontus. Had he been back in his beloved Rome how different his aspect would have been! I remember a patient aged sixty in John ward who was admitted for a kind of dysentery. His symptoms yielded to treatment, but he seemed no better, sank, and died. He had once been well off, had been convicted of fraud, and had emerged after some years in prison without means—

*"And that which should accompany old age,
As honour, love, obedience, troops of friends."*

When I examined his body I could find nothing anatomical to account for his death. It is a well-established fact that long-continued subcutaneous injection of morphia is followed, even in those who were before absolutely truthful, by a complete disregard of truth. I was once able to detect the true cause of a malady by knowing of this moral symptom. The patient, now no more, was unsuspected of this habit, and he consulted me for dysentery. I had known him in health for several years as a man of high character. He had become feeble and emaciated. I asked him about his town house, his country residence, his travels, his food, and so forth, but failed to find a cause for the dysentery. It had lasted so long that I thought malignant disease of the bowel unlikely,

though the man's aspect suggested it. I did what I could for him at the time. I saw more of him, and once on what seemed a trivial matter he practised an elaborate deception upon me, which required him to write a letter containing a deliberate but ill-constructed falsehood. The letter was so unlike the man that I came to the conclusion that it was a symptom of disease, and remembering that writers on the subject in France, where morphinomania is common, speak of untruthfulness as its sequel, I concluded that morphia might be the cause of his dysentery and of his emaciation; and when I saw him next I ascertained that this my conjecture was correct. The group of diseases known as hysterical depend upon the relation of the mind to the body, and whoever fails to remember this will again and again make wrong diagnosis and in consequence employ a mistaken treatment. No medical practitioner will ever excel who does not always keep before himself the fact that in every state of man the mind and the body react upon one another and are parts of a whole. How ought this vast subject to be taught here? I have thought it my duty to consider this question from the beginning since my appointment as lecturer. Our profession trains us to believe nothing in it upon mere authority, but it encourages us to respect experience; so I am inclined, in trying to settle this point, to consider how the subject has been taught,

and to avoid, to follow, or to modify the methods of my predecessors after full consideration of each.

One of the earliest professors of the principles and practice of medicine in London is described by Chaucer. He was one of the companions of that famous pilgrimage which started for Canterbury from the "Tabard" in Southwark. It is highly probable that Chaucer has described the conversation of Dr. John of Gaddesden, a graduate of Merton College, Oxford, and one of the chief physicians of the reign of Edward III. :

" With us ther was a doctour of phisik,
In al this world ne was ther non him lyk
To speak of phisik and of surgerye.
 * * * *

He knew the cause of every maladye,
Were it of hoot, or cold, or moyste, or drye,
And where engendred and of what humour;
He was a verrey parfight practisour.
 * * * *

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

His medicine consisted of a knowledge of these writers. Here upon the table are the works of most

of them: Deiscorides, who, according to the delightful old Greek dictionary of Suidas,* which was edited by the Greek tutor of the founder of the College of Physicians, was physician to Cleopatra; Rufus of Ephesus, who wrote in the reign of the Emperor Trajan; Hippocrates, the father of medicine, whom the physician only knew in bad translations, quotations, and paraphrases; Haly Abbas, who wrote in Arabic in the tenth century, and whose work was translated into Latin about the time this hospital was founded; Galen, physician to Marcus Aurelius; Serapion, the earliest of the Arabian physicians; and Razis, known to the Arabs as Muhammad Ibn Zacharia al Rhasis, whose largest of books, called 'The Continent,' contains all he knew or had ever read, and who lived at Bagdad and died A.D. 932. Avicenna was another Arabian, born at Bokhara about 980, whose two best known works are called 'The Canon' and 'The Canticle.' Constantyn was, in the twelfth century, one of the famous teachers of the school of Salernum, a city where the study of medicine flourished to such a degree that it was known as Civitas Hippocratica, just as the parish of St. Bartholomew's the Less in Smithfield, which is altogether covered by this hospital, might very appropriately be called Parochia Hippocratica. Bernard was the Montpellier professor whom I quoted to you

