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INTRODUCTORY LECTURE
TO
THE COURSE
ON THE
THEORY AND PRACTICE OF MEDICINE,
At the Bristol Medical School—Session 1842-3.
By Dr. SYMONDS.

GENTLEMEN,—The course on which we are about to enter is devoted to the Theory and Practice of Medicine—the science and the art—the knowledge of the phenomena of disease, their relation to agents which cause, or remove, or diminish them, and the application of that knowledge to particular exigencies.

A science consists of the description of a collection of facts, and of reasonings upon those facts. What are the facts of which medicine is composed? They are such as the following:—It has been observed that sick persons sometimes lie helpless, prostrate, insensible to all that passes around them, speechless, or muttering inarticulately; or that they are violently excited by ordinary perceptions, starting at a footfall, thrown into convulsions by the opening of a shutter, and incessantly raving; that they complain of burning thirst, refuse food, reject it when swallowed; or that they shudder at the sight of liquids, and that they devour the strangest substances; that they pass days or weeks, or more, without excretion, or that they are hourly subject to evacuations; that their skin is dry as parchment, or as sodden as a wet sponge; that they are racked with aches and pains, cramped and distorted with spasms; or that they are benumbed and palsied, feelingless, motionless. It is observed that they have tongues dry, rough, and encrusted, or dripping, glazed, and unnaturally clean; that they breathe pantingly or heavingly; that they have pulses fleeting away at railroad speed, or limping, fainting, fluttering; and so on.

These are facts; but independently of any wish to prevent the recurrence of such events in man's history, we naturally ask what, in a scientific point of view, is to be made of such heterogeneous facts? In other words, we cannot be content to detail or hear them detailed—we must reason upon them. Now to reason, as I observed on a former occasion, is to find the relations of things, in obedience to an instinctive propensity, common in less or greater degree to all mankind—and one of the first relations we discern, or seek for, is that of likeness, and the act of so discerning or seeking is called comparison. We should ask, are all sick persons so affected, or may these phenomena be collected and arranged in groups, observed in different individuals? How are they produced?—by agents within the body or out of it? Do they continue, or do they last only for a time, and then disappear? Do they reappear at certain periods, or

do they only remit?—or do they end in death? Are they removable, or only susceptible of abatement by remedies? In obtaining answers to a thousand such questions we get the science of medicine.

Technically, medicine is divided into Symptomatology, Pathology, Semeiology, Ætiology, and Therapeutics. On each of these divisions I shall make a few general remarks.

Symptomatology is, as the word imports, the doctrine of symptoms. Symptoms are literally things that happen together in a sick person. They are such changes of the patient's vital actions, feelings, movements, and so forth, as are taken cognizance of by his own senses, or by the senses of those about him. The totality of these is sometimes considered the disease, as in fever; or some one of them, to which the others are viewed as secondary, as phrenitis. The patient's case is an enumeration of the symptoms from their onset to their final disappearance. To a certain collection of symptoms coexistent, or occurring in a certain series, a particular name is given, and it becomes a species. The classification of cases with an appropriate nomenclature, is called nosology. In a given case to recognise an assemblage of symptoms, as described by others under a certain specific application, is to make a diagnosis. But this term is sometimes applied to the discrimination of the case from some other form of disease with which, by reason of a certain degree of likeness, it might be confounded. In modern use, diagnosis is also applied to the recognition of the proximate cause of the symptoms, or the pathology of the case.

Till comparatively recent times all that was most valuable in medical science was comprehended under symptomatology—the knowledge of the order of the symptoms, and of their yielding or resistance to remedies. Much pathology was mixed up with it, but being the result of mere mental speculation rather than of the observation of nature, it was good for little.

What, then, is pathology? It proposes to treat of the nature of diseases, their essence. It is not, like symptomatology and nosology, busied in merely enumerating and arranging morbid phenomena, but it treats of the alterations in the body from which those manifestations of disorder take their origin. It goes, so to speak, to the root of the evils. The pathologist is not satisfied with knowing that a patient has a foul tongue, a pain in the stomach, a quick pulse, and a hot skin; but he must know, if possible, why these symptoms have occurred, what relation they bear to some less obvious sources of mischief, the removal of which is necessary before the former can be expected to vanish. Now these fundamental lesions, like symptoms, are deranged vital actions, or the effects of such derangements; but they involve organs more intimately connected with life than those from which

arise the most of what are called symptoms; and they are for the most part deep-seated, lying in viscera which are enclosed in cavities shut out from sight. How, then, are we to recognise them? By the following methods: the study of physiology, of morbid anatomy, and of chemistry. Pathology, indeed, is morbid physiology. Physiology alone will not tell the structural alteration on which the symptoms depend; but it may tell the function that is primarily affected, and of course the seat of that function—in fact, the *sedes morbi*. It will in some cases reveal much more than even pathological anatomy. To take an instance: the primary seat of that dreadful malady, tetanus, has never been revealed by the scalpel, but the physiology of the nervous system, as developed during the last few years, points, I may say unerringly, to the spinal chord as the true location of the disease; though the structural nature of it is still a mystery, yet not more a mystery than is the instrumentality of all nervous matter in the performance of its several functions.

