GALEN.¹

[A BIBLIOGRAPHICAL DEMONSTRATION IN THE LIBRARY OF THE
FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW,
DECEMBER 9TH, 1891.]

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At our last bibliographical demonstration I showed you, in the various editions we possess in this library, the works of Hippocrates,² who is often styled the "Father of Medicine." To-night we have on the table before us the works of Galen, who is sometimes termed the "Prince of Physicians." His name is given in various languages as ΓΑΛΗΝΟΣ, Galenus, Galen, Galien. The chronology, or dates of his life, unlike those of Hippocrates, are not involved in any great doubt, for in his own writings there are very numerous autobiographical and historical details,³ which allow of considerable accuracy in tracing his course. As mere dates afford to many of us but slight indications of the period when a man flourished I give here certain dates as landmarks to guide our ideas on this subject:

Claudius Galen, born A.D. 128 or 130, died about A.D. 200.

Lucian (the Greek writer of *Dialogues*, etc.), born about A.D. 120, died about A.D. 200.

The Emperor Marcus Aurelius (the Stoic philosopher), reigned A.D. 161-180.

Polycarp (the Christian martyr), died between A.D. 168-175.

PERGAMUM—"SATAN'S THRONE" THERE.

Galen was born at Pergamum, and so the adjective "Pergamenus" or "Pergamensis" is often affixed to his name, as in the reproduction of Linacre's Latin translation of one of his works printed in Cambridge in 1521. We know that Pergamum was a great medical centre, for it was the seat of an important temple dedicated to the god of healing; we also know that a large statue of Æsculapius, with the figure of a serpent, was a prominent feature of this building. I have not been able to find any representation of this particular statue, but the illustration of a statue of Æsculapius in Pettigrew's *Biographical Memoirs*, vol. i, London, 1838-40, may serve to indicate the prominence given to the serpent in such representations of this god. This figure of the serpent at the temple in Pergamum has been generally supposed by writers on the history of medicine, to afford an explanation of the reference to Satan in the message to the Church at Pergamum, in the Book of Revelation (ii, 13); the words (in the Revised Version) "where Satan's throne is" and "where Satan dwelleth" being understood as referring to the image of this serpent on the great temple there. In another chapter we find a similar association of ideas in the phrases "that old Serpent called the Devil and Satan" (xii, 9); and again, "that old Serpent which is the Devil and Satan" (xx, 2).

Æsculapius with his serpent was undoubtedly a leading divinity in Pergamum, although there were temples there to other deities also; moreover, it seems certain that Pergamum was regarded as one of the principal seats of this god; both of these relationships are indicated by Æsculapius being named "Pergameus Deus." Biblical critics, however, are not quite clear that this reference to "Satan's throne" is indubitably

ably applicable to the serpent on the temple there, although it would seem that no better interpretation is available (see art. "Pergamos" in Smith's *Dictionary of the Bible*).

REFERENCES TO CHRISTIANITY.

This allusion to Pergamum, in the book of Revelation, leads one to ask what opinion, if any, did a learned and acute man like Galen express regarding the growing body of Christians, who were then beginning to influence the history of the world? From the Life of Galen prefixed to Kühn's edition, I find two references to the Christians.⁴ On referring to these, the first is found to occur in the treatise *De Pulsuum Differentiis*, lib. ii, where in the course of an argument he says: "Unless one, from the very outset, were to imitate the school of Moses and Christ, and listen to principles laid down without any demonstration, and that too when it is least becoming to do so" (Kühn, vol. 8, p. 579). The idea in the other reference is somewhat different; it refers to the tenacity with which the Jews and Christians held to their principles. In resenting the obstinacy with which his opponents in argument refuse to admit his conclusions, he says: "For sooner would the disciples of Moses and Christ depart from their own system than those who have been given over to sects, and been constituted philosophers and physicians" (lib. iii, Kühn, vol. 8, p. 657). Another passage has been quoted from Galen, by his Arabian biographer Abu-l-Faraj.⁵ The passage is stated by him to be from a commentary by Galen (now lost) on Plato's *Republic*. It occurs in this beautiful volume, presented to our University by the King of Spain—Casiri: *Bibliotheca Arabico-Hispana Escorialensis*: Matriti, 1760; toms prior, p. 253. The following is a translation from the Latin rendering there:

We have known that that sect, called Christians, founded their religion on parables and miracles. We believe, moreover, that they are very little behind the philosophers in moral discipline; that they practise celibacy, that even many of their women do so; that they love abstinence in food and drink; that they are assiduous in fastings and in prayers; that they injure no one; so that they far surpass the philosophers both in their endeavours after virtue and in their exercise of it. We view with admiration their pre-eminent excellence in equity, in moral probity, in chastity, and in the true accomplishing of miracles."⁶