* Milan, 1499.

at the commencement of my lecture. Gaddesden, the probable original of Chaucer's physician, was a canon of St. Paul's, who called his medical book '*Rosa Anglica*,' "because," he says, "as the rose excels all flowers, so this book on medicine excels all others." Gilbertyn was an Englishman, who wrote his '*Compendium Medicinæ*' in the thirteenth century. I ought to remind you that Chaucer's physician had not these fine editions in which to read his authors. He read them in vellum manuscripts. In the library of St. Paul's Cathedral you may see a specimen of exactly the kind of book he read, beautifully written in double columns. In it there is the following inscription in Latin:—"The gift of Mr. John Somerset. This great Canon of Avicenna, who was a philosopher rather than a physician, as appears in the beginning of the first book by his own statement—the canon, to wit, of valuable meditation and elegant composition—was bought by me of Sir John, rector of the church of St. Michael, Wode Street, London. I am John Somerset, Master of Liberal Arts and Doctor of Law, Chancellor of the Exchequer of England. I give, grant, and hand over to the library of the church of St. Paul of London, there to be kept clean and safe for the perpetual use and honour of the Catholic Church of Jesus Christ. I execute this deed the ninth day of May in the twenty-ninth year of King Henry, the sixth since the Conquest. Thanks be to God."

Lest you should think a poet insufficient evidence I will read you a piece of a matter-of-fact contemporary document—a Bull of Pope Clement V,* dated Sept. 8th, 1308, a date five years subsequent to the completion of his ‘*Lilium Medicinæ*’ by Bernard, with whom I commenced. It begins: “Clemens Episcopus, servus servorum Dei, dilectis filiis universis magistris facultatis medicinæ in Montepessulano Magalonensis Diœcesis commorantibus salutem et apostolicam benedictionem,” and goes on to lay down the course of medical study and to appoint examiners. The candidates are to read—Galen: *De Complexionibus*; *De Malitia Complexionis Diversæ*; *De Simplici Medicinâ*; *De Morbo et Accidenti*; *De Crisi et de Criticis Diebus*. Avicenna: *De Ingenio Sanitatis*. Rasis, Constantine, and Izac on the same subject. Hippocrates: *Techni*, *Prognostics*, or the *Aphorisms* and the *Regimen of Acute Diseases*; and Johanitius and Isaac de Febribus. Medicine was to be learnt by a course of reading and commentating. Such was the method of teaching and of study from the Hebrides to Damascus. In the Isle of Mull physicians of the clan MacBeatha or Beatoun painfully perused Gaelic versions which they had obtained from their teachers, hereditary physicians in Ireland,† O’Hickey, Mac-

* ‘*Mémoires pour servir à l’Histoire de la Faculté de Médecine de Montpellier*,’ p. 45. J. Astruc, Paris, 1767.

† ‘*British Museum Manuscript*,’ additional, 15,582, &c.

Donlevy, and O'Callanan. In England, France, Spain, and Italy a nearly uniform series of writers were read. The first person who taught medicine in St. Bartholomew's Hospital was of this school. I do not know his name, but his existence is known to us from a pupil of his, who always speaks of him respectfully as "magister meus." This pupil was John Mirfeld, a canon of St. Bartholomew's Priory. He was a contemporary of Chaucer, and was a member of the University of Oxford. Passages in his writings seem to indicate that he passed from the community of the hospital to that of the priory. As he was the first medical writer whose works were in part a product of this hospital, I will quote to you part of his introduction as a further illustration of the aspect of medical teaching in the Middle Ages. I have translated it from a contemporary manuscript in the British Museum.* "Here begins the Breviarium Bartholomei. In the beginning of this compilation let us give thanks to God, trusting in whose goodness I have collected certain valuable things medical which I have found in diverse places of texts and glosses on the art of medicine, and in the works of many who treated subtilely and fully of that science; and I pray that a good beginning and a good end may be granted to this my compilation, and that I may be kept from writing in it anything displeasing to God's will, or

* Harleian, 3.