Morbid anatomy is, however, of vast importance, and has contributed to the great modern improvements in medicine far more than any other method. It is, indeed, a comparatively new species of research. When I say new, I mean in reference to the high antiquity of our science; for, notwithstanding Pliny informs us that it was the custom of the kings of Egypt to assist at the inspection of dead bodies, and thus to have ocular demonstration of the causes of disease (*Iis [regibus] erat studium corpora scrutari mortuorum, et causas valetudinum oculatâ fide recognoscere*), there is no reason for thinking that much came of such inspections. In the records of medicine we find nothing precise on the subject earlier than the beginning of the sixteenth century, when Antonio Benevieni, of Florence, published a treatise, "*De abditis nonnullis ac mirandis morborum et sanatorum causis*" (1507), consisting chiefly of some cases of scirrhus of the stomach, biliary calculi, and concretions in the great blood-vessels. After him, Schenckius, Plater, Fabricius, Sennertus, Tulpus, Bartholinus, and others, related remarkable instances, some more marvellous than accurate, of changes in the internal organs discovered by dissection. Our immortal Harvey had made many necroscopic observations, with the view of discovering the causes and seats of maladies, and, had he lived long enough would probably have given the results of them to the world. But the first systematic treatise on the subject was the "*Sepulchretum Anatomicum*" of Bonetus (1679), a repository of facts of great interest, derived from many sources, and forming a compilation, rather than containing the results of his own observations. But, as a philosophical work, it is very inferior to the great production of Morgagni, "*De sedibus et causis morborum*." This admirable writer does not content himself with naming the disease, and then describing the appearances found in the dead body, after the manner of Bonetus; but, by patient and rigorous analysis, he investigates the connection between the changes found on dissection, and the symptoms which occurred during life. This method, though so well illustrated by Morgagni, was not for many years followed up with due vigor; but, from the time that it became general in this country and on the continent,

we may trace a rapidly increasing progress of pathological science.

Morbid anatomy, in exposing faults of structure, ministers to medicine in two ways—first, by showing how the functional disorders, under the form of symptoms, were caused by such changes in the organs as prevented their proper action; and secondly, by revealing a tendency to similar disease in several parts of the same body, and so leading from special pathology to general pathology, or the knowledge of those general faults in the economy which are pre-existent to the local diseases.

Chemistry is a third help in pathological investigations, in so far as it enables us to recognise alterations in the composition of the fluids, whether of the blood itself, or of the secretions; for changes in the latter intimate a change in that from which they are formed, or in the secreting organ. It has already enabled us to ascertain with accuracy that in inflammatory diseases the quantity of fibrin is increased, that in diabetes the blood is impregnated with sugar (a fact that alone has cast a blaze of light on what was previously one of the darkest objects in pathology); and it has taught us, thanks to Dr. Bright, to recognise a peculiar disorganisation of the kidney, by the discovery of albumen in the urine, this fluid being at the same time of a low specific gravity. This department of knowledge has, till very lately, been but slightly cultivated; it promises rich results to future inquirers. The same remark applies to the microscopic examination of tissues and fluids. The accessions made to minute normal anatomy by this method within the last few years are prodigious, and none more striking than those relating to the structure of mucous membranes and secreting glands; but pathological anatomy is by no means unindebted to it. Witness its applications to carcinomatous growths. The composition of the fluids in disease has been still more strikingly illustrated by the microscope. We now readily distinguish the pus globule and the blood globule in urine. In the blood are discerned changes in the forms of the globules, indicative of morbid diatheses. In some morbid secretions parasitic growths are revealed, which, till the use of this instrument, were altogether unsuspected. When this method and pathological chemistry shall have yielded the same proportion of knowledge as we have derived from morbid anatomy, pathology will have made an advance towards perfection infinitely surpassing its present development. It will lead in its applications to the prevention or early recognition of many fearful diseases, which are now only known to us after they have made their deadly inroads on solid structure, and irretrievably poisoned the fluids.

Semeiology is the knowledge of signs, the interpretation of symptoms, the discernment of them as indications of mischief in some part of the body not subjected to ocular examination; as, for example, the symptom palpitation may indicate disordered action of the heart; delirium, disturbance of the brain; a red tongue, irritation of the stomach. Symptoms thus viewed are diagnostic signs. But some signs are not symptoms, for they may be impressions on our senses, derived from the mere physical changes in the structure of the body; such is a dull sound on percussion of the chest, where it ought to be a clear one, indi-

cating that either fluid has been effused into the pleura, or that the lung has become dense instead of porous. The recognition of signs, or semeiology, may be considered almost equivalent to diagnosis. It will be considered at large on a future occasion.

