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THE

PRINCIPLES

OF THE

CHRONO-THERMAL SYSTEM OF MEDICINE,

WITH THE

FALLACIES OF THE FACULTY.

BY

SAMUEL DICKSON, M.D.

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WORKS ON CHRONO-THERMAL MEDICINE.

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WITH THE

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PRELIMINARY REMARKS.

It was a saying of the sculptor Canova, that Englishmen see with their *ears*. The following narrative is intended for readers who prefer to see and examine with their *eyes*.

During many years past it has been the annual custom, at the London College of Physicians, for one of the Fellows to deliver an oration in Latin, commemorative of the discovery of the Circulation of the Blood by the great Harvey. The Orator for the year is chosen by the President of the College for the time being, and to him the oration is submitted before it is read to the assembled members. Whatever representations or misrepresentations it contains, have, therefore, the official sanction of the highest authority of the College.

In the oration for the year 1860, delivered by a gentleman of the name of Page, there occur certain statements, which, when translated into English, will be found to run thus :—

"In the beginning of this century, the favourite practice of physicians was depletion in all its forms—[meaning thereby, bleeding, leeching, cupping, purging, &c.; or the abstraction, during a state of corporeal disrepair, of the *living material of all repair*].

"At the present day, the employment of stimulants, chiefly wine, brandy, and the like, has been much on the increase. Of this method of treatment, many assert that Dr. Todd was the author; but in truth, neither to Dr. Todd nor to any other person, do we owe this plan of cure—a plan which, from some atmospheric change, perhaps, or from some change in the condition of men's bodies, has gradually come into vogue. The annals of our hospitals, if I mistake not, show all this very clearly. At St. George's Hospital, the records of which have been carefully kept for the last thirty years, this change must strike everybody who inspects them. During that time, phlebotomy has been becoming there more and more infrequent. The use of leeches and cups, yearly diminishing, is now all but given up; while, on the contrary, the expenditure for wine, brandy, and malt liquor, steadily on the increase, is at the present moment greater than it ever was at any former period." *

That a great revolution has of late years taken place in the English practice of medicine, is incontestible; but Dr. Page's account of the manner in which this revolution was brought about, will scarcely be so satisfactory to thinking and observing men out of doors, as it would

* "In hujusce seculi initio depletio omnigena medicis quam plurimum placuit. Stimulantium hodie, vini præsertim, spiritus vini Gallici et similium, obtinuit largior usus. Hujusce methodi auctorem multi Toddium asserunt. Verum enimvero, non Toddio, non uni aut alteri debemus hanc curandi rationem,—quæ gradatim mutatis aeris forsan, necnon corporum conditionibus prævaluit. Nosocomii cujusvis annales hæc, ni fallor, plane demonstrant. Cuivis in Sancti Georgii Nosocomii annales per annos jam actos triginta servatos inspicienti hæc vicissitudo patet. Venæsectio per id tempus singulis annis ibi rarior fit. Cucurbitulorum, hirudinum usus quot annis diminutus hodie vix ullus est. Vini, contra, spiritus vini Gallici cerevisiæ expensa, perpetuo aucta, supra modum jam ampliatur."—*Oratio ex Harveii instituto a Gulielmo E. Page, M.D. Oxon*, 1860.

appear to have been to the erudite auditory he addressed. The questions therefore still remain,—How came "depletion in all its forms" to be put down? Wherefore was it put down? When was it put down? And who first, to the horror of a jealous profession, openly substituted stimulants and tonics—both of which now go hand in hand—for the cruel and exhaustive measures, that, from the time of Hippocrates till within the last few years, were the all but universal practice of medical men?

Theories which attribute everything to masses and nothing to individuals, are usually in high favour with colleges and corporations. To the corporate mind, "a change in public opinion," "the march of intellect," "the requirements of the age," and other abstractions equally vague and unmeaning, very readily account for the greatest events. "It is too much the present fashion," says Sir John Herschell, "to ascribe all progress, at least all modern progress, in the inductive sciences, and indeed in every department of human thought and action, to 'the age;' as if there were some magic in the word, and as if by its use it were possible to *elude or abate down* the acknowledgment of an *individual pre-eminence.*"

To the "age" and "the requirements of the age," many very clever doctors have attributed the recent revolution in physic. How to "elude or abate down the acknowledgment of an individual pre-eminence" in this particular department of science, has been one of the difficulties of modern medical men. Dr. Page thinks he has solved the problem. According to him, the revolution in question was begun by nobody. Before the assembled magnates of the College of Physicians, before the large body of practising apothecaries, who have recently been admitted members of that time-honoured institution, Dr. Page held, that for this revolution the world is indebted to no one man's tongue or pen. He ascribed this all but complete REVERSAL of medical practice to a gradual change, either in the constitution of our English atmosphere, or in the condition of the human body itself; he did not pretend to say which! Is Dr. Page quite sure any such change has really taken place in either the one or the other? Not quite; he qualifies his assumption by that most awkward of adverbs, "*forsan,*" perhaps!

Dr. Page's dictum was received, nevertheless, with the most implicit respect by the solemn gentlemen whose ears it was intended to tickle. Of all the assembled "medical philosophers," who met on a pleasant day in June to do honour to the shade of Harvey, not a single individual by word or sign signified his dissent from a proposition so absurd and illogical. On the contrary, when the oration was finished, the solemn gentlemen, for once in their lives at least, relaxed their professional gravity, and cheered Dr. Page to the echo!