Passing from Galen's opinions as to Christians and Christianity, let me carry you onwards 1300 years to the earliest translator of his works in this country; I mean the learned Linacre, who founded the College of Physicians in London. I show a facsimile reproduction of his translation into Latin of Galen's treatise *De Temperamentis*, published in Cambridge in 1521. To this reproduction (London, 1881) Dr. J. F. Payne prefixes an interesting account of Linacre himself, from which the following extract is taken:

Linacre when advanced in life, his health broken by study and disease, and near his end, took the New Testament in his hand for the first time (although he was a priest), and read the Gospel of St. Matthew to the end of the 7th Chapter (that is to the end of the Sermon on the Mount). Having read it, he threw the volume away with all the strength he could muster swearing, "Either this is not the Gospel or we are not Christians." It is possible (says Dr. Payne) that the striking contrast between the teaching of the Sermon on the Mount and the practice of the Christian world has inspired many readers with the same feeling, and it will continue to have the same effect on many more, though they may not happen to give vent to their surprise with the same petulance.

One can scarcely speak of Linacre without thinking of Caius who, somewhat later, also translated into Latin some of Galen's works. Dr. Caius, who founded a College in Cambridge, was confessedly one of the most learned men of his time, although his name is perhaps most generally known as

¹ The following have been found specially useful: Dr. W. A. Greenhill: *Art. Galenus*, in Smith's *Dictionary of Greek and Roman Biography*, vol. ii. London: 1870. M. Laboulbène: *Histoire de Galien*, sa vie, ses œuvres, son dernier traducteur, Charles Daremberg, *Gazette des Hôpitaux*, pp. 1041, 1188. Paris: 1882. Dr. T. K. Chambers: *The Bloodletting Question* in Olden Times, *British and Foreign Medico-Chirurgical Review*, vol. xxii. London: 1858. Dr. J. Kidd: *A Cursory Analysis of the Works of Galen*, so far as they relate to Anatomy and Physiology, *Transactions of the Provincial Medical and Surgical Association*, vol. vi, part 1. London: 1837. Dr. E. Gasquet: *The Practical Medicine of Galen and his Time*, *British and Foreign Medico-Chirurgical Review*, vol. xi. London: 1867. Puschmann (Th.): *A History of Medical Education*, translated and edited by Evan H. Hare. London: 1891. Works on the History of Medicine and on Medical Biography should also be consulted by those desiring to study the life and works of Galen, such as Le Clerc (D.), *Histoire de la Médecine*. Amst.: 1723. I am indebted to Mr. Duncan, our Librarian at the Faculty, for writing out some translations for me from the Latin version in Kühn's edition of Galen's works.

² See *Glasgow Medical Journal*, April, 1892.

³ M. Laboulbène says these references have been collected by M. Goulin, but I have not had an opportunity of referring to his book.

⁴ The writer there says: "Acerrimus est Galenus contra Christianos et Judaeos esquisque succenset, quod legibus nulla earum demonstratione facta obtemperant." Kühn, vol. i, p. xlii.

⁵ About Faradj (Gregory), often called "Pharajius" and "Bar-Hebraeus," lived in the thirteenth century; he was a "Jacobite Christian." See *Dictionnaire des Sciences Médicales: Biographie Médicale*, Paris, 1820; also, Leclerc (Lucien), *Histoire de la Médecine Arabe*, tome i, Paris, 1876, p. 191.

⁶ In *Historia Compendiosa Dynastiarum*, Authore Gregorio Abul-Pharajio, *Malatensi Medico*, edited by Ed. Pocock, Oxon., 1663, p. 78, we find almost the same words quoted from Galen, but referred to his commentary on the *Phaedo* instead of the *Republic*: "At etiam in explicatione sua libri Platonis de moribus cui titulus *Phaedo*, Videbis populum istum qui Christiani appellantur, disciplinam suam enigmatibus et miraculis superstruxisse, neque Philosophis veris opibus cedere, continentiam amare, in jejuniis et orationibus continuos esse, ab injuriis abstinere, atque esse inter ipsos homines qui se mulieribus non polluunt."

a character in Shakespeare's play of the *Merry Wives of Windsor*, where he is held up to ridicule as a French simpleton.

GALEN AS A PHILOSOPHER.