Ætiology is that department of medicine which considers the causes of disease; not, however, those causes of which we have just taken notice in our remarks on pathology, and which are the strict causes, the *causæ causantes*. I shall speak hereafter of the different divisions of causes which have been proposed at different times. But at present we need only advert to the distinction of causes, as proximate and remote. The proximate is the event immediately prior to the disease, and the event without which the latter would not have taken place. It is identical with what we often speak of as the pathological state of the patient, or the cause of the symptoms. You will be puzzled, as many have been before you, if you are not aware that when this term, proximate cause, received its present application, the disease meant always a collection of symptoms. Confusion on the subject has arisen from its having been, since the greater attention paid to pathology, customary to speak of "the disease" not as the congeries of symptoms, but as the disease, *par excellence*, and the cause of the symptoms. When we say that the disease which a patient labors under is peripneumonia, we do not merely signify that his symptoms are such as correspond to the symptomatic definition in Dr. Cullen's or any other Nosology, but that the lungs are inflamed. The disease, then, so understood, is identical with what used to be called the proximate cause. Were we in all cases acquainted with the part and state of the body on which the symptoms depended, we might confine the word disease to the expression of the pathological cause, and speak of the symptoms as separate from and secondary to the disease. But to this perfection of knowledge we are not yet arrived. What do we mean by hydrophobia? In answering this question we are obliged to describe the symptoms presented by a person bitten by a rabid animal, one of them being (as in many other cases, icterus and phthisis, for examples) that from which the name is taken; but the proximate cause of those symptoms is at present only conjectural, though their seat may be inferred from physiology.

But while you will have perceived that in some cases what was once held to be the proximate cause, may have been merged into the disease itself, yet you will not be so unphilosophical as to suppose that there is really in such cases no proximate cause. Such an idea is absurd, for there must of course be the proximate cause of the proximate cause itself, every event having been preceded by something on which it inevitably depended. Proximate cause is but a relative term. It expresses the event which we trace nearest to the symptoms which constitute the disease. The proximate cause of the symptoms in diabetes mellitus is a certain change in the composition of the blood, which contains sugar, and is probably deficient in some of the important nutritive principles; but what is the proximate cause of this state of the blood? Defective digestion of the amylaceous principle, whereby sugar has been formed in the stomach, or has not undergone the proper organic conversion.

And what is the proximate cause of that fault in the digestive process? It remains to be proved. We conjecture some defect in that gastric secretion which is the great agent in the first stage of digestion. And here I may incidentally remark, we have a glimpse of the great arena on which future discoverers are to display their prowess—namely, in finding the state of the organ, and of the whole economy of solids and fluids, immediately prior to the formation of the local disease. Diseases, except when forced on the body by mechanical violence, or by chemical or poisonous action, do not occur without some preparation.

This preparation is effected by some of what are called the remote causes, or events earlier in the train. These, according to their degree of remoteness, are distinguished as predisposing, and exciting, or occasional, or determining, the latter being the latest in occurrence. Call the disease the ultimate event, then the exciting is the penultimate, and the predisposing ante-penultimate. Suppose apoplexy the disease, hæmorrhage into the substance of the brain, or compression from congested capillaries, or simple obstruction of the cerebral circulation, may be the proximate cause; the exciting cause may be an alcoholic draught; the predisposing cause, plethora, or a fragile state of the cerebral arteries. In acute diseases our attention is more directed to the exciting than the predisposing cause, which is often and injuriously lost sight of. In chronic affections, on the other hand, it is more difficult to apprehend the exciting cause. We sometimes speak of morbid agents prior to the predisponent. Thus we say that a person's habits engendered a predisposition, as full, luxurious living creates the plethora, which, under the action of a stimulant, induces the disease, apoplexy. The ancients recognised such distinctions in their terms *egumenæ* and *pro-egumenæ*—antecedents and præincipientes. You will find that when treating of ætiology in general, I shall consider the remote causes under the heads of internal, or those conditions within the body predisposing to or determining disease; and external, or those presented by the agents around us, some of them being modifications of common vital stimuli, as air, temperature, electricity, aliment, &c.; others specific, or existing only under particular circumstances, such as malaria, contagions, poisons.

The last and the most important branch of medicine is therapeutics, the *ratio medendi*.

Medicine is the art of healing and relieving the sick, or it might otherwise be defined as the art of curing diseases; but, in using the latter terms, it is necessary to bear in mind the primitive sense of curing—that is, treating or taking the care or management of, there being many diseases, the cure of which, in the generally received sense of the word, is at present beyond our reach. That what I have hinted at is the original meaning, appears at once in the old saying, "*Natura sanat, medicus curat morbos.*" I shall have frequent occasions hereafter to remind you that there is another difference between the two definitions. It is one thing to cure diseases, and another to cure patients. The former may be done with great *éclat*, while the latter is left undone. To-day, by a vigorous use of the lancet and revulsive remedies, I may have put an end to an hæmoptysis; to-morrow

my patient may die of syncope from the loss of blood.

I have said that medicine is an art; as such, it is an example of the subjugation of nature to the mind and will of man. It is not, as I shall presently attempt to show, a mere imitation of nature. Nature must be the instructress, yet only to become the servant of man. To master her powers he must observe them accurately; but when he has made them work his purposes, he cannot be said to have been the mere follower of nature, otherwise than as the workings of his own mind are a part of nature's operations, in which sense we lose sight of the common meaning of nature, which to the observer is objective. Art, then, is external nature moulded to the desires of man; just as nature in its widest signification, including man and the whole universe, has been sublimely said to be the "art of God."

