

**An introductory lecture to a course of lectures on clinical medicine,
delivered in the theatre of the London Hospital, Saturday, January 31, 1829
/ [James Alexander Gordon].**

Contributors

Gordon, James A. 1793-1872.
London Hospital (Whitechapel, London, England)

Publication/Creation

London : Compton and Ritchie, 1833.

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For the Author

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INTRODUCTORY LECTURE

TO A

Course of Lectures

ON

CLINICAL MEDICINE,

DELIVERED IN

THE THEATRE OF THE LONDON HOSPITAL.

BY

JAMES A. GORDON, M.D.

PHYSICIAN TO THE LONDON HOSPITAL.

Second Edition.

LONDON :

PRINTED FOR THE AUTHOR,

By Compton and Ritchie, 23, Middle Street, Cloth Fair.

1833.



TO

WILLIAM COTTON, ESQ. F.R.S.

MY DEAR SIR,

THE warm interest you feel in the welfare of the London Hospital, and the liberal and extended views you take of its sphere of usefulness in promoting medical science, would have induced me to dedicate to you this Second Edition of a Lecture intended to forward the purposes you have so much at heart, even if a deep sense of private friendship had not made me solicitous to connect your name with anything interesting to the feelings or reputation of

Your faithful and obliged friend,

JAMES A. GORDON.

2, Finsbury Square, March, 1833.

A LECTURE.

I HAVE the honour to appear before you to commence a Course of Lectures on Clinical Medicine, the object and scope of which is, practically to demonstrate the treatment of disease, and thus lead you to apply, at the bedside of the patient, to the relief of human suffering, the fruits you may have derived from your previous studies and observation.

The origin of Medicine was essentially clinical; and it is no less curious than instructive to trace, in the history of our art, how a method of teaching so conformable to reason has been often lost in the dreams of a vain philosophy, and has only occasionally glimmered forth in a few master-spirits, until the principles on which it is founded were immutably established in the glorious effulgence of Lord Bacon's Philosophy.

The remembrance of relief derived from accidental causes in particular disorders, and the traditionary preservation of these observations for the benefit of others, or, in fact, experience guided by analogy, must have constituted the earliest rudiments of Medicine as an art. But the human mind soon became restless and dissatisfied with the possession of mere facts; and we accordingly find, that in the earliest ages, in Egypt and in Greece, various dogmas were advanced to explain the relief thus obtained. These being abandoned, as the progress of knowledge developed their futility, an empirical, or system of medicine strictly experimental, succeeded, to which school, essentially Grecian, the great Hippocrates belonged. Soon, however, the Grecian philosophers, more especially of the Platonic school, applied their theories to the explanation of disease; and under the auspices of Diocles Carystius, these speculations, crude and vain as they were, had acquired such ascendancy, that they were preferred to the experimental method.

The result of such conflicts between the advocates of hypotheses and experience was, that as the imperfections of the former became evident and rendered them untenable, the latter was debased ; and experience, which in the school of Hippocrates had been rational empiricism, became, in the hands of Herophilus and his disciple, Philinus Coius, blind empiricism. Boldly declaring that they placed more faith in medicines than in the medical art, they were properly the founders of the Empirical School.

The corpuscular theory of Epicurus again introduced hypothesis into medicine, and from this sprung the sect of the Methodics, who, feeling the insufficiency of their doctrines, returned to experience ; and Agathæus Spartanus had the rare merit, by combining the dogmas of the Methodics with experience, to found the " Eclectic School." To this, in his youth, belonged the celebrated Galen, but he afterwards departed from it ; and, by uniting the subtleties of the Academy with the doctrines of the Peripatetics, he formed a theory of his own, which, adopted by the Arabians, interpolated by the chemists, and modified by various other sects, ruled the republic of medicine with an iron sway, until the influence of Lord Bacon's Philosophy, and the labours of Forestus, Schenk, and Sydenham, finally delivered our art from its trammels.

Were it possible in this brief sketch to enumerate all who have acknowledged the superiority of experience to theory, I should not fail to pay a tribute to Baglivi, Huxham, Zimmerman, and De Haen : it is sufficient, however, for my present purpose to have demonstrated, that even before Lord Bacon's time, every improvement in medicine arose from experience, not hypothesis* ; and that whenever physicians abandoned their only safe guide, they were obliged, by painful and signal failures, to abandon hypothesis and return to observation.

To the influence of what is termed Lord Bacon's Philosophy, medicine, in common with all other sciences, is indebted for the overthrow of the Scholastic system, and for the establishment in its stead of the method of induction

* F. Bayle de *Experientia et Ratione conjungenda*. 1678.—J. A. Hofstetter de *Experientia et Ratione tanquam fulcris et principiis cognoscendi in arte medica*. Halle, 1705.—D. H. Lavater, *Dissert. de nexu Theoriæ e praxi*. Göttingen, 1801.

