THE

FitzPatrick Lectures for 1904.

DELIVERED IN THE ROYAL COLLEGE OF PHYSICIANS,
NOVEMBER 8TH AND 10TH.

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LECTURE I.

ENGLISH MEDICINE IN THE ANGLO-NORMAN PERIOD.

[ABSTRACT.]

IN my lectures last year I endeavoured to put together the scanty notices we possess respecting the state of medicine and the medical profession under the rule of the Anglo-Saxon kings, and especially the characteristics of that English vernacular medical literature which forms so striking an episode in the barren and degenerate medicine of the Dark Ages.

We have now to consider what changes English medicine underwent after the rule of the Normans was substituted for Anglo-Saxons.

As I have already shown, the old English medicine disappeared, not immediately, but in the end completely. We have now to inquire what came in its place. First I must emphasize the statement that the Norman Conquest, even if it modified the practice of medicine and the social relations of the medical profession, added nothing to medical science in England. There was no question of a higher culture taking the place of a lower, or deep scientific knowledge superseding what was superficial.

How far the same conclusions can be drawn with respect to general learning and literature as I have drawn with respect to medicine I am quite incompetent to judge; but I will quote a high authority, and one not swayed by national prejudice, the eminent German historian of England—Lappenberg.¹ Speaking of the decay of old English learning and literature after the Conquest, he says:

The collective fruits of the intellectual exertions and experience of the Anglo-Saxon race, contained in a literature richer than that of any of their Germanic brethren, either in expressive prose, or in artistically constructed alliterative rhythmical poetry, the wisdom of hoar antiquity, all the learning, every animating warning, and exhilarating example in national tradition, became lost to the people. Such a loss we should deplore, even if it had been supplanted by something nobler and better. But that which the Normans brought with them was certainly far from being an equivalent, even in point of mere learning.

This judgement gives a wider extension to the conclusions at which I arrived with respect to medicine. The Norman Conquest did nothing to assist, though it did not arrest, the progress of medicine. The old English medical literature continued to be productive, as I have said, for nearly a century after the Conquest, and during this period we find no trace of any Anglo-Norman medical literature. It is not till the second century after the Conquest that we have a true representative of Anglo-Norman medicine—Gilbertus Anglicus—of whom I shall have to speak, the first English physician to acquire Continental reputation. In what respects he differed from the Anglo-Saxon physicians, and what was the cause of these differences, will be considered later.

Although the Norman Conquest did not assist the progress of medical science in England it introduced considerable changes in the social position of the medical profession. It is clear that the Norman aristocracy, not speaking or understanding English, could make no use of the old Saxon leeches, even had they not despised them too much. They must have required physicians speaking their own language, and thus we find the names of several Normans occupying the post of physician to the king or the great nobles. These physicians were exclusively clerical, and were often promoted to high offices in the Church. Among the Anglo-Saxons we do not find mention of high ecclesiastics as themselves leeches, or of leeches reaching high ecclesiastical rank, though they must have been, at least in later times, mostly clerical persons.

But a change began, as I said before, with Edward the Confessor, who took for his physician a Norman monk, Baldwin, afterwards Abbot of Bury St. Edmunds, and Physician also to William the Conqueror. Under the Norman kings there are several instances of Norman or French physicians who became the trusted advisers of kings or nobles, and were promoted to be bishops and deans. The practice of the English leeches

must at this time have been confined to the lower and middle classes who spoke English.

There was another difference between the old English and the Norman physicians which gradually gave the latter a great superiority—namely, that the Normans were educated abroad, as there was no real school of medicine in England; though there is some evidence that medicine was studied in the University of Oxford before 1200, and some medical teaching has been, without good grounds, attributed to Jewish physicians.

All physicians of whom we know anything went to Salerno or, later, to Montpellier for their medical training. The Normans had several bonds of connexion, direct and indirect, with Salerno, which was one of the chief seats of Norman rule in Italy. The most celebrated production of the school of Salerno, the *Regimen Sanitatis*, was written for a king of England, generally supposed to mean Robert, eldest son of the Conqueror, who claimed to be, though he never was, king of England, and who spent some time under the care of the doctors of Salerno on his return from Palestine in 1099. The travels of a Norman noble, Rodolphus Mala Corona, led him in 1049 to Salerno, where he disputed on medicine with a learned matron, supposed to have been Trotula, writer of a treatise which still survives.