The connections between art and science I shall not trace on the present occasion, having formerly treated of them in this place; * I shall enter at once on the consideration of the principles on which the art of medicine is or ought to be practised.

Very different principles have been taught by different professors of the art. One of the oldest divisions among physicians was that of the empirical and the rational; the former professing to observe the action of remedies, and to give like remedies in like cases; the latter to ground the use of their measures on their knowledge of the functions of the body, the nature and causes of diseases, and the presumed fitness of remedies. The rational sect have also been called dogmatic or theoretical practitioners. Let us take an illustration. A patient is presented subject to epileptic fits; the empirical practitioner proposes to give him nitrate of silver, or indigo, or powdered misletoe, or some other one of the thousand specifics of vaunted efficacy in this disease. Ask him why he makes this suggestion. His answer, if he is a consistent empiric, will be, that he knows nothing of the *modus agendi*, but that from frequent observations on his own part, and that of others, he is satisfied that the disease is likely to disappear after the use of the nostrum; that is, he has seen it so removed once, twice, a dozen, or fifty times, and he expects a similar success in the case before him. But what says the rational practitioner? He begins with unfolding his view of the pathology of the case. He may consider, for instance, that during the paroxysms there is unquestionable evidence from the spasms, the convulsions, the loss of consciousness, that the vessels of the spinal chord and the brain are overloaded with blood; also that in the intervals the patient presents symptoms of tendency to congestion, though in less degree, of these organs; that the heart beats with undue impetus, and so forth; and therefore he opines that measures should be taken for relieving the distended blood-vessels during the fits, and for subduing the congestive tendency in the intervals, whether by reducing the amount of blood in the whole system, and lowering the action of the heart, or by equalising the circulation by derivants to the surface of the body and the extremities. Or he may take a somewhat different view. He may urge that though the paroxysmal symptoms certainly indicate a turgid state of the cerebro-spinal capillaries,

yet this, like the morbid orgasm of other parts, may be owing far less to any general fault of the circulation in the way of excessive tone, than to extreme irritability of the nervous system which has engendered the morbid state of the capillary circulation; that to abstract blood, would be a sure way of aggravating the excitability, and that the most rational remedies would be such as soothe the nervous system when excited, and such as lessen its mobility, by increasing its tone; or he may lay down a third doctrine. He may say all this disturbance of the spinal marrow and brain is caused by some irritating agent operating upon the extremities of the incitor or afferent nerves, and that it is useless to direct measures against the nervous centres when the mischief lies in some part of the periphery. Let us investigate, says he, and we shall find some disturbing cause acting on the febrils of the fifth pair in the teeth, or on those of the par vagum in the stomach, or on the uterine nerves. Having found this, we must set to work and remove it, and then there will be no more eccentric irritation of the excito-motory system. To return, I suspect that the distinction between the above classes of practitioners, although it corresponds with the difference in the habits of thought common to two classes of men, has reference more to degree than to kind. There are few—very few—who are absolutely empirical. Under the guise of the most simple form of empiricism we can often detect a lurking theory. It is not in the nature of the human mind, however unphilosophical the individual may be, to observe facts at all times in simple sequence, without the intervention of some cause fancied by the individual. The most ignorant of our empirics not unfrequently in the very announcement of their pretended remedial discoveries, and while the very words of scoffing at theories and philosophers are yet on their tongues, betray the thralldom maintained over their minds by dogmas and hypotheses, which, though once dominant in the high places of philosophy, have been exiled in favor of other dynasties, and compelled to seek a more appropriate sway over the credulous vulgar. Or—to take a far more respectable instance of the truth of our remark—the savage who has seen the fever of his companion dissipated by drinking of a pool, in which a potent vegetable has accidentally been macerated, does not content himself with the mere observation that his friend had a fever, that he drank of the water and recovered, but he views the fever as the production of a malignant spirit, and the water is to his apprehension endowed with some secret mysterious power "by the unseen genius of the wood."

Those who have been professedly rational practitioners have acted, as might well be expected, according to very different systems. Thus, we have the expectant method, the perturbant, the eclectic. One or two remarks may be sufficient to sketch their respective peculiarities.

The physicians of the expectant school are those who pin their faith on the "*vis medicatrix nature*"—who think that if this power fails, no other can be looked to for aid. They presume that in all cases curable at all, nature herself tends to bring about the desired result, and that the doctor has only to stand by and assist. He is to be emphatically the "*interpres et minister nature*," carrying out her designs

* Provincial Medical and Surgical Journal, October, 1840.

if her energies are languishing, he must endeavour to sustain them; if they are too vehement, he may somewhat restrain them; but always modestly and reverently. "Laissez faire" is ever the motto of this school. The favorite measures of the expectant physicians are—ptisans, emulsions, gentle alteratives, salines, placebos; they lay great stress on diet and other hygienic agents, their chief object being to place the patient in circumstances as favorable as possible to the sanative operations of nature.