from observation and experiment. As I believe that clinical medicine can only be properly taught by the practical application of these principles, I am induced to make a few observations on the nature and object of Lord Bacon's Philosophy, which I shall do by quoting at some length the words of an admirable living writer*. "Since the spirit of Lord Bacon's Philosophy began to be rightly understood, science has advanced with a rapidity unexampled in the history of all former ages. The great axiom of his philosophy is so simple in its nature, and so undeniable in its evidence, that it is astonishing how philosophers were so late in acknowledging it, or in being directed by its authority. It is more than two thousand years since the phenomena of external nature were objects of liberal curiosity to speculative and intelligent men. Yet two centuries have scarcely elapsed since the true path of investigation has been rightly pursued and steadily persevered in; since the evidence of experience has been received as paramount to every other evidence, or, in other words, since philosophers have agreed, that the only way to learn the magnitude of an object is to measure it; the only way to learn its tangible properties, is to touch it; and the only way to learn its visible properties, is to look at it. Nothing can be more safe or more infallible than the procedure of the inductive philosophy as applied to the phenomena of nature. It is the eye or the ear-witness of every thing which it records. It is at liberty to classify appearances; but then, in the work of classifying, it must be directed only by observation. It may group phenomena according to their resemblances; it may express these resemblances in words, and announce them to the world in the form of general laws: yet such is the hardihood of the inductive philosophy, that though a single well-attested fact should overturn a whole system, that fact must be admitted.

"In submitting, therefore, to the rules of the inductive philosophy, we do not deny that certain sacrifices must be made, and some of the most urgent propensities of the mind put under severe restraint and regulation. The human mind feels restless and dissatisfied under the anxieties of ignorance: it longs for the repose of conviction;

* Chalmers' Evidence and Authority of the Christian Revelation: article, "Christianity," in Brewster's Edinburgh Encyclopædia.

and, to gain this repose, it will often rather precipitate its conclusions, than wait for the tardy lights of observation and experiment. There is such a thing, too, as the love of simplicity and system—a prejudice of the understanding, which disposes it to include all phenomena under a few sweeping generalities—an indolence, which loves to repose on the beauties of a theory, rather than encounter the fatiguing details of its evidences—a painful reluctance to the admission of facts, which, however true, break in upon the majestic simplicity that we would fain ascribe to the laws and operations of the universe. Now, it is the glory of Lord Bacon's Philosophy to have achieved a victory over all these delusions; to have disciplined the minds of its votaries into an entire submission to evidence; to have trained them up in a kind of steady coldness to all the splendour and magnificence of theory; and taught them to follow, with an unflinching step, wherever the sure though humbler path of experiment may lead them."

However obvious and unanswerable these principles may appear, the application of them to medicine has not always been attended with the success anticipated; and one great cause of the failure has been pointed out by a writer, of whose works I may, without any partiality of friendship, say, that they are admirable models of clinical research:—I allude to my esteemed friend and preceptor, Dr. Abercrombie*.—"We often," says this author, "talk of the philosophy of Bacon, without fully recognizing the important truth, that the philosophy of Bacon and Newton consists entirely in ascertaining the universality of a fact. If medicine is ever to attain a place among the inductive sciences, its first great step towards this distinction will be made, when medical inquirers agree to restrict these investigations to ascertain the universality of a fact. By adhering to this rule, we shall avoid two errors which have been frequent in medical reasonings, and have had no inconsiderable influence in retarding the progress of medical science. The one is the construction of hypothetical theo-

* Vide Preface to "Abercrombie on Diseases of the Intestinal Canal."

There are also some excellent observations on medical hypotheses and reasonings in Dugald Stewart's "Elements of the Philosophy of the Human Mind," vol. ii, p. 459, the careful perusal of which I earnestly recommend to the medical student.

ries, or the assumption of principles which are altogether gratuitous and imaginary; the other is the deduction of general principles or conclusions from a limited number of facts."

It is in this cautious and humble spirit that I shall endeavour to teach clinical medicine, feeling, as I do, with Hildenbrand, "*Melior omnino nulla foret, quam hypothetica medicina, phantastica et futilis, tot hominum sacrificis cruenta;*" and convinced as I am, with Abercrombie, that the object of physical science is, to ascertain the universality of a fact.

In thus guarding you against a system of medicine purely hypothetical, I am not combating an imaginary evil. The love of theory is the error which most easily besets young and intelligent minds: it is the offspring of limited experience, and often arises from an honourable anxiety to avoid the imputation of "practice without principles," if such an anomaly can be called by any other term than quackery.

Perhaps this subject may be more forcibly illustrated by considering the distinction not unfrequently made between medicine viewed as a science, and medicine considered as an art. The *science* of medicine comprises the principles, or the knowledge we derive from physiology and pathology of the functions of the body; the manner in which these functions may be deranged, and the means in our power of acting upon them in a state of disease. The *art* of medicine consists in the practical application of these principles to the cure of particular diseases. It appears almost superfluous to point out the necessary dependence of the science and the art upon each other; the inadequacy of theory without practice, and the fallacy of mere practical knowledge without an acquaintance with the principles on which it is founded.