June passed; July came and went; August appeared, and congratulations still poured in upon the Orator of the year 1860. The beautiful manner in which he had fulfilled the task confided to him gave satisfaction to all. Dr. Page's oration was pronounced a marvellous success.

Could it be possible that a secret understanding existed between the authorities of the College and Dr. Page, in reference to the subject matter which, after the usual hackneyed laudation of Harvey, was intended to be the telling point of the oration? Why explain to the members of the College what the members of the College knew as well as himself—that the fashion of physic had changed? Why go into the fact of a gradual decrease of phlebotomy, and other exhaustive practices, and a corresponding increase of expenditure for wine, brandy, &c., in the London hospitals? And why, in the

year of grace 1860, of all years since this change began, fix the date of the decrease of depletion in St. George's Hospital so far back as *thirty* years ago? Was this exposition meant solely and entirely for the members of the College? Or was the oration of the year 1860 a mere farce, got up for a special purpose between the College authorities, and their mouthpiece, Dr. Page? Perhaps these astute gentlemen thought the time had at last arrived when, by adroitly concealing facts, and by falsifying dates, they could, without compromising themselves in the eyes of their patients, give their sanction to a change of practice which, in common with the majority of their brethren, they had for years opposed as dangerous and unorthodox. Be that as it may, the orthodoxy of this complete change of practice was in the month of June, 1860, for the first time, publicly recognised by the College authorities. But while trimming round in this wholesale manner, the College made an important omission. A great physiological discovery—the greatest perhaps of this or any other age—the discovery, in truth, from which the present practical change actually dates, was on that occasion carefully kept in the background. What this new revelation was, and what were its inevitable results, will appear in the course of these pages.

Discoveries or inventions that militate against the interests of powerful bodies of men, may often be crushed down for a time; but, sooner or later, there is a day of reckoning. This may yet be the case here. The medical profession in civil life, as shall in due course be seen, have the most powerful of all motives for shelving a discovery which, in spite of every effort on their part, rendered it impossible for them much longer to uphold the practice of blood-letting—a practice, be it observed, that, amid a thousand changes introduced from time to time into the Materia Medica, had, in Europe at least, continued to be the dominant fashion of physic for upwards or three thousand years. If that was the object of Dr. Page's oration, the farce was badly got up, and the performance was a mistake.

The month of August, we have seen, found the Orator of the year 1860 still radiant from his triumph. But his feelings of jubilation were not destined to last the month through. A fortnight before August reached its close, the hopes of rising in his profession, which Dr. Page, doubtless, founded on his oratorical success, received an unexpected damper. Not from *without*, but from *within* the walls of the College came the bitter pill in this instance. As yet nobody had dared to shock Dr. Page's vanity by any expression of dissatisfaction with his statements. What then must have been his mortification when he found his facts and his figures called in question in a letter addressed to himself by a brother Fellow—and that Fellow—mark—a grandson of one of the greatest ornaments of the College of Physicians in an age gone by — the celebrated Heberden! Dr. Heberden's letter being now published is very much at the reader's service:—

"*Park Street, Grosvenor Square,*
"*16th August*, 1860.

"DEAR SIR,—I have been prevented by circumstances from tendering to you, until now, my acknowledgments for the copy of your Harveian Oration, which you were so kind as to send me above a week ago. While thanking you for a composition couched in such elegant Latin, I regret to find it contains some statements with which I cannot concur.

"It is quite true, as you say, that at the beginning of this century depletion of every kind was in great favour with our physicians; and it is equally true that stimulants, more particularly wine,

brandy, and the like, are more freely used now than formerly. True it is, also, as you state, that those who ascribe the introduction of this method of cure to the late Dr. Todd are in error. Whether as regards the substitution of wine, brandy, &c., for abstinence ; or the exhibition of bark, steel, &c., for blood-letting and other exhaustive measures, Dr. Todd was anticipated by many medical men, both within and without the walls of our own College.

"But in the teeth of facts,—facts patent alike to the majority of the profession and to the better instructed portion of the public,—I cannot agree with you that for this revolution in practice we are indebted to no one man in particular. Your assumption that this revolution may, 'perhaps,' have been the gradual result either of some change in the condition of the atmosphere or of some alteration in the human body, you will pardon me for saying, I consider altogether groundless and unphilosophical.

"The records of our hospitals, you say, bear you out in this belief. I am glad you qualify that statement with the words '*ni fallor* ;' for here assuredly you labour under a misconception. Your impression that the annals of St. George's Hospital show that this great change of pratice began there *thirty years ago*, can scarcely be correct. Dr. Chambers, who was senior physician of that hospital at the date you refer to, used depletion very largely up to his retirement from practice :—and his retirement, if my memory serves me, did not take place till about fifteen years afterwards.

"You are right, nevertheless, when you say that venesection is every year becoming rarer ; and that cupping and leeching, yearly diminished, are now little employed ; while the expenditure in our hospitals for wine, brandy, and malt liquor, has, on the contrary, increased. You say nothing of the increased expenditure for quinine and other supporting remedies.