The opposite system is the *medicina perturbatrix*—a method of active interference, engendered by a want of confidence in the ability of nature to conduct the patient to a safe termination of his disorder, perhaps even by suspicions that her intentions even are by no means to be trusted; and that as often as not, she means to extinguish instead of fanning the flame of life. To a physician of this way of thinking, it seems that almost any change is better than the present state of disease, and he resorts to the most powerful artificial agents on the economy, preferring that the patient should die of the remedy rather than of the disease. With such practitioners, the lancet, blood-letting, evacuates, and revulsives in some cases, or powerful stimulants and narcotics in others, are the weapons most in use.

These are on either side extreme opinions, and not only extreme but exclusive, and as such erroneous. To look fixedly in one direction, and because truth is seen, to refuse to turn the eyes in another direction, and not only so, but to deny that truth can lie anywhere in the universe but on the very spot contemplated, is to err (if the phrase be not a solecism) from the want of discursiveness. Those who do not regard the processes of disease in so partial a manner, may readily discern two different tendencies, one to reparation and health, the other to destruction and death; nay that the very same vital action which in one situation may be most salutary, in another may be just as pernicious. The effusion of fibrin, which, in a external wound, restores the continuity, may on the surface of the intestines produce fatal entanglements, on that of the heart may embarrass the organ for the remainder of life, and in the air-passages become literally a fatal obstacle. The formation of pus in the liver may seem to have saved the patient when the abscess has pointed through the parietes of the abdomen, or through one of the mucous outlets, but the same process is mortal when the matter escapes into the peritoneal cavity. There is strong reason for surmising that death was contemplated by the Divine Author of our being, as the result of our constitution no less than the continuance of life, and that disease is one of the many means intended to accomplish the former of these purposes. If organic processes are so adjusted that they assist each other, that they recover from disorder immediately on the removal of the disturbing cause, and that fatal disease in one part is prevented by a morbid state supervening on another part; it is no less true that at other times these processes interfere with each other, that they persevere in morbid action, and that the occurrence of disease in a part of trivial importance will be the occasion of serious mischief in a vital organ; that, in short, if on the one hand we observe harmony, reparation, and salutary revulsion, on the other we cannot

shut our eyes to the existence of discord, destruction, fatal sympathy, and metastasis. Were we disciples of Zoroaster we might recognise in the human body, as throughout the universe, the sway of two antagonist principles, a good and an evil. The *vis medicatrix* is opposed by what I have been accustomed to call a "*vis vitiatrix*." On contemplating these forces the practitioner may exclaim, "*Non nostrum inter vos tantas componere lites*."

But his duty is not that of an arbiter; he must be a steady partizan of the one—the deadly foe of the other; the difficulty is to be discreet in his aid; if he interferes rashly and unadvisedly he may thwart or even injure the very party he is anxious to abet. We have to study closely the natural course of maladies as to this very point; if it appears that the tendency to recovery is very marked, we should be foolish to interfere. If, on the other hand, it has been ascertained that cases left to themselves, or but little meddled with, more frequently end in death than in recovery, it is our plain duty to make trial of remedies, even though of the most doubtful description, on the old maxim, "*anceps remedium melius quam nullum*." In many cases of continued fever the practice may be expectant, in local inflammations it can rarely be so with safety; yet in both instances circumstances may arise to change the plan of treatment. In the fever a local disease may be set up requiring the most active exertions of the physician, such as an intestinal hæmorrhage depending on follicular ulceration, and requiring the bold exhibition of some of our strongest medicines. Again, in the other case, the inflammatory process may be undergoing spontaneous cure by the increase of a natural secretion, and here the *nimia diligentia medici* might be as dangerous as inaction in the former instance. In brief, almost every case that comes under treatment requires the practitioner to be constantly on the watch, to determine not only how to interpose the aid of art, but when to do so.

In the practice of medicine my advice to you is to aim at being eclectic; do not be enticed into the notion that to be eclectic is to have no decided views, or, in other words, to be blowing hot and cold. If you care rather to save yourselves trouble than to do your duty towards your patients, you will find it unquestionably easier to take up with one exclusive system of pathology and apply to it one system of therapeutics. Individuals of great genius and vast knowledge have fallen into this error, as I shall have hereafter to point out to you; and when men have been the authors of useful discoveries we may make allowances for their having over-valued their own productions and fixed their minds too exclusively upon them; but we must not permit ourselves to be misled, and to adopt their errors, because it saves us the trouble of viewing other facts and doctrines. One cardinal maxim let me urge upon your adoption; suspect the truth of any therapeutical system of great simplicity, and the more so if propounded by one imperfectly acquainted with the fundamental departments of medical science; be certain that when anatomy and physiology are every day exhibiting more and more strongly the infinite complexity of the normal structures and functions, pathology and therapeutics must be proportionally composite. Take no account of what is called the overwhelming testimony to the effi-

cacy of these simple methods when offered by uninformed observers. Such has been offered in favor of the most absurd and dangerous forms of quackery that have ever been propounded. If the testimony refer only to a single remedy for a single disease, or for a particular method for such disease, you may listen to and weigh it carefully, remembering that many remedies have in the first instance been purely empirical; but when the one remedy or plan of cure is to be applied to many and divers diseases, having little or no affinity with each other, you may safely dismiss it from your minds.