Again, as I showed in my former lectures, the one book which connects Anglo-Saxon medicine with the school of Salerno, the treatise *Peri Didaxeon*, founded on a work of Petrosellus, was not written till more than half a century after the Norman Conquest.

It was natural, therefore, for Norman doctors to study at Salerno. But the studies at Salerno itself had materially changed since the days of Petrosellus, that master of the eleventh century who was the only Salernitan author known to the Anglo-Saxons. The old traditional medicine, derived by obscure channels from the Greeks, was metamorphosed, if we ought not to say superseded, by the medicine of the Arabians, brought nearer to Europe after the Mohammedan conquest of Spain.

By the industry of scholars who knew something of Arabic—first of all by the monk Constantine—many of the medical books of the Saracens were translated from Arabic into Latin. These medical books were partly the work of Arabian writers, partly—and herein lay their great significance—Arabic versions of the classical Greek medical writers—Hippocrates, Galen, and others—who were lost or forgotten in Western Europe. Moreover, the works of the Arabians themselves were almost entirely based on those of the Greek authors, so that in effect the translation of the Arabic books meant the introduction, or rather the reintroduction, into Europe of the old Greek medicine, in a corrupt form and in barbarous language, but incomparably more copious than the scanty relics of Greek and Roman medicine with which the Anglo-Saxons and their contemporaries had to content themselves. The revolution thus effected in European medicine was rapid and decisive. The Arabian version of Greek medicine dominated European thought for some four centuries or more, till at the epoch of the Renaissance, by a purer version of Greek medicine and a revival of the best Latin authors, the Arabian school was in its turn dethroned.

Though it is impossible to speak at length about the Arabian-Greek medicine which was now invading Europe, some of its strong and its weak points may be indicated.

The Arabian books and versions of the old Greek books which accompanied them comprised a body of knowledge and experience far beyond what was furnished by the late Latin and Greek authors on whom the Anglo-Saxons and others in the Dark Ages depended. Next, it was a great merit of the Arabian physicians that they banished the supernatural from medicine; they were not dealers in charms, and there is nothing in their medical books like the exorcism of diseases or gathering medical herbs with masses and processions. As the Arabian doctrines prevailed, these superstitions disappeared from the practice of medicine.

Also, the Arabians introduced a knowledge of certain diseases unknown to the ancients, as small-pox and measles, and gave a much better account of some old diseases, as leprosy. They also greatly extended the European pharmacopoeia by the introduction of new drugs and new methods of pharmacy, in addition to distillation and other chemical processes.

On the other hand, the Arabian medicine had in some respects an unfavourable influence. It strengthened, though it did not introduce, the habit of slavish submission to authority and dogma in matters of science. The Moham-

medans differed from the Greeks in basing their most fundamental beliefs on an infallible written dogma. This reverence for the written word, profoundly influenced their scientific as well as their theological creed. The authority of great names like Aristotle and Galen was almost unbounded, and the method of science with the Arabs was like the method of theology, that of reasoning downwards by deduction from the dogmata of the philosophers. If this dialectic method was a bad one in philosophy and other subjects, it was above all harmful in medicine. Moreover, as a set-off to their disbelief in charms, they were ardent partisans of astrology, and this pseudo-science was, with most injurious results, brought into the field of medicine.

The popularity of the Arabian books in their Latin version was very great, and it is curious to trace that as time went on these works were much more read than the Latin versions of the Greek masters. The latter were difficult to understand, and supplied no convenient textbooks for daily use, while the Arabian authors seemed to come nearer to the mediaeval mind, and were thought to be more practical. Even in the seventeenth century Harvey, deriding the Neoterics or moderns, told students to go to the fountain head—to read Aristotle and Avicenna.

For better or for worse, it was this Arabian modification of Greek medicine which ruled in Europe for centuries, and of this Gilbert was no mean exponent.

LIFE OF GILBERT.