"This complete REVERSAL of a practice which existed from time immemorial, must not only have had a beginning, but it must, moreover, have had some one to begin it. It is not in the nature of things that so sudden and so important a revolution could originate in many minds at once. If you will turn to the last July number of the *British and Foreign Medical and Chirurgical Review*, you will find that the initiative of this revolution, 'in this country at least, must be assigned to Dr. DICKSON, the Apostle of Chrono-thermalism, who has long reviled antiphlogistic proceedings, and lauded a treatment essentially supporting. We do not know (the Reviewer continues) whether our friends will be pleased *stare sub nominis umbrâ;* but it is certainly true that Dr. Dickson long ago asserted much the same as what the two English physicians [Dr. Bennett and Dr. Todd] teach.'

"On comparing dates, it will be found, that though Dr. Todd anticipated Dr. Bennett in his opposition to the hitherto orthodox practice, Dr. Todd himself only followed in Dr. Dickson's footsteps.

"Dr. Dickson began his crusade against blood-letting in 1836. Dr. Todd waited till the year 1850 ; in which year, while assuming that all diseases originate in 'poisoned blood,' he adopted the all but identical practice introduced fourteen years before by Dr. Dickson ;—bark, steel, and stimulants, according to Dr. Todd, being the 'antidotes' to this hypothetical 'blood poison.'

"In 1836 Dr. Dickson took a surer ground. Appealing to his great discovery, the Unity, Remittency, and Periodicity of all Disease, whereof he considered Ague or Intermittent Fever to be the type, Dr. Dickson advocated the early employment of bark, steel, wine, &c., in almost every form

of disorder — pneumonia and apoplexy included. Holding Remission to be the most unfailing clue to all good medical treatment, Dr. Dickson addressed himself to the prevention of paroxysmal return, and adopted for his motto '*principiis obsta.*'

> '*Principiis obsta*—on the outset act
> And crush disease at once by skill and tact;
> Crush it ere from neglect the frequent fit
> Becomes a habit difficult to hit.'

"For the last twenty-four years, in various publications, all powerfully and perspicuously written, Dr. Dickson has never ceased to urge the total and entire abolition of blood-letting in each and every of its forms,—giving quinine, steel, and stimulants, in cases where for thirty centuries the great majority of the profession advocated exhaustive measures. For this innovation he has had to pay the penalty of all truly great reformers, persecution and injustice!

"The illustrious HARVEY, to the perpetuation of whose fame your oration is dedicated, and JENNER, scarcely less dear to medicine, were both, as we all know, decried and oppressed in their life-time by their professional brethren. With these examples before me, I cannot doubt that so great a Benefactor to mankind as the Author of *The Fallacies of the Faculty*, will, ere long, like these discoverers, be appreciated as he deserves by the distinguished body of which yourself and I have the honour to be Fellows.

"In the interest of science, and on public grounds, I propose to print this letter,—for the length of which allow me to apologise. Your oration being now published, I do not anticipate any objection on your part to the course I mean to pursue. Believe me to remain, yours, my dear Sir, very truly, THOMAS HEBERDEN.

DR. PAGE, *F.R.C.P.*"

Dr. Heberden is right in his facts. All honour to him for his bravery and independence.

It was as he says. In 1836, Dr. Dickson published the *Fallacy of Physic as taught in the Schools, with new and important Principles of Practice.*

What were the new and important principles developed in this work? Precisely what Dr. Heberden states—The Unity, Remittency, and Periodicity of all Disease;—whereof Intermittent Fever or Ague was shown to be in all climes and during all seasons the model or type. Upon the successful treatment of that type—that unchangeable type or model of all disease—by bark, steel, stimulants, and attention to temperature, Dr. Dickson based his treatment of all disorders. For all disorders he prescribed bark (in the form of quinine), iron, and febrifuges generally,—including, of course, cold and hot ablution, and other thermal applications. For each and all, — apoplexy, paralysis, and pneumonia not excepted,—he moreover advocated the judicious use of wine, brandy, &c., in opposition to the antiphlogistic fallacies then and for centuries taught in every school and university of Europe, as indisputable truths!

In 1838, Dr. Dickson again published his revolutionary views, under the unmistakable title of the *Unity of Disease.* And yet again in 1839, when, having delivered a course of Lectures on the same subject in the Egyptian Hall, Piccadilly, he reproduced them under the title of *The Fallacies of the Faculty, with the Chrono-thermal System of Medicine.* This last-mentioned work, after passing through many English editions, has been translated on the Continent and reprinted in America, times without number.

Reader, we are now dealing with facts and dates; be pleased carefully to note what was the hospital treatment pursued by the most eminent London physicians when Dr. Dickson first printed his Views in 1836.

Mühry, a German physician, who came to England that very year, expressly to see the practice of our London hospitals, thus writes :—

"Mercury, purging, and blood-letting, are the three leading therapeutic means in England." "The English physicians hold the human system to be so constituted, that it can bear a considerable loss of blood." "Even in chronic inflammation, bleeding is much depended on."—*Mühry's State of Medicine in France, England, and Germany, in* 1836.

Does Mühry make any exception in favour of St. George's Hospital, where, according to Dr. Page, the practice began to change six years before the visit of this foreign physician? He does not. And the records of St. George's Hospital, so far from corroborating the statement of Dr. Page, that a change of practice began there in the year 1830, make it clear to everybody who will take the trouble to examine them, that the physicians and surgeons of that hospital held out against all change longer than those of any other hospital in London. But this trouble may be spared the reader; inasmuch as in the *Medical Gazette* for 1851 he will find a series of cases of apoplexy and paralysis treated, towards the close of that year, in St. George's Hospital, by Dr. Wilson, the then senior physician of the hospital, after the most approved sanguinary fashion. Though one and all terminated fatally, these cases, *mirabile dictu!* are reported by the registrar of the hospital, Dr. Barclay (now of Leicester), as so many examples of the best method of treating the complaints in question. The published writings of Sir Benjamin Brodie, moreover, so long the senior surgeon of the same institution, as shall afterwards be seen, afford evidence equally conclusive of the mistake in dates made by Dr. Page. Dr. Page's statement on that point is not worth the paper it is printed upon.