Let me, however, again recommend to you the eclectic method. Be not exclusive in your rejection of methods any more than in your adoption of them. How unwise would it be to forego the advantages of the stimulant treatment once so universally applied by the Brunonians, or of the bleeding of the Broussaists, or of the blue pill system of Abernethy, or of the "beefsteak and porter" practice of others, merely because the indiscriminate use of such measures has led to deplorable failures in practice. Each of these systems is good in the right place; "nullum in remedium quin solo tempestivo usu tale fiat."

I would advise you even not to disdain taking a hint now and then from the practice of heretical professors, if you can turn it to account, for the good of your patients; for in most of the heresies in medicine, as in philosophy and religion, there may be detected a portion of truth, though overlaid by a mass of absurdity and error: to instance, two systems at the present time very popular, though one has passed its meridian of favor, and the other is in the ascendant—I mean homœopathy and hydropathy. The former of these has two grand principles—one, that diseases are cured by substances which produce such diseases, "*similia similibus curantur*," as bark is said to cure ague, because it produces ague in healthy persons (though I confess that, in a pretty large experience of the use of this drug, I never saw any such effects); or as diarrhœa is cured by purgatives, &c. The second principle is, that these substances must be given in infinitesimal doses, and that, in the trituration and agitation essential to such minute subdivisions, new powers are developed. Now, to the first of these principles much exception may be taken though there is an apparent plausibility in it. The artificial action is not the same, though somewhat like. The evacuations produced by the purgative that cures a diarrhœa are very different from those that constituted the latter, and argue a dissimilarity in the states of the membranes that furnished them. The inflammation produced in the eye by nitrate of silver is different in character from the inflammation which it is so useful in removing. Still something may be learned from the facts adduced in support of the dogma; and it is that, inasmuch as certain substances do produce a morbid change in certain organs, and that change is not only often subversive of spontaneous disease, but also itself easily removable, we may with benefit make use of such substances. Often the difficulty in practice is to find a substance that will act upon the part which we deem the seat of disease; but the discovery of one that induces an effect like the disease, shows that we have a substance likely to answer our purpose, of engendering in the

seat of disease an artificial evil that may supersede that which is spontaneous. As to the other principle, I have no hesitation in saying that I utterly disbelieve it. No *a priori* evidence has been adduced in favor of it; and if my faith is to be obtained only by trying experimentally whether the decillionth of a grain of opium does or does not produce its reputed effects, I must remain a hardened infidel. To such egregious absurdity I say, "*Incredulus odi*." But what, you may ask, is to be made of the apparent homœopathic cures? Simply this, that the expectant or *laissez-faire* method is in this system carried out to the fullest extent. The natural tendencies to recovery have their full play, and are often aided at once by the suspension of meddling treatment, and by the judicious regulation of diet, the latter being all the positive operation of the homœopathic system, the rest only negative.

The fashionable hydropathy or hydriatics imported from Silesia consists in a vehement and universal employment of cold water, both internally and externally—the extended use of a remedy familiar to every well-informed practitioner. Perhaps something may be learned from this system as to the mode of applying the remedy; but one cannot help being amused with the pretensions of the hydropathic system, which is to overturn all other methods of cure, and to place the art of medicine on a new basis. This announcement would be startling did it emanate from persons acquainted with the structure and functions of the human body in health and disease; but issuing from persons devoid of this knowledge, we must receive it with a good-humored smile, and regret that these sanguine encomiasts have so much disappointment to encounter.

That cold water, in the form of the shower-bath, or cold sponging, or the plunge-bath, is an efficacious tonic, nine-tenths of the practitioners in this country are daily impressing on patients who require such means; and that it is an efficacious auxiliary in repressing certain inflammatory and hæmorrhagic diseases, is at the present moment experienced by the hundreds of sick persons who are ordered by their physicians to have cold cloths on their scalps in meningitis, to swallow iced drinks for cynanche, or gastritis, or hæmatemesis, or hæmoptysis, to have pails of cold water emptied over the abdomen for hæmorrhage after parturition, to dip into cold hip-baths for menorrhagia, or to keep their wounds wet with cold water dressings. If you have to learn how and when to give such directions you may find abundant instruction in the classical work of Dr. Currie, in the treatise on cold by M. Beaupré, in an admirable article on bathing by Dr. Forbes in the "*Cyclopædia of Practical Medicine*," and in many other practical works with which medical literature is adorned. Even from so old a work as that of "*Mercurialis de Arte Gymnasticâ*" you may glean much useful information respecting the application of cold water for hygienic purposes. It cannot be questioned that the mere ingestion and subsequent elimination of large quantities of liquids often produce most beneficial results; and their utility may be traced, as Dr. Holland has well shown, to "first, the mere mechanical effect of a quantity of liquid in diluting and washing away matters, excrementitious or noxious,