It is not easy for any one who has not made the attempt to understand the difficulty of identifying and distinguishing men known by their Christian names only, in an age when surnames were hardly known in the middle and lower classes. Gilberts were numerous in the twelfth and thirteenth centuries and later, as may be seen in the *Dictionary of National Biography*. The Gilbert we are in search of was a physician and known by the cognomen of Anglicus, which implies not only that he was an Englishman, but that he lived or was known in other countries, since a man does not get the name of Englishman in his own country. The oldest collections of English biography, the works of Bale, Pits, and Leland, tell us something about him; but the statements of these writers have to be received with caution, because they give, generally speaking, no documentary or other authority for what they state. Bale says that Gilbertus Anglicus was an eminent physician who had travelled a good deal, and studied in foreign universities; and says that he is highly praised by Symphorien Champier, a physician of Lyons in the early part of the sixteenth century, in his work on illustrious medical writers. Champier speaks of him as "Doctor Desideratissimus."

Pits, who wrote more than half a century later, but says he had gathered his material from old records and documents, gives Gilbert the surname of Legleus (which turns out to be a mistake), and again refers to Symphorien Champier. After speaking of Gilbert's long travels abroad, Pits adds the important statement that he was physician to Hubert Walter, Archbishop of Canterbury, an eminent prelate, soldier, and statesman of the reigns of Richard I and John, who died in 1205. Pits concludes that he "flourished" about 1210, which would mean that he was born in the latter half of the twelfth century.

The biographical writers are, as I have said, not authorities in the modern sense of the word, since they do not give their authorities. But the broad facts alleged by Pits, that Gilbert was physician to Hubert Walter, and lived before and after 1200, must be taken as representing some tradition. Pits could not have dreamed of Gilbert's connexion with the Archbishop, nor had he any object in making up the story.

This tradition may be tested by comparing it with the few biographical details which can be gleaned from Gilbert's own book, the *Compendium Medicinæ*. The first definite fact which is established by a multitude of allusions is that Gilbert studied at Salerno; he speaks of many of the "Masters" by name, and of the Masters generally in such a way as clearly to show personal experience. The time when he studied there is also clearly established by Gilbert's mention of a certain Magister Ricardus, whom he speaks of with the warmth of a personal knowledge, and with such admiration as seems to imply the relation of a student to a teacher. Now Richard's date is well known, because he is spoken of by a physician eminent in his day, Gilles de Corbeil, or Aegidius Corboliensis, physician to the French King Philip Augustus. Now, Aegidius studied at Salerno towards the end of the twelfth century; hence Richard must have been living at the same

time, and that becomes the most probable date for Gilbert's Salernitan studies. This is confirmed by the argument that the Masters spoken of by Aegidius are nearly all also spoken of by Gilbert, and neither of these writers quotes any master who lived later than about 1200.

Another curious point which comes out from Gilbert's book is that he travelled in Syria and must have been there, speaking broadly, about the period of the Crusades, for he says that in the city of Tripoli, in Syria, he met with a certain canonicus who suffered from rheumatism. Now, for a Christian canon to be met with in Tripoli implies that the place must at that time have been under Christian rule, as Tripoli was for many years.

From these references we conclude that, speaking broadly, Gilbert was at Salerno and in the East about the end of the twelfth century, in the time of Richard Coeur de Lion and the third Crusade.

We will next inquire what were the proceedings of Hubert Walter during the same period. This prelate, as Bishop of Salisbury, accompanied King Richard Coeur de Lion on the Crusade. The King met his fleet at Marseilles, sailed August 17th, 1190, and coasted along the shores of Italy to Messina in Sicily. This little voyage occupied six weeks, and it is expressly stated that the English fleet touched at all the principal ports, under which phrase Salerno must have been included, though I do not find it actually mentioned. Richard, with the bulk of his force, remained at Messina through the winter, but Hubert Walter, with Baldwin, Archbishop of Canterbury, and Glanville, the Grand Justiciary, went on in advance and had some sharp fighting before the King arrived the next summer. Hubert became the King's principal adviser, as well as one of his chief army leaders. Having obtained permission to make a pilgrimage to Jerusalem, Hubert had long interviews with Saladin as the King's representative. In October, 1192, Hubert Walter returned with the English fleet to Sicily, though the King himself, as is well known, had a very different adventure. Soon after, Hubert was made Archbishop of Canterbury, and died in 1205.

Now, it is clear that the travels of the Bishop, who was afterwards Archbishop of Canterbury, coincided very nearly both in place and time with those of Gilbert. The two were at, or passed through, Salerno at about the same time, and were also in Palestine within about the same period. They may, for all we know, have met at Salerno, and the English Bishop may have taken away the young English doctor to be his physician, or they may have met in the East; or again, as Pits reports, Gilbert may have been made physician to the Archbishop after his return to England. The facts we have related make the old story quite plausible, and no undue credulity is required to accept it, since both the persons concerned were travellers and crusaders at the same time, and had many possible points of contact.