that can do any of His servants harm. If not very learned, I am at least justified in putting down what my short memory would otherwise fail to preserve." Then Mirfeld complains of the modern medical man, from whom, he says, he and his friends have suffered, but adds that modern patients too are hard to satisfy, "*multi infirmi modernis temporibus valde impacientes sunt.*" In older times, he goes on to say, the patients would wait till the fourth or fifth day, so that the peccant material was digested and properly evacuated; but now "*vero nisi statim in primâ die senciant alleviare de medico diffidunt ejusque medicinas respuunt et contempnunt.*" In subsequent chapters he quotes again and again every one of the authors mentioned by Chaucer and the books enumerated in the bull of Pope Clement V, and he also often uses their statements without direct quotation. He sometimes relates cases, but bases no arguments upon them, and does not give any description of the great epidemic of his own century, the Black Death, many of the victims of which he may have seen before they were laid in their graves in Charterhouse Square.

In the Middle Ages the principles and practice of medicine, it is clear, were taught by commentating upon and expounding authors, just as the classics are taught at the present day. With the revival of learning two new methods of teaching appeared—one startling but transient, the other valuable but incom-

plete. Paracelsus, Professor at Basle, when he began his lectures had before him the works of Galen and Avicenna, and a great brazen caldron with a fire in it. Into the flames he flung 'Macrotechni' and 'Microtechni,' 'The Canon' and 'The Canticle,' an expressive way of beginning, and then he went on to lecture. He was not a very clear expositor, but what he said came to this: the old theories are all wrong; let us have a new one. The mediæval basis of medical knowledge was unsound, and his basis, though professing to be new, was in reality of exactly the same kind. The other and more valuable new method may in England be called that of Linacre, the founder of the College of Physicians, a body which has done more to maintain the learning and dignity of medicine than either Oxford or Cambridge, and which has exercised a powerful influence for good on medical study. Linacre's history is an instructive illustration of the effect which the general learning of the day has upon medicine. He went from Oxford, where Greek was just beginning to be taught, to Italy, and there studied under Demetrius Chalcondylas, a citizen of Byzantium, to whom it was a living tongue as well as a literary pursuit. He grew deep in Greek literature, and recognised the superiority of Greek medicine over that of mediæval times. The Hippocratic school observed disease and drew conclusions from their observations. The first step forward was

to make Hippocrates and Galen known in their original language or in accurate Latin translations. To this Linacre devoted himself. He translated several of the works of Galen, and in addition to thus setting before students an example of pure ancient medicine he founded in 1518 the College of Physicians, every Fellow of which was from the first devoted to the new medicine, and which has never been less enlightened since. Linacre's method of teaching was to make students grasp the meaning of the authors of the Greek school, and thus incite them to see patients after this excellent example. The progress of events showed that this was the right method for the time. The actual sayings of Hippocrates and Galen rather than their method were for a time the more respected, but successive steps in the application of their method led to its complete use ; and men learnt gradually that observation, and observation alone, was the true basis of medicine. It is interesting to note how gradually the fourth or modern method of learning and adding to medicine grew from the knowledge of the sound ancient method. First of all Dr. Caius, an inhabitant of this hospital, Linacre's devoted follower, who decorated his tomb, added to the splendour of his college, and was himself the founder of a college, wrote a somewhat dry and crabbed English treatise—'A Boke or Counseill against the Disease commonly called the Sweate or Sweatyng Sicknesse'—of the

greatest interest as the first account from a scientific observer of an epidemic in England. Then came Harvey with his discovery of the circulation of the blood, the greatest aid ever given to medicine by one man. He was well read in Greek science. He himself says that it was a passage in Aristotle which first suggested to him the circulation of the blood. A copy of the opuscula of Galen which is in the British Museum library, and which I discovered to have been Harvey's, is filled with careful notes in his handwriting.* The manuscript notes of his lectures which have been published show what close original observation of medical cases he had made in this hospital and elsewhere. He is the first man of the school of Linacre who not only knew the ancient lesson-book, but practised its lesson to the full. It is true that he did this less in the domain of the principles and practice of medicine than in that of anatomy and physiology.