Throughout the annals of this brazen age,
Where will you find a more deceptive PAGE!

Having proved, by the testimony of an independent foreign physician, the kind of practice prevalent in each and every of the London hospitals in 1836, let us now see what English practitioners were doing ten years later. Sir John Forbes, physician to Her Majesty's Household, thus describes the practice of 1846 :—

"One of the besetting sins of English practitioners at present, is the habitual employment of powerful medicines, in a multitude of cases that do not require their use; mercury, iodine, colchicum, antimony, drastic purgatives, and *excessive blood-letting* are frightfully misused, in this manner."—*Lancet*, 1846.

Why does Sir John Forbes style this catalogue of blunders "*one* of the besetting sins of English practitioners"? It was neither more nor less than wholesale butchery; and as such it is now looked upon by many eminent men who were once themselves in the daily habit of treating their patients in the manner described. For centuries the sanguinary and exhaustive practice was fashionable throughout England. It was, in truth, the favourite practice of the leading physicians of the metropolis at the epoch we speak of. Dr. Watson, every Londoner knows, was the man whom the West-end medical practitioners then most delighted to honour; and he it is whom many of them still prefer to call to their "consultations." By his fruits ye shall know him. In the second edition of his *Practice of Physic*, published in 1845, Dr. Watson recommends bleeding, leeching, cupping, purgation, and calomel in large doses, for every kind of disease. Reader, you will find Dr. Watson's book in every medical library; it is the most approved text-book in our universities still!

Thus much for English practice. What about the Scotch? Long after Dr. Dickson

began his crusade against blood-letting, blood-letting was in high favour with the Edinburgians. Until within the last ten years, Dr. Alison was the leading physician of Scotland, and he was for many years one of the Professors of Medicine in the University of Edinburgh; he was, besides, Senior Physician to the Royal Infirmary of that city. What was the practice of Dr. Alison until within a year or two of his retirement from his professorship? Take it from his own pen:—

"In all cases of inflammation the only antiphlogistic remedy on which absolute reliance can be placed is blood-letting. And there is *no other remedy for any other kind of diseased action* which can be put in competition with this in efficacy and importance."

A short time before his death Dr. Alison modified his practice, on the pretence of a "change in the type of disease." A change in the type of disease—a change in the constitution of man! Dr. Alison imagined an impossibility; everything in creation proving that, however much *forms* may change, *types* are immutable!

Cross we now the Irish Channel, and let us see what for years was the practice of the great hospitals of Dublin. In the *Medical Times* of 1854, Dr. Stokes gives the following account of his own experience in the Meath Hospital:—

"There was hardly a morning at the Meath Hospital that some twenty or thirty unfortunate creatures were not phlebotomized largely. It was dangerous to cross the prescribing hall for fear of slipping. Patients were seen wallowing in their own blood like leeches after a salt emetic; and these disgraceful scenes continued for many years."—*Medical Times*, 1854.

Let me ask a question here. Could men who acted in the insane manner shown above, have had the slightest notion of the nature of the vital principle, whether in health or disease? Impossible!

Throughout Her Majesty's three kingdoms this, nevertheless, was the universal treatment of what the doctors called "inflammation." Nor was it confined to these shores. All over Christendom, until within the last few years, the great body of medical practitioners were equally inflammation-mad!

Woe to the man who dared to lift his finger against this hitherto universal practice—against a practice which it was boastingly said had stood the test of thirty centuries! From the moment Dr. Dickson published a discovery which made it as clear as day that almost everything the medical profession had been doing for these three times ten centuries was a mistake, he was marked for destruction. From 1836 to the present hour he has had a professional enemy in almost every English home to calumniate his motives and decry his practice. Dr. Seymour, one of the Censors of the College of Physicians, had the audacity to tell a Committee of the House of Commons, that "the chrono-thermal man" held nothing but a foreign diploma; though, had Dr. Seymour looked into the "Medical Directory," he would have found that Dr. Dickson possessed the double qualification of a Glasgow degree in Medicine, and a diploma of the Edinburgh College of Surgeons; and had, besides, served in India and elsewhere, with what credit to himself it is not necessary to state here, as a medical officer in the British Army!

In spite of all this the rules for the Treatment of Disease, which Dr. Dickson so fearlessly propounded in 1836, have, one by one, been gradually adopted by physicians and surgeons, who in the innocence of the public pass for paragons of honour and virtue, while still refusing to meet in consultation the man whose system, when it suits them, they daily

and hourly plagiarise! The facts which shall appear in these pages would be absolutely beyond belief, if not proved by evidence the most incontestable. Reader, that evidence shall in due time be forthcoming.