Galen, we must remember, was a philosopher as well as a physician. Indeed one of his treatises is entitled "*Quod optimus medicus sit quoque philosophus*." He wrote many philosophical works, and his name is perpetuated in Logic in connection with the fourth figure of the syllogism. Some doubt has indeed been expressed as to his being the inventor of this figure, but M. Daremberg says that it is certain that it occurs in Galen's *Introductio Logica*.⁷ Galen was evidently a man of great natural ability, versed in philosophy, an expert anatomist, an experimental physiologist, and a physician of great experience. He was also a writer of enormous industry, as the portions of his works which have survived, now placed on the table, may show you at a glance; but further, his writings extend over such a wide range in medicine as to be of an encyclopædic character, the whole welded together into a consistent system by a master mind. No wonder, therefore, that Galen's name held an undisputed sway till Paracelsus attempted to overthrow his authority; and indeed long after that time he was virtually regarded as infallible.

EDITIONS OF GALEN.

The editions of Galen's works which I place before you are amongst the best and the most useful. We have not in this library a copy of the celebrated "Aldine" edition, with the Greek text only, published in five folio volumes, at Venice, in 1525. I show, however, the one published in Basle in 1538, also in five folio volumes, with the Greek text alone. It may interest some to know that the initial letters in this edition are supposed to have been carved by Holbein, who was in Basle about this time, and whose work lay very much in this direction. Although Galen practised his profession for many years in Rome, he wrote exclusively in Greek, as, indeed, it was common at that time for philosophers there to do. The Latin translation, in three large folio volumes, now before you, was published in Basle in 1562; it contains a preface and life by the learned Conrad Gesner. On the title page of the first volume there are some curious and interesting illustrations of certain passages in Galen's experience, to which I will refer by-and-by.

The edition which for many years has been principally referred to is the Greek and Latin text of Kühn, consisting of this long range of twenty octavo volumes, with 1,000 pages or thereby in each, published in Leipzig, 1821-1833. There are really twenty-two volumes, two being double; the first volume is largely taken up with a life of Galen and a bibliography in great detail; and the last volume is occupied by an index. It is to this edition that references are here given.

Another edition by Renatus Charterius in thirteen folio volumes, Paris, 1679, was much referred to before Kühn's appeared. It contains the works of both Hippocrates and Galen, and has a Latin translation as well as the Greek text.

A French translation by Daremberg, in two volumes, entitled "*Œuvres Anatomiques, Physiologiques et Médicales de Galien*," Paris, 1854-56, is of very special value, so far as it extends. Its title page bears that it is preceded by an introduction containing a bibliographical, literary, and scientific study by the editor; in the preface this study is announced as about to follow (constituting a third volume); but it never appeared, and it is to be feared the MS. is lost. (*Laboulbène: Gazette des Hôpitaux*, 1882, p. 1187.)

Of English translations, there are none except those by Gale: "Certaine Workes of Galens called Methodus Medendi," beginning with "The Third Booke of Galen, called in Greeke *θεραπευτικόν*; in Latine, Methodus Medendi," and going on to the "sixt;" also "Clausus Galeni de Tumoribus preter naturam;" and "An Epitome upon Galens three bookes of naturall Faculties." This edition of Gale's, which I show, was published in London in 1586; the bulk of the volume consists of a translation from Vigo.

⁷ Daremberg "*Essai sur Galien considéré comme philosophe*," Paris, 1847 (?); (*Extrait de la Gazette Médicale de Paris*). "Grâce à la découverte de M. Mynas signalée plus haut, nous savons maintenant que Galien mentionne véritablement cette quatrième espèce de syllogisme dans l'*Introductio Dialectique*." A footnote refers to *Introductio Logica*: "Ouvrage récemment découvert au Mont Athos et publié par M. Mynas, Paris, 1844."

J. R. Coxe: "The writings of Hippocrates and Galen epitomised from the original Latin translations," Philadelphia, 1846, may also be mentioned, but I have not seen this work.

Dr. Broadbent has translated into English, in his little book on "The Pulse," London, 1890, part of Galen's "*Libellus de Pulsibus ad Tirones*."

SECTS IN GALEN'S TIME.