There is still a part of Gilbert's life involved in great obscurity—namely, that after the death of his patron in 1205. It appears to me most probable that he then went to France, and spent some years, if not all the rest of his life, there. From his quotations of French vernacular words and allusions to French patients, it is certain that he lived and practised in France for a certain time. Also his knowledge of Aristotle and of his commentator, Averroes, is unusual for the period, and could hardly have been acquired elsewhere than at Paris. The introduction of Aristotelian learning into Oxford took place too late to apply to Gilbert.

There is one curious tradition confirmatory of Gilbert's having been a teacher at Paris, that according to M. Littré, there was in the fourteenth century a street in the neighbourhood of the schools called Rue Gilbert l'Anglois. Also I have found him spoken of in a later English MS. as Gilbertus Parisiensis.

There was also a vague tradition that Gilbert not only studied or taught at Montpellier, but was actually Chancellor of the University there. But the French scholars seem now to be agreed that Gilbert or Gilibert the Chancellor was not the same person as Gilbert the Englishman. It is quite possible that Gilbert was at Montpellier; there is nothing improbable in the supposition; but there is no evidence for it. It was probably at this period of his life that he wrote his principal work, the *Compendium Medicinæ*, since it gives evidence of large and mature experience.

The date of Gilbert's death is uncertain. If we suppose that he was between 20 and 30 when he studied at Salerno (1180 or 1190), he must have been born about 1160-70, and might have lived to 1230 or thereabouts; but this is only conjectural.

A definite limit is placed for the date of Gilbert's work by considering what later writers quote him. We find that he is quoted by name in the *Thesaurus Pauperum*—or "Treasury of Poor Men"—a celebrated mediæval book of popular medicine, attributed to Petrus Hispanus, afterwards Pope John XXI (or by some to his father). It is thought to have been written about 1270. A writer of nearly the same time—Theodoric, Bishop of Cervia—who wrote a book on surgery (finished in 1266, according to Haeser), borrows largely from Gilbert, but without acknowledging the debt. Allowing some years for the diffusion of Gilbert's books, this would put him into the first half of the thirteenth century.

It is true that most of the historians of medicine place him later, and their arguments are duly considered in the proper place. I will only mention that Freind, our historian of medicine, asserts that Gilbert quotes a book by Roger Bacon, and therefore must have lived after him, but really the book referred to has nothing to do with Roger Bacon. Freind also argues that Gilbert quotes from Theodoric, whereas the converse is the case; and his other arguments are not much better.

One other eminent man who has written on Gilbert ought to be mentioned—the great scholar and lexicographer, Emile Littré; he contributed a notice of the English physician to the *Histoire Littéraire de la France*, that great encyclopædia of French literary biography begun and mostly written by the Benedictines. Littré admits that Gilbert was an Englishman, but puts him among the French writers, because he brings French forms of speech into his Latin, and speaks of French patients, implying that he lived in France. The latter fact is, I think, very probable; and, if Gilbert was more familiar with French than with English, this would also have been true of his patron the Archbishop, of all the important English prelates and statesmen of that time, and of the king himself, whose ignorance of English was notorious. Gilbert must have been a French-speaking Englishman, that is, an Anglo-Norman. Littré justly criticizes the accounts given by the old English biographers as having no authority, and sets himself to determine Gilbert's date on the strength of one anecdote contained in the *Compendium Medicinæ*. This is an interesting story relating how the writer treated a wound of the eye in a young man belonging to a French knightly family settled in Palestine. The criticisms of eminent Saracen and Syrian Christian physicians are also given, and the prescriptions which they brought out of their books. The story is exactly what one would have expected to hear of Gilbert, and one gives it up with great regret. But, unfortunately, it is only an interpolation in Gilbert's book, and refers to an entirely different person, one Zacharias, who wrote a treatise on diseases of the eye, and is said to have been a Master of Salerno. The passage is indeed marked in the printed edition of Gilbert as "Additio," and cannot have been part of the original work. Since M. Littré's conclusion as to the date when Gilbert lived is founded exclusively on this story, we need not further consider it.