The fatal error into which an hypothesis may lead a practitioner received an awful illustration in the history of the memorable fever which raged at Leyden in the year 1699*, and which consigned two-thirds of the population of that city to an untimely grave; an event which, in a great measure, depended on Professor Sylvius de la Boe,

* Paris's Pharmacologia, vol. i.

who, having just embraced the chemical doctrines of Van Helmont, assigned the origin of the disorder to a prevailing acid, and declared that its cure could alone be effected by the copious administrations of absorbent and testaceous medicines. But it is not necessary to go so far back for illustrations of a fact which must be familiar to us all. Let us imagine a young physician issuing from the university, with all the blushing honours of his *Alma Mater* full upon him—very much impressed with the omnipotence of his art—possessed of ten or fifteen characters by which every disease may be correctly ascertained and distinguished from all that resemble it, and, at least, as many remedies which are infallibly calculated to make the disease fly before him. Place him at the bedside of the patient!—Who can paint his disappointment and embarrassment, when he finds all his rules fail him? When a case, for instance, of affection of the brain proves fatal, with coma and dilated pupil, without having at all followed the course prescribed in the books for the progress of hydrocephalus; and when another patient dies in two days of an affection of the abdomen, which wanted some indispensable character of enteritis? His astonishment will be still farther increased when he finds a secret power at work which baffles all the rules of the schools; and when he finds diseases prove fatal, which, according to these rules, have been treated with the most rigid accuracy. Thus the fallibility of his principles is gradually and painfully forced upon him, and he is obliged to acknowledge, with an eminent person of the last century, “that when he was a young man he knew forty remedies for every disease; but now he knew forty diseases for which he had no remedy at all.”

Let us now reverse the picture; and if I have spoken with some severity of mere hypothesis, how much more keenly might we depict “practice without principles?” How should we catch the ever-varying lineaments of the many-headed monster, “empiricism,” in all its shades and gradations, from the man, not of one idea, but of one drug, up to the respectable and regular practitioner, who has a particular remedy for each and every disease, without knowing what the disease really is, or in what organ of the body it is seated?—the empirical knowledge preached and

acted upon by nurses and *Lady Bountifuls*, and by practitioners who deserve to be ranked with them, confounding in their frightful confidence one disease with another, treating colic for enteritis, and rheumatism of the intercostals for pneumonia !

The correction of both these errors is the great object of a clinical course, in which the attention of the student is directed to disease as it really exists ; and thus supposing him to be, as he ought, acquainted with the principles of his profession, theory and practice are made mutually to aid and correct each other. Here he will also soon begin to learn a painful truth—the uncertainty of his art, even when entered upon with every possible advantage ; and understand the necessity which the conscientious practitioner feels of carrying along with him the principles by which a clinical course is regulated—the daily necessity of correcting his previous impressions by the facts which come before him—of altering his confidence in the distinctive characters of disease, and the action of remedies. The uncertainty of our art, indeed, has not escaped the sneer of the philosopher nor the sting of the humorist, and has been made the frequent theme of wit and ridicule. The following apologue, says D’Alembert, made by a physician, a man of wit and philosophy, represents, very well, the state of medicine :—“ Nature is fighting with the disease :—a blind man armed with a club, that is, the physician, arrives to settle the difference ;—he first tries to make peace ; when he cannot accomplish this, he lifts his club and strikes at random. If he strikes the disease, he kills the disease ; if he strikes nature, he kills nature.” This story, which the humorist applies to the art itself, may not unaptly fit those who exercise it on unsound principles ; and few of us there are who have not, in our experience, seen specimens of practice in which the random blows of the blind man may be recognized.

I have thus endeavoured to point out the indispensable connexion of theory and practice, and clinical study as the only vinculum, or tie, by which they are to be united. I have adverted to the uncertainty of medicine, as a motive to perpetual exertion, and depicted our profession as one of daily study as well as daily toil. I have done this advisedly, feeling that, in addressing an audience of me-

dical students, it is my duty, as it is my pride, to impress upon you the extent and dignity of a profession, to excel in which requires a greater compass of knowledge than any other art—a greater variety of liberal accomplishments—and a quicker and readier application of these to the wants, necessities, and afflictions of mankind.

In the earliest ages, the necessity of clinical instruction was so far felt, that physicians were in the habit of taking pupils to the bedsides of their patients, and there demonstrating the nature and treatment of disease. The earliest traces, however, of an institution specially devoted to clinical instruction, are to be found at Pavia, as early as the sixteenth century. In more modern times, Delbonus founded a clinical establishment at Leyden, which was greatly improved by Boerhaave (1714); and on the plan of Boerhaave all the continental clinics were formed, especially at Vienna, under the guidance of Van Swieten and De Haen. It is discreditable to us, that whilst clinical schools have been long recognized as indispensable and integral parts of every foreign university, they are, with the exception of Edinburgh, comparatively a novelty in this country.

A clinic has too often been made a stage for dramatic and affected exhibitions, or for hazardous and ill-directed experiments. It ought, simply, to be an establishment in which the physician and his pupil should do every thing as they would in private practice; not as if the pupils were learning a lesson in an hospital, but beginning to practise for themselves, with the advantage of having a more experienced practitioner with whom they may consult*. The cases selected for clinical examination ought, when practicable, to be placed in a separate and distinct ward; because the time and attention necessarily bestowed upon such patients are apt, in the common ward, to convey to the others the impression that they are neglected, and, at

* On my return from the Continent in 1818, I established and edited the first two volumes of the "Quarterly Journal of Foreign Medicine and Surgery;" and in the first volume of that work the reader will find, in an article on Vienna, an account of Professor Von Hildenbrand's clinic, written by my friend Mr. Mackenzie, of Glasgow, being the first of a series of articles undertaken by that gentleman and myself, on the German schools, which we had together visited.