Finding the opposition to himself still as fierce as ever, while his views were in this manner being gradually adopted by the men who continued to defame him, Dr. Dickson, in addition to the works above mentioned, in the year 1850, commenced a monthly journal, entitled the *Chrono-Thermalist or People's Medical Enquirer;* and this he continued, single-handed, for two-and-twenty months, to the manifest advantage of the public, so far as the practice of physic was concerned. Resting on his oars for a season, he resumed his pen once more in 1853, in which year he published the first of four editions of the *Destructive Art of Healing—a Sequel to the Fallacies of the Faculty.* While showing to what extent both his theory and his practice had from time to time been plagiarised by some of the most eminent medical men in England, these various publications afford the best refutation to the malignant misrepresentations that were everywhere spread about by his professional brethren in civil life;—for, to the honour of the medical officers of the different public services, we must except them from a charge so disgraceful. We must except also the late Sir Astley Cooper, Dr. Southey, Dr. Heberden, Mr. Fergusson of King's College, Dr. Ruttledge, and other honourable men in civil practice.

All this time not only had Dr. Dickson to contend with the great body of the medical profession throughout the country, but, excepting on one or two occasion, the conductors of the medical press, for reasons of their own, joined in the outcry against him. The simple advertisement of his works was denied admittance in the advertising columns of the *Lancet*—when tendered with the money.

Nor was this enough. Again and again, when his opponents were openly pilfering his views, Dr. Dickson found it next to impossible to let his voice be heard in any medical quarter. Depending on the profession for the sale of their publications, the editors of the medical journals have rarely dared to let him speak for himself. For a quarter of a century he has thus been the victim of a great professional conspiracy, a conspiracy having its affiliations in every city and town of the empire. During all that period, whether in England or the Colonies, his discoveries, as the sequel will show, have been alternately denied, decried, and plagiarised. The *British and Foreign Medical and Chirurgical Review* is almost the only medical journal that has in any way acknowledged his merits; and this exception is the more remarkable, inasmuch as seventeen years before—in 1843 to wit—the same journal, while criticising a French translation of the *Fallacies of the Faculty,* was loud in its condemnation both of Dr. Dickson and his system. True, in 1843 and long after, as the reader has seen, "depletion in all its forms" was the prevailing practice of English medical men; and Sir John Forbes, who then edited the *British and Foreign Medical Review,* took his cue accordingly. But times have changed considerably for the better since 1843, and Sir John Forbes himself has changed with them. Consequently Dr. Sieveking, the gentleman who in 1860 wielded the editorial pen of that Review, found it less difficult to reverse the judgment of his predecessor. In his July number for that year, while criticising "A New Theory of Disease, by Dr. Inmann," Dr. Sieveking referred at some length to the theory and practice of the late Dr. Todd; and he took occasion to compare both the one and the other with the theory and

practice of Dr. Inmann, and these again with the theory and practice of Dr. Hughes Bennett. Though differing *toto cœlo* in their theories, these three physicians, the Reviewer showed, came very nearly to the same practical conclusions—all of them more or less advocating tonic and supporting treatment in lieu of exhaustive measures. Heartily coinciding with Drs. Todd, Bennett, and Inmann in their curative means, the Editor of the *British and Foreign Medical and Chirurgical Review* made the qualified admission noticed by Dr. Heberden in his letter to Dr. Page. For the purpose of comment we quote the Reviewer's words verbatim:—

"And to give every one his due, it must be allowed that *whatever merit belongs to these three*, the PRIORITY, to a great extent, in this country at least, must be assigned to Dr. Dickson, the Apostle of Chrono-thermalism, who has long reviled antiphlogistic proceedings, and lauded a treatment essentially supporting. We do not know whether our friends will be pleased *stare sub nominis umbrâ;* but it is certainly true that Dr. Dickson long ago asserted much the same as what the two English physicians teach."

Has the reader remarked how timidly and grudgingly the merit of "priority" is awarded to the right man here? The Reviewer, Dr. Sieveking, felt himself on tender ground. Though evidently well disposed to Dr. Dickson, he could not afford to let the whole truth out on this occasion; otherwise he would have told the world that what Dr. Todd in his lifetime taught, and what Dr. Bennett and Dr. Inmann still teach—so far as *treatment* is concerned—are neither more nor less than so many miserable piracies of Dr. Dickson's previous teachings. But Dr. Dickson bears the Reviewer no malice for that omission. Dr. Sieveking doubtless had his reasons for being afraid of the touchy gentlemen who subscribe to his journal; and it is a significant fact that three short months after the date of that article he retired from the editorship of the *British and Foreign Medical and Chirurgical Review.*

What does Dr. Sieveking mean by the words "to a great extent"? Dr. Dickson carries out the principle of support in every form of disorder—apoplexy, paralysis, and pneumonia included. Instead of bleeding, he gives stimulants and tonics in these diseases, where required, as freely as in any other complaint. It is not very easy to see how he could carry the supporting principle further. He certainly did not fall into the error of Dr. Todd, who, according to a statement in Dr. Page's Harveian Oration, gave stimulants occasionally to excess, to the manifest injury of his patients.

Then as regards the phrase, "in this country at least," Dr. Dickson will be glad to know in what other country, and by whom, he has been anticipated in his "essentially supporting" practice in all complaints. It was not in France, at all events, as may be seen from the note below.* Neither was it in Germany or Spain, the physicians of both countries being still as notorious for their lowering treatment as they were in the days of Sangrado. Nor yet was it beyond the

* "It is curious to watch the opinions expressed by the *élite* of French physicians on the effect of stimulants in diseases; their dread of using them, and yet partial belief in, and astonishment at, their utility. They are still frightened because they can find no explanation of the fact. 'We admit,' says the *Gazette Médicale*, 'that this has been our difficulty; despite of ourselves, the instinctive fear of a fire (*de l'incendie*) has prevented our acceptance of this treatment; and we have always acted with the greatest timidity in giving generous wines in these kinds of affections. It was in vain that we saw the tongue become clean, and the appetite increase, under their influence; prejudice and dread of some unknown evil always remained behind. Our judgment accepts the facts before we give our adhesion to them.'"—*Medical Times*, October, 1860.