It must be remarked in passing that the histories of medicine generally give very unsatisfactory and indeed inaccurate accounts of Gilbert. Haeser falls into a twofold confusion as to Gilbert, due partly to the mistakes of the old English biographers, and his conclusions are therefore inadmissible.

The best evidence as to Gilbert is to be derived from his own works, and especially from the *Compendium Medicinæ*. Other works attributed to him are a Commentary on the Aphorisms of Hippocrates, which exists in MS. in the Bodleian Library, and an *Antidotarium*, which I have not been able to trace, but they are not important.

The *Compendium Medicinæ* is a large book, making a thick quarto of 724 pages, with double columns of very contracted Latin in the edition of Lyons, 1510; if it were printed in a more extended form it would make a fair-sized folio. This book was printed again at Geneva in 1608 with the title, *Laurea Anglicana*, but, like the works of other English medical writers of the Middle Ages, has never been printed in this country. There are a few MSS. of it in the English libraries.

This book is avowedly a compilation. The prologue says: "Incipit liber morborum tam universalium quem particularium a magistro Gilberto Anglico editus," etc.

Here beginneth a book of all diseases, both general and special, put forth by the Master Gilbert the Englishman, extracted and taken from all authors and from the Practices of the Masters, which is entitled, the *Compendium of Medicine*.

The word "authors" seems to refer to ancient writers; and the word "practica," or practice, was the customary technical word for the short practical treatises issued by "masters" of the school of Salerno, as, for instance, the *Practica Petrocelli*, *Practica Bartholomei*, and others. The whole work is a fusion of ancient classical writers, the newly-translated works of the Arabian school, and those of the modern Salernitan teachers.

Beside these literary sources there are frequent references to the "Magistri," "Magistri Salernitani," "Magistri moderni," etc., as if to contemporaries; and disputations in the school are also alluded to. The *Mulieres Salernitanae*, or female physicians, are once spoken of.

The Greek classical medical writers are often quoted, but evidently from Latin translations; Hippocrates is mentioned 107 times, Galen 59, Aristotle 78, Alexander 14 times, the others less frequently. Among the Arabian writers the most important is Avicenna, whose name occurs 88 times, besides Isaac the Jew, who was an Arabic writer; Johannitus, or Honein, a Syrian Christian, who wrote in Arabic; Rasis, Averroes, and others. All the works quoted had been translated into Latin.

The most frequently-quoted Latin writer is Constantine, whose name comes in 50 times; the other Latins mentioned are nearly all well-known teachers of Salerno, such as Nicolaus (Praepositus), author of the celebrated *Antidotarium*, Ricardus (already referred to) Maurus, Platarius, and others. It is important to observe that all these writers belong to the twelfth century or earlier. No one is quoted who wrote (broadly speaking) after 1200. Some of the names mentioned are quite unknown, and not found elsewhere.

It is very difficult in a short compass to give an account of Gilbert's work. It is divided into seven books: the first on fevers; the second on affections of the head, including diseases of the brain, mania, and so forth; the third on affection of the eyes, ears, and face, including some skin diseases; and the fourth on diseases of the "spiritual" or respiratory organs; the fifth on diseases of the stomach and intestines; the sixth those of the liver, spleen, and kidneys. The seventh book, headed "On Diseases of the Generative Organs," includes some of the most important chapters, such as those on leprosy and on small-pox and measles.

The classification of fevers is very elaborate. We have the usual intermittents—quotidian, tertian, and quartan—each doubled with a "bastard" of the same species, and with other variations—the semitertian, or hemitritus—which might be major or minor; synochus and synocha, the distinction of which puzzled mankind for centuries; causon, and others. These were explained—as were diseases in general—by some fault in one of the four humours—namely, blood, yellow bile or choler, black bile or melancholy, and phlegm. Any of these might be excessive in amount or altered in quality, or in the wrong place; it might, again, undergo putrefaction, either within or without the vessels, and the difference was momentous. Gilbert's account of this subject is chiefly taken from the Arabians, and does not differ essentially from that of some other writers, but is made more tedious by his extreme prolixity, subtlety, and fondness for abstract discussions. He has some marvellous calculations as to the day on which relapse in intermittent fevers was to be expected.