the same time, to excite alarm in individuals thus distinguished. A clinical ward should be sufficiently large to permit, without injury to the patient, the frequent observation of the student*. The cases admitted should be comparatively few in number, that these observations may be conducted, in the words of a celebrated author, "*adcuratè, pensiculatè et patienter*," and the students will then not be mere runners after cases "*qui multa non multum videre volunt* (Stoll), but calm and unprejudiced observers of morbid phenomena. The diseases treated of in a clinical ward should be primarily those of ordinary and frequent occurrence; and although cases of a rare nature will occasionally come before us, yet I shall ever bear in mind, that my duty to you requires me to teach the management of the more common disorders, because these are not only the most frequent, but the most dangerous, and require, above all, that decision and tact which can only be acquired by clinical study; "*neque in vulgatissimis morbis omnia semper vulgaria sunt*." (Max. Stoll.) On the admission of each patient I shall give a slight view of the nature of the disease—its probable progress—the chief objects to be kept in view in the treatment—the rules of diagnosis by which it may be distinguished from diseases which resemble it. Secondly, during the progress of the case, I shall direct your attention to the effects of the remedies used—the good effects of some—the failure of others—and the changes which take place in the system. Thirdly, at the conclusion of the course, I shall review the progress and treatment—the resistance of the disease to the rules of art—and the mistakes we may have made in the application of these rules.

To err is human, and all men are mortal; and some of the cases on which we have bestowed the greatest attention will terminate fatally. Our object will then be, by a careful examination, to illustrate more fully the nature of the disease—the fallacy of our prognosis—and the failure of our remedies: without this, all our previous observations are vain; and the careful cultivation of morbid or patho-

* Von Hildenbrand, "*Initia Institutionum Clinicarum*." *Viennæ*, 1807.—J. P. Frank, "*Plan d'Ecole Clinique*," 1790.—J. G. Hofrichter, "*De Arte Clinica in nosocomiis oportune addiscendis*," 1795.—A. Roschlaub, "*Über den Nutzen eines wohl eingerichteten medic. Clinicums*," 1803,

logical anatomy, as it is termed, must be viewed as the great means of correcting those unsound systems, which speculative physicians construct in their closets on the one hand; and of exposing, on the other, the futility of the rules of the empirical practitioner.

The origin of pathological anatomy may be dated as far back as the sixteenth century, although it hardly at that time deserved the name of a science, consisting only of a few detached observations on the injuries of particular organs. Antonio Benivieni, of Florence*, was the first who directed his attention to the subject, by publishing observations on scirrhus of the stomach, ulcerations of the epiploon, and biliary calculi and polypi. His example stimulated other anatomists to open bodies, in order to study the alterations produced by disease. Kenneman† (1568) described different species of calculi: Salius Diversus‡ examined the state of parts in inflammation of the brain; and Schenk§ collected in his work all the curious cases which the opening of bodies had discovered up to that period. Wier|| gave an account of several diseases of the genitals: Marcellus Donatus (1588), Forestus (1597), Fabricius Hildanus and Daniel Sennert (1637), respectively contributed to improve pathological anatomy by the light which they threw on particular diseases. The greater part of these observations were, as you may well suppose, disfigured by the superstitions of the times, but they are nevertheless really valuable and curious. The same observation applies to the works of Tulpius**, Vesling††, Blasius‡‡, and Van der Wiel§§. We must not omit to mention our illustrious Harvey, who opened a vast number of bodies in order to discover the causes and seats of disease, which he would have published, but for his untimely death.

Although several excellent works on this subject were published by Willis, Wepfer, Zernel, Plater, Pison, Syl-

* De abditis nonnullis ac mirandis morborum et sanationum causis. *Flor.* 1507. In 4to.

† Calculor. in corp. hum. gener. xii.

‡ Curat. quorund. particul. morb. *Bonon.* 1584.

§ Observat. Med. *Basil.* 1584.

|| Observat. Med. *Basil.* 1609.

** Observat. Med. editio quarta. *Amstel.* 1672.

†† Observat. anat. et epist. Med. *Hafn.* 1664.

‡‡ Observat. anat. in hom. sim. equo, etc. acced. extraord. in hom. repert.

§§ Observ. rarior. anat. *Lugd. Bat.* 1687; *Lugd. Bat.* 1674.

vius, Baillon, &c. no complete work on pathological anatomy existed before the publication of the "Sepulchretum" of Theophilus Bonetus*. On the plan of this work Morgagni wrote his great work, "De Causis et Sedibus Morborum," the very mention of which is sufficient to excite in every student an enthusiastic reverence for his memory. Lieutaud, who is next in chronological order to Morgagni, has been, I humbly conceive, too highly extolled. In endeavouring to avoid the prolixity of Morgagni, he has fallen into an opposite extreme, and his 3584 observations are merely so many insulated facts without connexion. In Germany, Ludwig† endeavoured to reduce his observations in a narrow compass, to form, as it were, a table of organic injuries, without extending his design to general views, and without following any other arrangement than an anatomical one. The same remark applies to the works of Conradi‡ and Voigtel§.

We have not time to pursue this subject as minutely as I could wish; but in the history of pathological anatomy I cannot forbear paying a passing tribute to Senac|| and J. F. Meckel¶, on diseases of the heart; Camper, on diseases of the arm and pelvis; and our own great and lamented countryman Baillie.

In France, Bichat considerably advanced the study of pathological anatomy by pointing out the analytic manner in which it ought to be studied: Reil pursued the same plan in Germany; but the most learned and useful work published already, is from the pen of the celebrated Meckel, of Halle, possessor of the anatomical collections of his forefathers, as is he also the inheritor of their talents**.