Alps. The telegraph from Turin while we write brings us the melancholy intelligence of the death of Count Cavour, who, for a fever, variously described by his physicians as "the gout," "congestion of the brain," "brain fever," "*intermittent* fever," &c., &c., was three times bled in one day, and twice the next.* If we turn to the Western hemisphere we shall be equally at a loss for an answer. Throughout the now dis-United States of America the older physicians, while bewailing modern innovations, ascribe the downfall of blood-letting in the new world to a too ready acquiescence of the people in the Chrono-thermal quackery of Dr. Dickson.

Dr. Sieveking styles Dr. Dickson "the Apostle of Chrono-thermalism." Dr. Dickson, on the contrary, is the Founder of the System; and here it may be as well to say what Chrono-thermalism means.

The term Chrono-thermalism is a compound of two Greek words, the same words from which we derive the names of two instruments in daily use, namely, the Chrono-meter and Thermo-meter. It has therefore a certain relation to *Chronos*, Time, and to *Therma*, Temperature.

During health the human body keeps time in all its parts like a watch. How could the nose on the face, or the finger with which we point, preserve its shape, if its constantly changing atoms kept no time in the order of their *exits* and *entrances?* Every organ and atom, and consequently every function of our frame, whether in health or disease, keep more or less perfect time. The Chronometry of Man only ends with the Life of Man. Like the clock he is a Chronometer more or less perfect till he stops altogether. Moreover, there is a certain thermal state —a certain temperature—beyond which, if his living body, in whole or in part, rises or falls, we find disease;—which disease may be either a cause, a consequence, or a coincidence of such increase or decrease of temperature.

"So long as Life's Chronometry is true,
And all's well thermally, 'tis well with you.
Therefore, to shame the doctors of the schools,
Who work so often with destructive tools,
Whate'er to Chrono-thermal comfort tends,
Promotes in all things Physic's aims and ends."

This is a proposition no sophistry can overturn. Consequently the physician or surgeon who opposes Chrono-thermalism is a bigot or a fool. Reader, take note, he may be both the one and the other, and yet be a very honest man.

When the savage for the first time sees a watch, his exclamation is, "It lives!" Why? Because of its lifelike movements. The watch keeps periodic time like the beating of his own heart! The body of man, like a watch that strikes the hour, is a repeater and a time-keeper throughout. The nearer you bring the movements of any machine to the movements of animal life, the more perfect you make the machine. There are chronometers that play and sing like a bird; could they do either without a main-spring? Considering the amount of regular work a

* "The Romans, it is said, crowned on the Capitol the physician who rid them of Pope Adrian VI. The Italians of our own days would honestly hang Count Cavour's doctors if the execution would afford any relief to their feelings. There never was a clearer case of a man murdered by his medical attendants. Within the very short period of five days they attempted to cure the count of four or more different complaints,—congestion of the brain, typhus fever, intermittent pernicious fever, brain fever, dropsy, and, lastly, gout; and for all these diseases they could think of nothing but their own sovereign remedy,—the lancet. I think these excellent practitioners are worthy to have their names sent down to posterity. They were Dr. Rossi, Dr. Mattoni, and, towards the end, the king's physician, Riberi, the same in whose hands the mother, wife, and brother of Victor Emmanuel expired, one by one, in the early months of the fatal year 1855. Dr. Tommasi, who was summoned from Pavia by Cavour's friends, was not admitted to consultation."—*Turin Correspondent of the Times Newspaper*, June 6, 1861.

Similar disputes about the name of a disease, with the same treatment and the same results, were the English rule when Dr. Dickson first came out as a medical revolutionist and reformer.

man does every day of the year, and every year of his life, the inference is, his body must have a main-spring somewhere.

So far as the Chronometry of his living body is concerned, the main-spring of man is the Brain. Like the main-spring of the machine that tells the hour, this organ regulates the movements of every wheel and pulley of his frame. But having far higher functions to control than the machine of man's invention, the brain's rule does not stop here. The brain is not only the main-spring of Time, but the main-spring of Temperature also; for in addition to its chronal force, it has thermal power, the power to heat and cool. You may find this daily exemplified in your own person; every passion and emotion of the mind being attended by some thermal change.

"The brain, moreover, to a great extent,
Can mend the wheels themselves when broke or bent,
Whether, observe, the local flaws begin
From outward sources or disease within!"