from the alimentary canal; secondly, their influence in modifying certain morbid conditions of the blood; and thirdly, their effect upon various functions of secretion and excretion, and especially upon those of the kidneys and skin." (Med. Notes and Reflections, p. 316). For obtaining knowledge of this kind, then, we have no need to depend on the inspirations of the heaven-born peasant-physician of Graeffenburg. In applying this epithet to Vincent Priessnitz, I have no wish to reflect upon his lowly origin, well knowing how many lights of science have sprung from the humblest ranks of society; but it is proper to remind you that he who is proclaimed as the great reformer of medicine is still a peasant—an uncultured, uninstructed man, so far as medical knowledge is concerned.* I have reason, however, to believe that this individual is endowed with great natural sagacity, which is in no respect shown more remarkably than in his selection of favorable cases for the water cure; many invalids he rejects as unfit subjects for the process, and in so doing manifests a proper discernment. How many, alas! of the cases which daily require the anxious care of the ordinary medical practitioner must be rejected, were they capable of being transported to a water establishment!

I must not omit to remark that the treatment called the water cure, when carried fully out for a long time, often produces boils, ulcers on the skin, and the hydropathic doctors consider these eruptions as critical, and effecting the elimination of morbid humors; but we can more readily account for them as resulting from the chronic congestion, inflammation, and suppuration ensuing on the assiduous application of cold water. Such effects on the skin are often produced in the thinly clad members of the community by mere exposure to the inclemencies of the atmosphere. The counter irritation is, no doubt, in many of the cases alluded to very beneficial, the sores in question having the same curative influence as our more orthodox issues and setons. Perhaps the powerful and long continued excitation of cutaneous capillaries under the sudorific part of the water cure may have something to do with the eruptions alluded to.

If we are curious to investigate the circumstances to which hydropathy owes its great popularity, it will probably be found that the following are some of the principal causes:—First, the system is very simple—diseases may be manifold, but the remedy is single, though variously applied; second, the universal applicability of the remedy seems to harmonise with its universal distribution over the face of the globe; third, the system dispenses with the use of drugs, most of which are disagreeable, and many not a little dangerous; fourth, it gives ample employment to the superabundant energies of many of the invalids who seek its aid—physicians are often at a loss in recommending interesting occupation to the hypochondriac, to whom nothing is interesting but what has reference to his health; fifth, diaphoresis or sweating, which is one of the great results of the system, is in much favor with invalids. Whether from the additional notions of bygone pathology, or from instinctive feelings (I suspect the former), patients always attach great importance to perspira-

tion; doubtless this is really one of the most advantageous results of the process. I know a gentleman who for many years has had the greatest difficulty in procuring action of his bowels, and to him the sudorific process of the water cure has been obviously beneficial in compensating the alvine deficiencies. Lastly, the outward use of cold water allays many disagreeable sensations, and at the same time the feeling of glow or reaction gives the idea of an invigorating effect often far beyond what is really imparted. Multitudes of patients of the neurotic class find the sensations attendant upon cold water a pleasant exchange for the anomalous and often distressing feelings which haunt them when their minds are not otherwise occupied—such are dyæsthesia and dysphoria in their various forms; moreover, the use of cold water begets the desire of its repetition. Every one who has accustomed himself to plentiful ablutions of cold water, when debarred from their use feels all the annoyance consequent on the loss of a stimulus. He may fancy that what he experiences is owing to an accumulation of what ought to be removed from the skin, but the time, the lapse of a day for instance, is often too short for any such effect. The real cause I believe to be the privation of the accustomed excitement of the cutaneous nerves and vessels. This fact gives, I think, a ready clue to the explanation of the perseverance with which hydropathic patients often follow up the system—"increase of appetite hath grown by what it feeds on."

As I began with observing, some useful additions to practice may, no doubt, be gathered from the observation of the peculiar methods adopted by the hydropathic professors; but eventually, after the present popular excitement has passed away, cold water will, like all other remedies, find its proper level; it will be known as a valuable expedient in certain diseases, and under certain circumstances, many of which are yet to be learned. The supposed universality of its powers, as I have just remarked, is one of its chief attractions at present; and when that has been disproved, as it surely will be, there is ground for fearing that the remedy will sink in popular opinion to a degree which will be the exact measure to its present undue elevation. The dyspeptic, the hypochondriacal, the nervous, and the victims of ennui and satiety, as they at one time invoked the mysteries and mummeries of mesmerism—at another swallowed, at the bidding of an empiric, hundreds of vegetable pills—or at another flew for aid to Wildbad, and Baden Baden, and Schlangenbad, and were disappointed—will now not unnaturally appeal to hydropathy, and perhaps with some better success. But the subjects of fevers, exanthemata, and acute visceral inflammations, the unhappy sufferers from organic diseases, and those who have been broken down by hæmorrhages and exhausting discharges, and those who require the skilful knife of the surgeon—all, in fact, who are in direct need of the remedial art, will, we venture to say, remain adherents of the practice which has been built upon the confirmed observation of disease for successive centuries, and upon the accumulated improvements which every year had added to the knowledge of the human body in health.