* Sepulchretum anatomicum, seu anatomica practica ex cadav. morb. donatis. *Genev.* 1679. 2 vol. in fol.

† C. F. Ludwig, Primæ. lineæ anat. *Lips.* 1785. 8vo.

‡ Handbuch der Pathologischen Anatomie. *Hannover,* 1796. 8vo.

§ Handbuch der Pathologischen Anatomie, vol. iii. *Halle,* 1804. in 8vo.

|| Traité de la structure du cœur, de son action et de ses maladies. *Paris,* 1749. 2 vol. in 4to.

¶ Physiologische und anatomische Abhandlung von ungewoehnlicher Erweiterung des Herzens, &c. *Berlin,* 1775. In 4to.

** See a very interesting paper in the "Journal Complementaire du Dictionnaire des Sciences Médicales;" par J. F. Lobstein: intended as a Supplement to the articles "Anatomie Pathologique de Laennec et Bayle," in the Dictionnaire des Sciences Médicales, tom. xi, pp. 46 et 61.—See also Dr. Craigie's admirable work on Pathological Anatomy; decidedly the most comprehensive and useful treatise on the subject.

In presenting you with this brief history of pathological anatomy, I am not unmindful of Lord Plunket's observation, that history without philosophy is a mere almanack. Now the philosophy of pathological anatomy—a philosophy extracted from the loathsome pursuits of the dissecting-room—appears to me to consist principally in the necessity it inculcates of daily correcting our previous impressions of disease, and adhering with unshaken firmness to the method of induction from observation.

Nothing, perhaps, can prove in a more satisfactory manner the importance of pathological anatomy than the improvement which has taken place, within these few years, in our knowledge of diseases of the heart. Corvisart, in his work, "*Sur les Maladies et les Lésions organiques du Cœur*," was the first who has afforded us any thing like a satisfactory account of the organic derangements to which the heart is liable. It will be remembered, that the learned author states, that enlargement with thickness generally takes place in the left ventricle; and that it most frequently occurs in the young and strong; in those who have a sanguine temperament, who engage in manly exercises, and are subject to violent passions. He mentions the symptoms to be, redness of the face, violent beating of the heart, discernible to the eye and hand, throbbing of the carotids, and a strong, hard, and vibrating pulse. These points were universally admitted by physicians, until M. Rostan proved, by numerous dissections, that such appearances were most frequently observed in the old, feeble, and infirm; and, what is more to our present purpose, had been in life attended by all the signs of debility, a livid face, an irregular, small, soft, and easily compressed pulse. The result, therefore, to which M. Rostan came, and one at which he could only have arrived by means of pathological anatomy, was, that dilatation with thickening of the ventricle is not the result of great strength or power of constitution, with activity of healthy action.

Organic disease we shall investigate under three different aspects.

*1st. The anatomical examination of the organ which is altered in structure

*Lobstein.

2d. The physiological examination of the same organ, with a view to discover how and by what means the organic change has been effected.

3d. The relations between the organs altered in structure and the vital phenomena, or the symptoms and phenomena of the disease.

Stimulated by the continental writers, the importance of pathological anatomy is now fully recognized among us; nay, let me not be thought fastidious when I remark, that it has acquired an undue importance. I mean to say, that students, hearing the encomiums deservedly passed on this study by more experienced and more fully educated men, are apt to anticipate, from the mere inspection of bodies, that knowledge which can only result from a laborious comparison of symptoms with appearances; and they moreover frequently neglect, in their ardour, those collateral branches of medical education which, aided by indefatigable study, can alone render pathological anatomy subservient to the relief of their fellow-creatures and their own advancement in the profession.

Of my own qualifications to conduct a clinical course I speak with unfeigned diffidence; of my zeal and anxiety to do it worthily, with unbounded confidence: need I add, that my endeavours will be fruitless unless met, on your part, with diligence and attention. I shall defer to our next lecture the method I recommend for exploring disease, and, on the present occasion, allude only to two points, attention to which is indispensable, in order to render our joint labours profitable to ourselves and our patients.

1st. Cultivate a spirit of observation, and remember that there is a vast difference between the vague observation of mere curiosity, and the solid observation of true diligence. Attention constitutes this difference, and therefore *Æsculapius* was depicted with a serpent, because, among the antients, the serpent was the symbol of attention*. The accurate observer takes in many circumstances which escape a less careful eye. He embraces, in his inspection, all the symptoms which denote disease, and not insulated or detached portions of them: he is bound by no hypothesis; he has no preconceived theory to establish; but his obser-

* Hildenbrand.

vations are made in a spirit of sincerity, and they are confirmed by frequent repetition: he draws a wide difference in his mind between attention and that subtlety which sees phenomena that never existed, and detects the whole cause in the minutest trifles. This is the observation which can alone lead to *experience*; and remember, gentlemen, that experience is the work of a life. Real experience is the knowledge of truths observed by the senses, with the power and disposition to apply them to useful ends. It implies, besides tact in observing, an extensive and accurate knowledge of the facts ascertained by others—a memory tenacious in retaining, happy in recognizing, and quick in reproducing the combined parts of observation and study; and, lastly, that intellectual vigour to combine, and rapidly to arrange into a whole, different phenomena; that “*ars quædam videndi et inveniendi quæ verbis dici non potest, et quam natura paucis concessit. Medicus, sicuti poeta aut miles, natus sit oportet*”.