If a healthy man be cut or bruised, the injured parts may, in numerous cases, get well without any surgical appliance whatever. And where local complaints, on the other hand, have been the result of long-continued constitutional wrong, — wrong induced by starvation, excessive heat or cold, or by hard work, whether of body or mind, — the cure may be materially helped by wine, brandy, bark, steel, &c., all of which, every body *should* know, tell on the brain! Now to the brain there are many avenues. When you want to touch this organ you need not bore a hole in a man's head; you may reach the brain very readily through the stomach. In the stomach the food and drink are digested; here it is the machine is daily wound up. Through the stomach, too, wine and medicines enter the system, and finally help or hurt it—for, according as they are used or abused, they may do both—by their action on the only organ by which the body can be moved—the brain! But you may get at the brain, whether for profit or loss, by various other paths. Through any one of the five senses, the brain may be reached, favourably or unfavourably, whether in health or sickness. Men, for example, have been cured of their fevers by music; others have recovered from their complaints through pleasant or unexpected sights. The mere act of tickling, on the other hand, has produced convulsions; and things disagreeable to the taste or smell, have brought on febrile relapses, and even death, where convalescence had been actually established. Shakspeare says, and says truly, you may

"Fetter strong madness with a silken thread,
Charm aches with air, and agony with words."

In all these cases the source of influence, whether curative or the reverse, is the brain. There are few diseases that have not been caused or cured through the medium of the passions. The head, not the heart, is the seat of the passions and emotions. The heart in truth is a mere mechanical contrivance to circulate the blood; and although the brain could not continue its functions many minutes without the support of the heart, the heart itself, like every other organ of the body, is dominated by the brain.

One of the readiest roads to the head is through the lungs. You may reach the brain in a minute with chloroform, for example. The power of this drug is something marvellous. When under its influence, a man may have his limb cut off without any sensation whatever; and even when he recovers from the artificial trance, he may still have neither pain nor uneasiness. Why? We have all seen a person after a fit of epilepsy. After a fit of that kind, people have no remembrance of anything done to them during the fit. During the epileptic paroxysm, the mental portion of the brain is all but completely torpid. The same thing happens during the anæs-

thetic sleep of chloroform. In neither case on recovering can a man remember *what he never felt!* But mark what may happen after amputation performed on a patient under chloroform. The same man who felt no pain in the stump either during or after the operation, may continue for many successive months to be attacked with the identical *local* symptoms for which his limb was removed, at the hour of the day or night when he was wont to suffer martyrdom before its removal. And more than this, if seized by his old enemy during sleep, he may wake exclaiming, "Oh my leg! my leg! it pains me just as severely as when it was on!" More curious still, so far as his own feelings are concerned, the same man will tell you he can actually move the foot and toes of the amputated limb! What do these facts prove? They prove—

1. That the Brain is the source of all motion and all sensation, morbid or sane. They prove inversely—

2. That the Brain is the source of rest and remission, sleep included. They further prove—

3. That the Brain is the source of all paroxysmal recurrence, whether the more prominent symptoms be general or local.

"How else, when once our maladies remit,
And ease succeeds to the distressing fit,
How could the ORGANIC MEMORY recal
The local symptoms, pain and heat and all,
In sense at least, even in the very part
Removed for ever by the surgeon's art!"

This Organic Memory is a very wonderful thing. It is on this memory, of which, by the way, the patient is himself mentally unconscious, that the paroxysmal recurrence of all diseases depends — wherever or however they may locally manifest their symptoms! Without this unconscious memory, life, whether in health or sickness, could not last a day. The Organic Memory plays periodically the same part in the interior economy, that the Mental Memory performs in respect of actions of which we are sensibly cognizant.

"While this directs the various outward acts
Whereby the mind repulses and attracts,
And in the intervals of work and rest,
Recals the joys that give to life its zest;
That for the inner workings of the frame,
Does in a silent manner much the same—
Preserving thus, where health exists at all,
The pleasant sense we Britons "Comfort" call.
If as an offset where bad feelings cease,
The first renews the thoughts that wound our peace,
The second, in its movements more occult,
Brings to the "physical" a like result,
Causing even local injury and pain
To come when past by fits and starts again;—
But these two memories, differently fed,
Spring from one source within the living head!"

It was BICHAT'S belief that the brain, during sleep, suffers collapse, and is at perfect rest. Dr. Dickson, on the contrary, holds that cerebral action goes on both night and day: and he further maintains, that during sleep the brain's action is the *reverse* of its action while awake. According to him the brain is the source of Expenditure by day, while by night it presides over Nutrition and Repair. Dreaming he calls the "Insanity of Sleep;"—and certainly the delusions of insane people resemble dreams very closely. So also do the delusions of inebriated men. Without sleep there could be no growth; that is why growing children sleep so much more than adults. Growth, then, like Nutrition and Repair, has its source in the brain. The Organic Memory must play its part in both. Without the Mental Memory, on the other hand, there could be no intelligence, neither could there be intelligent action. The law that regulates body and mind, according to Dr. Dickson, is one and the same. Both, when disordered, are subject to paroxysm and remission. The lucid interval of the maniac, whether perfect or partial, gives the lie direct to the assumption of the mad doctors that the brain is softened in insanity; so far, at least, as the word "softened" implies change of

structure. The brain of an insane person, like every other organ of the body when diseased, "loses condition;" but, like muscles and other parts when weakened by long sickness, the insane brain may, in most instances, recover its former firmness and stability while the patient has a limb to stand on. Intelligence and the power of intellectual action are gifts of the Creator which no animal is without; but the very highest order of animals possess intelligence in a much less degree than man. Nevertheless, all animals think and reflect; and all are therefore liable to mental as well as corporeal disorder. Moreover, there can be no mental disorder without corporeal disease.

"Order, disorder—sanity, insanity:
Do these exclusively concern humanity?
The horse, the dog, the fox become insane
By things that daily turn the human brain;
And drugs that stupify or sharpen men,
Serve birds and beasts the same, nine times in ten.
When these go mad, Remission, Fever's law,
Shows, as in man, the nature of the flaw."