The treatment was based chiefly on this speculative humoral pathology, but Gilbert sometimes shows glimpses of better things. He quotes more than once the saying of Hippocrates that the physician must be *minister Naturæ*—the servant of Nature—and follow her indications by endeavouring to expel the matter of disease. This he contrasts with the teaching of "Maurus and the Salernitans," and implies that by not considering this point those authors fell into error.

In the treatment of all diseases Gilbert attached great importance to diet. For drugs he employed, beside simples, a number of the old compound medicines, called "antidotes," which were popular for centuries, and have left their traces in our modern pharmacopœias. Gilbert mentions altogether more than 200 of these, giving their composition. This is a larger number than is included in the *Antidotarium* of Nicolaus, where there are only about 150. The type of these medicines was the *Theriaca* of Andromachus, the most celebrated remedy of antiquity, and valued up to modern times. Philonium and Mithridate were of the same class, but the antidotes were not exclusively remedies against poisons; they were good for nearly all diseases.

Though little used in the early period of the School of Salerno, antidotes became very popular in the tenth and

eleventh centuries. Besides formulae derived from Galen, the later Greek physicians, and the Arabians, the doctors of Salerno invented many of their own. The origin of some of the antidotes, which bore marvellous and legendary names, is almost past conjecture.

There is a draught, *Potio Sancti Pauli*, so called because the formula was composed by St. Paul; a plaster of St. Peter and St. Paul, the authorship of which is, however, not explicitly assigned to those Apostles, and a Potion of King David. The Ointment of Alabaster, which the Romans brought from Jerusalem at the time of our Lord's crucifixion, was one which Mary and Martha, the sisters of Lazarus, used every day of their lives. *Sal Sacerdotale* was used by the priests at the time of Elias the prophet. *Esdra magna* was composed by the prophet Ezra when he was in exile at Babylon. It contained more than one hundred ingredients, and was good for "all bodily ailments." Agrippa was an ointment used by King Agrippa. *Justinum* was a medicine for the stone, composed and used by the Emperor Justinus. *Usina* was a medicine approved for the same disease by many wise men at Babylon or Constantinople. Some were named after the eminent persons—pope, king, or duke—for whom they were first prescribed.

It should be observed that Gilbert mentions a few *empirica*—that is, superstitious remedies and charms. He says he had not a high opinion of them himself, but he inserted some recommended by old writers to make his book complete. He is very sparing of these prescriptions as compared with the Anglo-Saxons or with the later Latin and Greek physicians. In one instance he recommends a medicine prepared by distillation.

Gilbert's general method of treatment, he says, was that of the modern masters. In one case he speaks of an excellent method of cure recommended by Hippocrates, which, however, he does not give, but follows the modern practice lest he should be thought singular.

Gilbert's observations on leprosy are very important, and formed the basis of much of what was written on this subject by mediaeval authors. Theodorice Bishop of Cervia, Bernard of Gordon, and our own John of Gaddesden borrow largely from Gilbert. His description of the external signs of leprosy is evidently from first-hand observation. He describes very accurately the anaesthesia and other symptoms accompanying what we now call leprosy neuritis, and acutely distinguishes this affection from paralysis. The commonest causes of leprosy were inheritance, corruption of food, or some kind of contagion.

Several methods of contagion were recognized; among others by breath or by "aspectus"—that is, seeing a leper (or perhaps being seen by him). This terrible superstition, not peculiar to Gilbert, explains much of the cruelty of the mediaeval regulations for segregation of lepers. A large part of this account was taken from Arabian writers, but among the mediaeval physicians we cannot find any one who gives so much solid information about leprosy, though we might easily find a more concise and lucid expositor.

Gilbert's account of small-pox and measles must be regarded as on the whole the most important mediaeval contribution to that subject. A collection of the writings of the Arabist writers on these diseases was made in the eighteenth century by Gruner, but he unfortunately omitted the observations of Gilbert, from whom many later writers borrowed.