* Mr. Claridge states that he doubts whether Priessnitz knows on which side of the body the liver is situated.

You will probably hear these subjects adverted to in general conversation, and as medical students you

may be appealed to. Let me advise you to avoid expressing anything like annoyance at the vaunted success of these extra-professional therapeutics, lest it be supposed that you are influenced by interested motives. On the other hand, you will avoid assenting to the views, however plausibly stated. Content yourselves with stating that you cannot receive a theory of disease and cure from persons who have not studied anatomy and physiology, and that as for the alleged success of the method, before you trouble yourselves to account for it, you must be assured that the persons who witnessed the cures were capable of ascertaining that the alleged disease had really existed.

I have made frequent use of the word systems, and I shall often be obliged to use it. Systems may in process of time lose their value, but we cannot do without them; they are like formulæ in matters of faith; without such connecting tissue our ideas would fall loosely about and be lost. True, these systems are often artificial—idols or imaginary embodiments of our minds which we mistake for realities; but it is better that our knowledge of facts should be thus held together, even though the respective position of the members of the system and the cement which unites them must often be altered and softened by time. It is not, however, so with all systems—those, for instance, which are copied from the actual order and arrangements of nature. Why, you might at first sight ask—why should there be any systems but such as are directly derived from nature? The answer is, that the natural order and collocation of facts are often not easily ascertained. It may take ages of patient investigation even to prepare the way, before the genius of a great discoverer, even though gifted with those extraordinary insights and inspirations which are not vouchsafed to ordinary men, can see through the perplexities and intricacies in which the true nature of things has so long been involved.

Do not allow yourselves, from observing the varieties of opinion, and the inconsistencies, and transitoriness of systems, to pass into a state of scepticism, and to doubt whether in medicine there be any sound theory. Be assured that in medical science there is that which he who runs may read, there are lights which are not *ignes fatui*, there is ground which will not sink or recede. Read the immortal works which our medical literature can boast of, and you will find that nature presented the same facts to the eyes of the earliest observers as to ours, and that many of the landmarks which guided them may also be ours. Well might Hufeland remark, "There has ever been an invisible church of true physicians who have continued faithful to nature, have been animated by her spirit, have acted under her direction, and kept the sacred watchword—men who have all thought and meant the same thing, who have always been and always will be understood throughout all ages, and in spite of the confusion of tongues; there have always been men in these respects like Hippocrates, Cælius, Aræteus, Baglivi, Sydenham, Huxham, Boerhaave, Frank, and others."

With the enumeration of these illustrious names I terminate my lecture; for they cannot but inspire in your minds high and ennobling thoughts, which I should be sorry to incur the risk of dissipating by any further remarks.

HÆMORRHAGE
FROM
EXTRACTION OF A TOOTH.
TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—The following case occurred to me in practice a short time since, and I forward it you for insertion in your Journal, if you deem it worth notice.

I remain, Gentlemen,

Your obedient servant,

ALFRED CRABB, M.R.C.S.L.

Poole, October 15, 1842.

J. O., a young man about twenty-two years of age, of unhealthy aspect, but with the muscular system well developed, and who followed the business of a carpenter, applied to me early one morning to have a tooth extracted. I examined the mouth, and found the tooth which had given the individual pain, and the one to be removed was the first molar of the lower jaw, on the right side. The tooth was removed with facility by the aid of forceps, and the man left the surgery, there being at that time not more hæmorrhage than is ordinarily observed after extraction of a tooth. About four hours after, when I returned home, after making visits in the town, I found the individual for whom I removed a tooth in the morning so early, sitting in a chair in the surgery, and blood issuing freely from the mouth. He told me that, shortly after leaving me in the morning, bleeding came on, and had continued ever since. I added a little sulphate of zinc to a tumbler of cold water, and directed the mouth to be rinsed freely; I then removed any coagula that existed in and around the socket, and filled it firmly with lint saturated with *sp. terebinth.*; a piece of cork was then wedged on the lint and between the posterior bicuspid and the second molar; I bound the lower jaw to the upper, and directed my patient to go home and remain in bed for the rest of the day, all hæmorrhage being at that time arrested.

About four o'clock in the afternoon of the same day I was sent for to see him at his house; I was absent from home at the time, but was shortly after in attendance, and found him, to my surprise, below stairs, and sitting near a fire, with the bandage loose, which enabled him to open the mouth, and hæmorrhage going on. On expressing my surprise at finding him below stairs, he stated that he retired to bed according to my direction, where he remained an hour or two, but, as there was no bleeding, he thought he might get up. I removed the bandage, and on making an examination, found the cork loose in the mouth, and some of the portions of lint gone. He was now placed in bed, and directed to rinse the mouth, and I again filled the socket by replacing the tooth; and, with a view of keeping up pressure, I placed a piece of cork, which not merely covered the crown of the tooth, which had been removed, but extended over other teeth anteriorly and posteriorly; the lower jaw was again bound to the upper by the aid of a bandage, and cold applied over the whole of the side of the face and neck. Hæmorrhage having again been checked, I did not consider it necessary to remain with him, but left directions with his at-