Francis Glisson, as far as medicine was concerned, went a step further, and published in 1650 his treatise on rickets, the first complete account, clinical and pathological, of a disease by an English physician. Little Britain, the street which passes one of our gates, is not a very splendid thoroughfare, but when I lived in it, as I did in our college most happily for twenty years, I used often to think that it had a

* 'Athenæum,' October 6th, 1888.

learned and literary splendour imperceptible to unlettered eyes, since Glisson's '*Tractatus de Rachitide*,' Dryden's noble poem on the death of Cromwell, and Addison's '*Spectator*' were all printed in it.

Sixteen years after Glisson's book, the '*Observationes Medicæ*' of Sydenham appeared, and here the fourth and last method of teaching medicine begins. It took 150 years to learn the lesson of Hippocrates and the Greeks from the time that the true study of their books was begun by Linacre. Sydenham is unlike every previous teacher of the principles and practice of medicine in the modern world. Throughout his collected works he quotes or mentions Hippocrates exactly twelve times,* mentions Galen† once, and, excepting one passage in which he names thirteen authors who approve of copious bleeding in the plague, he scarcely alludes to any other medical writer of the past. He endeavours to describe diseases exactly as he observed them in patients, and to record the effect of regimen and remedies upon them. Sydenham had made most of his observations on private patients but his method of medicine made obvious the vast importance of hospitals as places of medical improvement and study. He may justly be regarded as one

* '*The Whole Works of that excellent Practical Physician, Dr. Thomas Sydenham.*' The ninth edition, corrected from the original Latin by John Pechey, M.D., London, 1729, pp. v, ix, xvi, 2, 172 (twice), 181, 196, 246, 281, 324, 392.

† Loc. cit., 172.

of their greatest benefactors ; but how very slowly the vast importance of minute and careful records of observations in them was grasped is shown by the fact that Dr. Alexander Marcet,* in 1817, could find no systematic record of cases in any London hospital. Individuals of course kept valuable notes of their own cases. I can myself remember the institution in this hospital of the keeping regularly written records of all cases. What greatly increased observation and care in consequence surround the patients! No better example of the necessary advantage to patients of the study of medicine in relation to their illnesses could be given. Nowhere else can the results of fatal diseases be accurately observed on an extended scale, and it is in its constant reference to morbid anatomy that the teaching of medicine at the present day is superior to that of Sydenham. Not that he would have neglected it if it had been included within his opportunities of observation. The regular use of morbid anatomy in relation to clinical medicine is largely due in England to Dr. Matthew Baillie, whose 'Morbidity Anatomy' appeared exactly a century ago.

I have now described to you four systems of teaching the principles and practice of medicine, viz. (1) the mediæval system or study of compilations and commentaries ; (2) the system of Paracelsus, or the

* 'An Essay on the Chemical and Medical Treatment of Calculous Disorders,' London, 1817.

substitution of a new hypothesis for all ancient hypotheses; (3) the system of Linacre, or study of the ancient observers; and (4) the system of Sydenham, which consists in the observation of patients and meditation upon its results. The first three are obviously limited in their application; the last is the only one which is capable of expansion and of variety of detail. How can we in our time best work it out? My own opinion is that the principles and practice of medicine, like every scientific subject, or indeed every subject, must be taught in the closest relation to the actual facts on which the statements of the lecturer are based. Believing this, my aim shall be to make these lectures illustrate what you can see in the hospital. I shall endeavour to make any medical books and histories of cases which I may have seen or read of, throw light upon things that you may see in the several parts of the hospital, so as to help you first to see what is to be seen, and next to arrange and retain it in your minds. How can I best make the lectures illustrate the hospital? It would not be right, even if it were possible, to exhibit living patients here as specimens. Every proceeding with regard to living patients must in some way or other involve their good. In the wards and the out-patient room the public discussion of their symptoms between teacher and student tends to promote an accurate diagnosis and careful treatment of each case.