Gilbert's account is partly drawn from Constantine and from the Arabian authors, who first described those diseases unknown to the ancients; but he gives, in addition, some original observations of his own. He shows that the mediaevals made a clear distinction between variolae and morbilli, which it is sometimes thought they confounded; the chief difference being that the morbillus does not rise above the skin while the variola projects. Gilbert also makes the first definite assertion about the contagion of small-pox, which he says may be caught by sitting near a patient, through the fumes dispersed from him, if the disease be of the infectious kind. I have found no mention of this in Avicenna or Rasis, so far as their works are accessible to us, nor in any mediaeval writer except one of the sixteenth century, who states as his own personal opinion, not as the accepted view, that small-pox is sometimes caught from others. Speaking subject to correction, I must then conclude that Gilbert was the first author to draw attention to contagion in small-pox. We know that even in the seventeenth century the contagiousity of this disease was not generally accepted, and was denied by such a man as Sydenham. Gilbert lays great weight upon the preliminary

symptoms preceding the eruption in both small-pox and measles. Gilbert was also the first writer to suggest a method of treatment in small-pox which has lately achieved great celebrity, namely, that by red wrappings and red objects—or, what is the same thing, by red light. His brief mention of this practice, partly based upon popular tradition, was quoted or repeated by most mediaeval writers on small-pox; till, finally, John of Gaddesden affirms that he actually carried it out in the case of a royal prince whom he brought successfully through an attack of small-pox, without any scars, by wrapping him in scarlet cloth and surrounding him with red hangings.

No anecdote about mediaeval medicine has been more often quoted than this, and Gaddesden has been held up to the ridicule of centuries for his folly, if not denounced as a charlatan. But now it appears that he must be reckoned as a precursor of Finsen, and Gilbert, from whom he got the idea, must also have his share of the credit.

The last two chapters of Gilbert's book are devoted to the hygiene of travellers by land and sea. In his rules of health for sea voyages there are two very remarkable points: one is, he recommends that if drinking water cannot be otherwise purified it should be distilled through the alembic. In this way, he says, nobles can get sea water turned into fresh. Also he recommends passengers to take on board with them dried grapes, leeks, cucumbers, apples, and pears, showing some recognition of the principles of antiscorbutic diet.

If we try to sum up the strong and weak points of Gilbert's work, we must admit that he was a man of very great learning, who had read, perhaps, almost too much; but also of wide experience and some practical skill. He shows considerable originality in his observations, which are by no means commonplace; but he seems to have lacked sufficient courage to strike out an independent line of treatment, following in this the beaten track. In his aims Gilbert was an eclectic; he sought to unite the old teaching of the school of Salerno with the newer doctrines of the Arabian and the revived Greek medicine. His *Compendium* is indeed the earliest attempt at a synthesis of these systems, and must have played an important part at a critical time.

The book had apparently a wide diffusion through Europe, and was sufficiently valued after the invention of printing to pass through two editions. It does not appear to have been more especially valued or more generally read in this country than on the Continent, which perhaps may be explained by the circumstances of the author's life.

REFERENCE.

¹ Lappenberg, *History of England under the Anglo-Norman Kings*, English edition, pp. 142, 143.

BEQUESTS TO HOSPITALS.—Under the will of the late Mr. Richard Calvert, of Preston, £5,000 are bequeathed to the building fund of the Preston and Lancashire Queen Victoria Royal Infirmary, and under the will of the late Mr. Thomas Russell, of Eton Square, formerly of Auckland, New Zealand, £10,000 are bequeathed to the Great Ormond Street Hospital for Sick Children.

THE TITLES QUESTION IN UNITED STATES NAVY.—In his annual report Surgeon-General Rixey, chief of the Medical Corps of the United States Navy, again calls attention to the absurdity of his title, which should be, he suggests, Surgeon-Admiral, since an army title has no place in the naval service. The Surgeon-General's recommendation also embraces a change in the titles of subordinates. He asks that the Medical Director be called "Surgeon-Captain" and the Medical Inspector "Surgeon-Commander," and the Assistant Surgeon "Surgeon-Lieutenant."

INTERNATIONAL CONGRESS OF MILITARY SURGEONS.—At the meeting of the International Congress of Military Surgeons, recently held at St. Louis, Surgeon-General Walter Wyman, of Washington, D.C., formerly first Vice-President of the Association, was chosen President. The winners of the Enno Sanders prize essay contest were announced. The first prizewas awarded to Lieutenant-Colonel William Hill-Climo, A.M.S. (retired), for the best paper on military surgery. The prize consisted of a piece of gold, worth £20, bearing on one side the effigy of Enno Sanders, of St. Louis, the giver, and on the other the inscription, "For the best paper on military surgery." The second prize was awarded to Lieutenant-Colonel Hathaway, R.A.M.C. The prize was a life membership in the Association, estimated at £10. The Congress will meet next year at Detroit, Michigan.