It is scarcely within the scope of this demonstration to enter into a discussion of the sects existing in Galen's time, or even of Galen's doctrines; these require quiet study by yourselves. But I will read the following short extracts, which may put these matters before you sufficiently for our present purpose. Dr. Adams says (*Paulus Aegineta*, vol. i, p. 12, London, 1844:—

[Various Sects.] "The empirics held that observation, experiment, and the application of known remedies in one case to others presumed to be of a similar nature constitute the whole art of cultivating medicine. Though their views were narrow and their information scanty when compared with some of the chiefs of the other sects, and although they rejected as useless and unattainable all knowledge of the causes and recondite nature of diseases, it is undeniable that, besides personal experience, they freely availed themselves of historical detail and of a strict analogy founded upon observation and the resemblance of phenomena. To this class we may refer Scribonius Largus, Marcellus, Plinius Valerianus, and a few others. The sect called the Rational, Logical, or Dogmatical, holding that there is a certain alliance and connection among all the useful and ornamental arts, maintained that it is the duty of the physician not to neglect any collateral science or subject. They therefore inquired sedulously into the remote and proximate causes of disease, and into the effects of airs, waters, places, pursuits, food, diet, and seasons in altering the state of the human body, and in rendering it more or less susceptible of morbid changes. Looking upon general rules as not being of universal application, they held that the treatment ought to be modified according to the many incidental circumstances under which the patient might be placed. They freely and fully availed themselves of whatever aid they could derive from experience, analogy, and reasoning. Hippocrates, Galen, Aëtius, Oribasius, Paulus Aegineta, Actuarius, and all the Arabian authorities may be looked upon as belonging to this sect. The Pneumatic sect, to which Aretæus probably belonged, was nearly allied to the Dogmatical. The sect of the Methodists, rejecting altogether the consideration of remote causes, which they held to be of no importance to the cure, and giving themselves up to too bold classification of diseases, according to certain hypothetical states of the body in which they were supposed to originate, fettered themselves too much with a few general rules, which they held to be so universally applicable that they would scarcely allow of their being modified by incidental circumstances in any possible contingency. The only perfect model of ancient Methodism that has come down to us is Cælius Aurelianus. Moschion and Theodore Priscian belonged to this sect; Alexander of Tralles also had a considerable leaning to its principles, and some would even refer the illustrious Celsus to this class, but probably without good reason, for he would rather seem to have imbibed the genuine spirit of Eclecticism, and, like his distinguished correspondent Horace, to have been "Nullius addictus jurare in verba magistri."

[Galen's Doctrines.—The essential distinctions of Galen's doctrines are thus briefly summarised and given by Pettigrew (*Biographical Memoirs of the Most Celebrated Physicians and Surgeons*, etc., vol. ii, London, 1840:—

He holds the end and object of medical science to be to preserve the parts of which the body is composed in a natural state, and to endeavour to establish their functions when disordered. Hence he deduces the necessity of a knowledge of anatomy. The parts of the body he considers as simple or compound, similar or organic; having for their elements fire, water, air, and earth, of which the qualities are heat, cold, moisture, and dryness. According to the predominance of any one of these qualities over the other is determined the condition of the body:

⁸ Lists of the various treatises and editions may be found in the first volume of Kühn's edition; likewise in the articles on Galen in the *Dictionnaire des Sciences Médicales*, *Biographie Médicale*, Paris, 1821; and in *Dezobriert: Dictionnaire historique de la Médecine ancienne et moderne*, tome ii, Partie 1, p. 450, Paris, 1834; also in *Fabricius: Bibliotheca Græca*, Liber IV, cap. 17 (*Eulogium Galeni chronologicum*, Auctore Philippo Labbeo), Hamburgi, 1708.

while they are balanced health is maintained, when they are disturbed disease results. Health, therefore, consists in the just proportion of the four elements. When he comes, however, to explain the origin of sickness, as produced by any defect of the elements or improper mixture of them, he is under the necessity of calculating the varieties of temperament as dependent upon qualities and combinations. Hence he is led to exercise his imagination; to depart from nature, and indulge in sophistical conjecture. His remedies are directed by the same consideration. When a part naturally hot becomes cold means must be taken to restore that which is lost, and *vice versa*. He admits, with Hippocrates, four humours—blood, phlegm, yellow, and black bile—these correspond to the four temperaments. By the aid of the four humours and the four elementary faculties, he attempts to explain the nature and origin of all diseases, and also the qualities of all substances employed as medicines.)

In trying to give some idea of Galen's works we have to consider him as (1) a philosopher and critic; (2) a Hippocratic scholar and commentator; (3) an anatomist; (4) an experimental physiologist; (5) a physician versed in diagnosis and practice; (6) a surgeon.

The first need not detain us, as I have already spoken of him in connection with logic, and the further discussion of such subjects does not fall to me. The last, again, may also be dismissed shortly, as Galen's reputation as a surgeon has never been great; his practice in this direction having apparently been small. The following is an extract from Galen's translation of the 6th Book of the *Therapeuticon*, where, speaking of wounds of the head, Galen says:—

I had also gone about to try the like waile of curing, if I had continually remained in Asia, but seeing I have bidde at Rome, I doe followe the manner of the Citie, committing the greatest part of such works to those whom they call chirurgions (*Galen's Translation*, London, 1586, p. 124).