The same applies to a clinical lecture on a particular case or set of cases ; the necessary additional and fuller consideration must be of use to the sick man. In a general course on medicine, however, I feel some doubt as to whether it would be right, if it were practicable, to exhibit diseased persons ; and there are, of course, only a few diseases which could be made plain to a large audience. After careful consideration I have decided not to attempt it. I shall try as far as possible, with the aid of the medical registrar, to let you know what cases illustrative of my lectures are in the wards, so that you may go round with the physicians and see them. A further part of your observation I shall direct to the post-mortem room and to our fine pathological museum. By continuation in the post-mortem room of observations begun in the wards you will attain an accurate method of finding out what is the matter with the patient and of knowing what is likely to occur—of diagnosis, that is, and of prognosis. There, too, you may see tested the methods of treatment I shall describe.

In this hospital there is a vast harvest of medical knowledge. You are here to reap it. It is for me to show you how you can do so with most advantage to yourselves, an advantage which is not selfish, since it will be inevitably shared by your future patients. If you go to look at a battle-field, you come to understand the battle best by reading a full account

of it and by studying the map beforehand, then with an informed mind looking at the ground itself, and afterwards again refreshing your introductory reading. If you are visiting a cathedral, it is best to read its history and the description of its architecture first. If you take a book with you it will distract your observation on the spot, and deprive it of all originality. The same rules seem to me to apply to observation in the wards in relation to lectures on the principles and practice of medicine. You will hear what I have to say, let us suppose, on pleurisy. I shall take some trouble to let you know what cases of pleurisy there are in the hospital. When you go round with the physicians you will observe the actual facts of each case. My previous lecture will, I hope, have helped you to observe with instructed eyes, and you can for yourselves confirm and fix in your minds as sound knowledge what I have said, or you can reject or correct it, if it does not accord with your own clinical observations. I will promise to give you some opportunity in each lecture to revise these critical observations. The conditions of your medical study make it difficult for you to read much. You can, perhaps, do little more than peruse some good text-book, such as that of Dr. Hilton Fagge, that of Dr. Bristowe, or that of Dr. Frederick Taylor. Any one of these would be very useful to you. It will be another part of my duty to acquaint you with

the medical library. There is scarcely any medical book, good or bad, which may not be looked through to some useful purpose if read in the light of the observations of the reader; but there are a few great authors who illuminate the mind of their readers, and make them see clearly what they had often looked at but never before fully understood. These are worth reading often. Heberden in England and Trousseau in France are of this rare merit. Then there are new books on particular subjects, such as the admirable treatise of Dr. Gowers on Diseases of the Nervous System, with which you ought to make some acquaintance, even if you have not time to read them through. You will find your medical reading much easier and more interesting if you can spare time now and then to read a page or two in other books than your textbook. After its primary object of making a man ready to observe, the true use of reading in medicine is to make him think. The difference between perfect and imperfect knowledge is not so much in the facts known as in the way they are treated by the mind. Perfect knowledge is that which has been thought over; imperfect knowledge that which has only been remembered. This is particularly noticeable in medicine, where a few observations well thought over will make a man far more useful than the mental retention of abstracts of hundreds of books. I hope I have made clear to you my opinion of the way in which the

principles and practice of medicine can best be taught here—namely, by the foundation of what is said in the lectures upon what may be seen in the hospital; by the use of the lectures as a guide to the cases. It is the way in which the subject was taught by Dr. Peter Mere Latham,* as is clear from those of his lectures which are published. Dr. William Baly's† lectures on Dysentery, though not actually delivered here, show that when he was lecturer his method must have been the same. I know that it is that of my colleague in the lectureship who, with characteristic kindness, has honoured me by his presence to-day. It was that of Dr. Gee, the learned physician whom I succeed. It will not be easy to follow a lecturer so well read in medical books, so full of medical observations, and so clear in the arrangement and the expression of his ideas.

* 'Lectures on Subjects connected with Clinical Medicine,' 1836; 'On Clinical Medicine, comprising Diseases of the Heart,' 1845; 'Collected Works,' edited by Dr. Robert Martin, 1876.

† 'On the Pathology and Treatment of Dysentery,' by William Baly, M.D., 1847 (afterwards Assistant Physician and Lecturer on Medicine at St. Bartholomew's Hospital).