2dly, and lastly. In your clinical practice, cherish humanity and minute consideration for the comfort of the poor.

The opportunity which this class of our fellow-creatures affords for the acquisition of experience, is an equitable return for the refuge and succour they receive; and if your observations are conducted in a proper spirit, they will be rather gratified than hurt by frequent inquiry. I have seen a very different spirit most justly excited in patients, by discussions held in their presence on the probable danger of their disease, and even the possible appearances on dissection. Avoid such cruel babbling: remember, also, that sickness is a selfish and engrossing feeling; and pardon the irritation of pain, or the testiness of weakness. I might, indeed, appeal to your self-interest, and tell you, on the authority of the best and wisest of our profession, that the manner in which the student treats his hospital patients adheres to him through life; and that the churl betrays himself hereafter, at the moment, perhaps, most detrimental to his interest. I prefer, however, reminding you, that “you are members of a profession which contributes to the moral happiness as well as to the bodily

* Haller.

sanity of mankind. Other professions have their evident importance, and, from requiring all the great virtues, are rewarded with wealth and honour; but none, like this, winds itself into an intimacy with the secret heart of man, and thus obtains his confidence and acquires his love. Indeed, it must be so, since, perhaps, half our diseases spring from mind, and the cure of these depends more upon benevolence, kindness, and discretion, than upon medicine itself. Hence we may, I think, observe, that while the distinguished in other professions are more outwardly honoured, the friend of the sick room is most personally loved*."

Indeed, I may add that, to my mind, a chief glory of the profession to which I have the honour and happiness to belong, is to be considered that exalted feeling by which the physician learns to disregard the fictitious distinctions of rank, and to contemplate before him, simply, a human being, and that being suffering. In the palace of the monarch, surrounded by all that the world calls good, and in the cottage of the peasant, encompassed with squalid want and breathing pestilence, the physician must be the same; he must exhibit the same tender sympathy for the objects of his care—the same zeal for the promotion of medical science—the same intense feeling for the awful responsibility of human life. He learns to contemplate this dread responsibility—not according to the measure which holds in this transitory state of things, but by light reflected from that futurity, where the fictitious distinctions which exist in this world are to cease for ever. Thus judging and thus acting, the conscientious physician moves in an atmosphere peculiarly his own—removed from the haunts of other men, and connecting himself in the cultivation of his art with other scenes and other times: and deeply feeling all the solemnity of this impression, and the frequent inadequacy of the best resources of his art, he learns to cultivate a feeling of dependence on that Almighty Being in whom he moves and lives, and without whose aid he can do nothing.

* Ward's "Tremaine."

APPENDIX.

HEADS OF THE HISTORY OF A CASE.

- I.—General account of the patient, as to
 age;
 employment.
 Habit of body :
 whether full ;
 spare ;
 emaciated ;
 florid ;
 sallow.
 Habits of living as far as known
 temperate ;
 intemperate ;
 accustomed to full living,
 or, to privations ;
 active exercise,
 or sedentary, &c.
- II.—Leading symptoms complained of,
 or spontaneously mentioned by the
 patient, when generally questioned
 in regard to his complaint.
- III.—Further symptoms elicited by ques-
 tions put to him, in regard to the
 condition of various functions.

While we take, in the first instance, the patient's own statement of his leading symptoms, we are constantly to bear in mind, that this is not really to be relied upon as our guide to the nature of the disease. For what he feels most uneasiness from, and, consequently, mentions as the prominent symptom, may, in fact, not be one of leading importance ; and circumstances of the first importance he may even keep out of view altogether, either from not considering them as essential, or, perhaps, from not attending to them. Thus, when a medical man mistakes strangulated hernia for ileus, it is no excuse to say, that the patient did not mention the tumour in his groin, for the physician ought to have discovered it in his examination of the case ; and in such a

case, the patient will often tell you, that he did not consider the tumour as of any consequence, or at all connected with his disease, or, perhaps, that he had not attended to it. In the same manner, a patient may complain of incontinence of urine, or frequent calls to discharge small quantities, while, in fact, accumulation is going on, and an attentive practitioner would discover a distended bladder.

In various other instances, what the patient chiefly complains of may be merely a symptom common to various disorders, very different in their nature; and it is only when questioned by the scientific physician, that he is led to mention circumstances essential to the diagnosis. He complains, we shall suppose, chiefly of vomiting, and scarcely alludes to any thing else; but the physician has to discover, by an appropriate cross-examination, whether the leading symptom be dependent upon mere disordered stomach, or gastritis, enteritis, affection of the brain, affections of the kidney, &c. Another may complain chiefly of cough, and can give no farther light into the nature of the affection, and the physician must elicit circumstances calculated to ascertain whether this leading symptom be connected with disease of the larynx, bronchiæ, lungs, liver, &c.

IV.—Circumstances discovered by examination of the organs more immediately concerned.