(To be continued.)

THE CHIEF SECRETARY AND THE GRIEVANCES OF IRISH DISPENSARY DOCTORS.

We regret to learn that Mr. Jackson, the Chief Secretary for Ireland, has declined to receive a deputation in reference to the Poor-law Officers Superannuation Bill, the assigned reason being that there would be no likelihood of its passing into law this session. We are quite aware of the difficulties with which any measure, other than those brought in by the Government, is likely to meet with in the press of business now before Parliament. But the measure to which we refer is peculiar in this, that it is the Bill of Mr. Gladstone's Government. It was brought in by the late Mr. Forster, and its provisions are of such a character that it could not meet with any serious impediment. If it were now introduced by Mr. Jackson, it would have the support of the Opposition, under whose guidance it formerly reached a second reading.

We confess, then, to a feeling of disappointment that the Parliamentary Secretary of the Irish Government should decline to make a proposal which would most probably be accepted. Mr. Jackson can hardly be aware of the hardships endured under the present law. As the recent Secretary of the Treasury, he knows that officers in the civil service are assumed to have reached unfitness for the comparative serenity of office work at 65, and that practically all officials must retire at that age; but he may not know that an Irish dispensary doctor is supposed to be fit to do the work of a district twenty miles long by twelve wide at the age of 84 or more. The contrast is remarkable, but such is the fact as the law now stands.

We need hardly point out how absurd all this is. Mr. Jackson's refusal to make an attempt to remedy it will raise a storm of indignation amongst the Poor-law officers and their friends in Ireland, and even on the low ground of policy rather than justice we can see how great a mistake has been committed. The present Chief Secretary has already raised a cry against himself by some of his appointments, and it is unfortunate that he has now thrown away a splendid opportunity for redressing grievances which everyone admits ought not to be allowed to exist for twenty-four hours.

THE DISPENSARY DOCTOR'S HOLIDAY.

We are very gratified to announce a firstfruit of the movement which we have been endeavouring to urge forward for the redress of the Irish dispensary doctor's many grievances. The committee of management of the Longford Dispensary District advertises for a medical officer to be elected on

March 16th, and makes this pleasant addition: "One month's leave of absence to medical officer will be given annually, without deduction for substitute's fees." The committee and the board of guardians which assented to this arrangement deserve to be specially praised for their enlightenment and as the first to accede to one of the reasonable claims which have been made by the dispensary doctors. The concession is a most important one, and will have a far-reaching influence, we hope, in Ireland. In the first place, it means a practical small increase of salary to the medical man who may be appointed, since he will not now have to pay £3 3s. a week to a substitute when he takes a well-earned rest. In the second, it means that in this particular union all the other medical officers will receive a holiday. That is the necessary result of what has been done, as the guardians must have seen. In the third place, the excellent example set is sure to be followed by other committees of management and boards of guardians, and we hope that before long we shall find the granting of a free holiday the universal rule in Ireland.

We ask our friends whose interests we have shared in helping to note this as an immediate result of the agitation which has been set on foot, and as an encouragement to continuous and untiring work in the direction to which they have set their faces. For the first time their case has been fully brought before the general public. We attribute this largely to the free circulation of the articles which have appeared in the *BRITISH MEDICAL JOURNAL*, and to the aid of the lay press in Ireland, among which we must specially mention the *Irish Times*, which has summarised our "Analysis" in a series of admirable articles. We think we are justified in congratulating our brethren in Ireland on this hopeful augury, and the Longford guardians and committee on their wise and liberal policy.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the Offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

NOTICE OF QUARTERLY MEETINGS FOR 1892. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 13th, July 6th, and October 26th, 1892. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 16th, and October 5th, 1892.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—The next meeting will be held (by kind permission of the Treasurer) in the Court Room of St. Thomas's Hospital (entrance from Westminster Bridge Road), at 8.30 P.M., on Wednesday, March 16th. Dr. Rutherford, Physician to the Samaritan Free Hospital, will read a paper on the Use of the Galvanic Current in Diseases of Women. Cases of clinical interest from the wards of St. Thomas's Hospital will also be shown. All practitioners, whether members of the Association or not, will be heartily welcomed.—HECTOR W. G. MACKENZIE, M.D., Honorary Secretary, 77, Lambeth Palace Road, S.E.