This is a point of the utmost importance, and one which cannot be too strongly impressed upon the attention of students. From want of attention to it, they will often see the most grievous errors committed by the careless, random practitioner. Complaints referred to the stomach, for example, may, after the most particular account which we can elicit from the patient, show no other characters than those of a dyspeptic affection, while an accurate examination of the patient, when in bed and undressed, may lead to a discovery or organic disease of the stomach itself, or of some of the organs adjoining to it. The same observation applies to diseases of other internal organs, as the heart, the uterus, &c. We have seen several very striking examples of persons wasting under obscure uneasiness in the bowels, with a degree of looseness, but the calls not frequent, the motions healthy, and nothing morbid to be discovered by the most careful examination of the abdomen externally; but by examination by the rectum, cancerous ulceration was discovered so high up, as to be barely within reach of the finger.

V.—Condition of the leading functions, as,

Pulse—weak or strong;

frequent, natural, or slow;

regular, irregular, intermitting.

In judging of the pulse, various cautions are to be kept in mind. Thus in certain diseases, it will be found natural in the morning, and frequent at night. This is what is called hectic fever, when it occurs in its regular paroxysms. It occurs chiefly in affections of the lungs, but may also take place in connexion with unhealthy suppuration in other parts. In such cases, therefore, the pulse is not to be judged of until examined at various times of the day. In persons of irritable habits, the pulse rises to great frequency on the entrance of a physician, and subsides very much, perhaps to the natural standard, on sitting a little, and talking cheerfully on different subjects. A physician has occasion constantly to keep this in mind, and make allowance for it, especially in females. When it can be done, it is often of great consequence to know the usual rate of a person's pulse when in health, as there are considerable varieties in it. Thus we may find persons whose pulse in

health is not above 40; others in whom it is 80 or 90. Now in a person whose pulse was naturally 40, the frequency of 80 would indicate a high degree of fever, while, in another, this might be the natural standard of health. Some persons, again, have naturally an irregular pulse; and in these it sometimes becomes regular during febrile diseases. A peculiar pulse is sometimes met with, which has a double beat; that is, a strong and a weak beat alternately. This is only felt when the pressure of the finger on the artery is very light. A little more pressure restrains the weak beat entirely, and the strong one only is felt. In counting such a pulse, then, we may find it, according to the degree of pressure, either at 70 or 140. We have observed this kind of pulse in continued fever, and in affections of the thorax. The most common rate of the pulse is about 72 in the minute. Increased frequency occurs in all febrile and inflammatory diseases. Diminished frequency is met with chiefly in connexion with diseases of the brain.

Skin—hot, cold;
parched, moist;
hot moisture;
cold, clammy moisture.

The temperature of the skin is about 95, but in fever it is sometimes as high as 105. This is ascertained by placing a thermometer under the tongue, or in the axilla. Increased temperature indicates fever, and coldness, generally, denotes sinking of the vital powers, and occurs chiefly in the low state of typhus, and in internal inflammations; in which case it generally indicates gangrene, but not necessarily; on the contrary, it may often be recovered from, even under the most apparently alarming circumstances.

Respiration—quick, slow, oppressed.

Usual frequency of respiration is about 18 in a minute. It is generally supposed to observe a certain ratio to the pulse, or one respiration to four pulsations. In fever, therefore, the respiration may be increased in frequency without indicating any thoracic disease. This occurs most remarkably in children. In thoracic diseases the frequency of breathing is often increased as high as 60 and even 80 in a minute. This, when permanent, always indicates a high degree of disease. But paroxysms of quick breathing occur in females as an hysterical affection; we have seen it in such cases as high as 80 in a minute. Slow breathing occurs chiefly in connexion with oppression of the brain. It also occurs in certain states of exhaustion of the vital powers. It is always a symptom deserving minute attention, and generally indicates alarming disease.

Appetite—good, lost, capricious, voracious.

Thirst—

Sleep—watchfulness, disturbed sleep, somnolency.

Sensorium—distinct, delirious, forgetful, imbecile.

Tongue—clean; foul but moist; parched;
clean, but raw and tender.

In the appearance of the tongue, the circumstances to be attended to are chiefly three:

1. A loaded but moist tongue, sometimes assuming the appearance of a brownish crust, and sometimes a white coating, as if covered with milk. The former may occur in mere dyspeptic affections, but generally indicates some constitutional disturbance. The latter occurs chiefly in fevers of an inflammatory character, and in most inflammatory diseases.

2. A dry parched tongue, of various colours, generally brownish, often quite black. This usually indicates fever of a typhoid character, and, in febrile diseases, the change of the tongue from the white and moist, to the parched and brown aspect, is to be watched with the utmost attention, as indicating an unfavourable change in the case, and one which will probably require considerable change in the treatment.

3. A clean, but raw and red state of the tongue, with tenderness, sometimes minute ulcers. This is generally connected with disease of the mucous membrane of the stomach and bowels, and usually indicates disease of an alarming character. It will often be found to be accompanied by an aphthous state of the throat.

Bowels—slow, obstructed, loose; character of evacuations, whether scybalous feculent and consistent, feculent but watery, watery and dark, mucous, bloody, puriform, &c.

Urine—scanty, turbid, retained, suppressed, over-abundant, diabetic, bloody.

Menses—suppressed or profuse, &c. &c.

VI.—In reference to diseases of particular classes, particular functions require to be more closely attended to than in this general view, as,

A Diseases of the brain—intellectual functions, sight, state of pupil, hearing, speech, paralytic affections.

B Diseases of thorax—respiration, action of the heart, quantity and quality of sputa, state of lungs, by percussion and auscultation. In the application of the stethoscope certain leading facts easily learnt.

PERCUSSION.

The hollowness of the sound elicited by percussing the chest depends upon the quantity of air contained within it. Sonorosity is increased, therefore, in pneumo-thorax and emphysema of the lungs; it is diminished in hepatization of the lungs, where masses of tubercles exist, in empyema, and in all cases in which the air-cells are obliterated.

AUSCULTATION.

The application of audition to the discovery of the sounds produced by the respiratory and cardiac movements in health and disease.

LUNGS.

1. Diseases of the Trachea and Bronchi :

Ronchus Sonorus gravis	}
----- Sibilans	
----- Mucosus	

These sounds depend upon partial diminutions of the diameters of the bronchial tubes, the results of inflammations of the mucous membranes, or upon the presence of mucosities.

2. Diseases of the Pa enchyma.

Ronchus crepitans occurs whenever fluid is deposited in the air-cells, as in the first stage of peri-pneumonia, in œdema pulmonum.

It may also be heard in emphysema, particularly the interlobular species.

Pectoriloquy, or the passage of the voice *articulated* up the tube of the stethoscope, always indicates the presence of a cavity. Varieties—perfect, imperfect, &c. depending upon the size, complete emptiness of the cavity, and its free communication with the bronchial tubes.

3. Diseases of the *Pleura*.

Œgophony.—Peculiar resonance of voice, depending upon a thin layer of fluid deposited between the costal and pulmonic pleuræ.

Tintement Metallique always indicates the co-existence of air and fluid between the pleuræ. In this case also the succussion of the chest will produce *fluctuation*.

Absence or presence of respiratory murmur depend upon the permeability of the lungs to air. It is not heard, therefore, in hepatization, in empyema, &c.

HEART.

Signs, divisible into four orders :

1. Extent of pulsation is proportionate to the increased size of the heart. Exceptions in nervous persons.
2. Impulsion, the force of, is proportioned to the increased thickness of the parietes of the heart.
3. Rhythm varies according to the disproportion of the different parts of the heart; thus in hypertrophy of the ventricle, the ventricular contraction is rendered longer.
4. Noise. The noise of the heart's contraction is proportionate to the thinness of its parietes.

ANOMALIES OF SOUND.

- a Bruit de soufflet,
- b Bruit de scie,
- c Bruit de rape,

depend upon contracted orifices of bloodvessels at their origin from the heart, or upon nervous disorders.

Fremissement cataire depends upon the same general causes as the bruit de soufflet, &c.

C Abdominal diseases—careful examination of various organs, patient in bed, and abdominal muscles relaxed, state of bowels, and minute attention to character of evacuations.

D Urinary diseases—quantity, sensible chemical properties of urine, state of urethra, prostate bladder.

The morbid states of the urine are well worthy of attention, and the student will do well carefully to peruse the scientific and practical works of Dr. Prout and the late Dr. Marcet on this difficult subject.

VII.—Aspect, &c. of the patient—

whether full, florid ;
emaciation ;
hectic flush, with emaciation ;
expression of countenance ;
posture in bed, &c.

Feelings of patient, as to strength, lassitude.

Much is often learnt from the aspect of the patient. Thus of two patients who present themselves, complaining of the same symptoms, referred, we shall suppose, to the stomach, we may be able, by the healthy aspect of the one, to say, at once, that he is a mere dyspeptic or hypochondriac, disordered probably by over-feeding; and from the emaciated appearance of the other, to ascertain that he is sinking under some organic disease, affecting the digestive organs. Diseases of the heart, in like manner, are often strongly marked by the appearance of the countenance, and may be pronounced upon without putting a single question to the patient.

VIII.—History and progress of the disease.

Date of first attack.
Causes to which it was ascribed.
Nature of first symptoms.
Changes which took place subsequently, leading to those taken down as the present characters.
Remedies that have been employed.
Effects of these, as far as can be learnt.

Previous state of health, when it can be obtained; state of constitution of the family; hereditary diseases.

DIET TABLE OF THE LONDON HOSPITAL.

COMMON DIET.

	PER DAY.	BREAKFAST.	DINNER.	SUPPER.
Sunday -	12 oz. Bread 1½ pint Beer, men 1 pint do., women	Gruel	8 oz. Beef, baked	1 pint Broth
Monday -	Ditto	Gruel	8 oz. Mutton, with boiled Rice and Potatoes	1 pint Broth
Tuesday -	Ditto	Gruel	8 oz. Potatoes, and Soup with Vegetables	1 pint Broth
Wednesday	Ditto	Gruel	8 oz. Beef	1 pint Broth
Thursday -	Ditto	Gruel	8 oz. Mutton, with boiled Rice or Potatoes	1 pint Broth
Friday - -	Ditto	Gruel	8 oz. Beef	1 pint Broth
Saturday -	Ditto	Gruel	8 oz. Potatoes, and Soup with Vegetables	1 pint Broth

MIDDLE DIET.

The same as Common Diet, except that 4 oz. of Meat shall be given instead of 8 oz.

LOW DIET DAILY.

8 oz. Bread	Gruel	Broth	Gruel or Broth
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FEVER DIET.

The same as Low Diet, but without Bread.

MILK DIET DAILY.

12 oz. Bread	Gruel	1 pint Milk	1 pint Milk
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JEWS' DIET.

Four-pence per Day, with Bread and Beer, when on Full or Middle Diet; but when on Low, Milk, or Fever, Diet, no Money.