Mania, or insanity, according to this view, is merely a remitting delirious fever, a fever too often made chronic by neglect or ill-treatment; but, like most other disorders, in the great majority of cases curable by febrifuges simply. Of this Dr. Dickson has given many examples. Taking advantage of the pause in the maniacal symptoms, and caring no more about the character of the patient's delusions than about the delusions of a drunken man, Dr. Dickson, with bark, steel, wine, &c., prolongs the remission here, however partial or imperfect, to permanent sanity. The mad doctors, who register the various delusions of their patients with an amusing minuteness, will say, of course, that this cannot be done; and they will bring you many very specious arguments against such "a dangerous method of treatment." Nor are these arguments, however sophistical, without their weight in certain quarters. The English people are naturally slow and cautious; but here, unfortunately, as in numerous other instances, their caution is exerted in the wrong direction. Putting their trust in men, who, they think, "must know all about it," they seldom or never examine for themselves. The mad doctors, like other doctors, whatever they may say to the contrary, have their own reasons for resisting quick cure; but it is not to the friends of the patients they confide their private thoughts.

"Where duty and men's interests are at strife,
How not to do it, is the rule of life."

Heaven help a rich man when once within the walls of a madhouse; for it is not the mad doctors only who are interested in his detention. The very practitioner on whose certificate he is incarcerated may receive, so long as the incarceration lasts, a handsome quarterly commission on the large sum annually paid for the *keep*—not the *cure*, mark! —of tne real or supposed lunatic. This was proved in a court of justice, in the recent case of Mr. Ruck, a sane man; the recipient in that instance, and in many others then brought to light, being the philanthropist, John Conolly. The jury awarded Mr. Ruck £700 damages for his wrongful imprisonment on Dr. Conolly's certificate.

But for this money question, there would be no difficulty in dealing with cases of lunacy. It is this money question, nevertheless, which, according to Lord Shaftesbury, the Chairman of the Lunacy Commission, sooner or later tends to vitiate much that may be done on the part of the Government for insane patients. And it is this money question, if the truth may be spoken, which in the outset militates against every improvement in general medical practice at all likely to shorten sickness.

From this digression turn we now to the subject of Vital Periodicity—turn we

to the Chronometry of Life. The Chronometry of Life, whether in health or disease, Dr. Dickson claims as his discovery. He it was who first showed that, like the heart's action, all corporeal movement is, more or less, periodic or chronometrical; and he it was who first further showed that temperature and time always influence each other. On this discovery, as our readers have seen, Dr. Dickson bases his Chrono-thermal System of Medicine; the first system, be it observed, in which this natural principle is broached or acted on in physic. For upwards of twenty years denied and decried by the great body of medical men, this discovery was, a year or two ago, plagiarised in the most impudent manner by no less a person than Professor Paget. In the summer of 1859, Mr. Paget delivered a lecture at the Royal Institution, "On the Chronometry of Life," before an auditory of doctors, many of whom doubtless laughed in their sleeves when the professor, with some unction, showed how nearly "the periodicities of organic life" are related to the thermal conditions of the body. Not once in the course of his elaborate lecture did Mr. Paget name the name of the author of the Chrono-thermal System!

In spite of the reluctance of the conductors of the medical press to entertain the question, the originality of "Mr. Paget's Theory" began to be canvassed; and in their notices to some of their more importunate correspondents we find proofs of the fact. These did not escape the eyes of Dr. Dickson's friends. Accordingly, the same gentleman who lately, so much to his honour, demolished the fictions of Dr. Page, made, with a few strokes of his pen, a still uglier hole in the reputation of Mr. Paget. Hear Dr. Heberden on the subject of this plagiarism. Read his letter on the

"CHRONOMETRY OF LIFE.

"*To the Editor of the Medical Circular.*

"SIR,—Among your 'Notices to Correspondents' of this week I find the following:—

"'*Mr. Paget's illustrations may not be new, but the merit of his lecture consists in recognising Chronometry as a pervading law in the animal economy.*'

"If Mr. Paget's illustrations are not new, to whom, let me inquire, do we owe the discovery that Chronometry is a pervading law in the animal economy?

"To whom, moreover, do we owe the knowledge of the important part played by *Temperature*, whether as a cause, coincidence, or effect of each and every of the movements that make up Life's Chronometry—a part on which Mr. Paget dwells at considerable length in the lecture of his you have just published?

"'*The influence of Time, as an element of action,*' you admit, '*has not been dwelt upon by physiologists, who have talked a great deal about all kinds of mechanical and chemical forces.*'

"To whom do we owe the introduction of an element into physiology, which for some years back has been silently reversing the whole treatment of disease?

"'Why vaunt the progress of our art and age,
Yet leave unnamed the individual sage
Whose genius brought to light the golden ore,
Whence drudging slaves drew only dross before?'

"*Suum cuique.* Yours, &c.,

"THOS. HEBERDEN, M.D.,

"Fellow of the College of Physicians.

"*Park Street, Grosvenor Square, June* 18, 1859."

To this letter the Editor of the *Medical Circular* appended the following words, which appeared in brackets, thus:—

"[Our correspondent obviously refers to Dr. DICKSON, whose merits on this and other questions his favourite law, 'Time,' will determine. We do not presume to

anticipate the verdict. As our correspondent says—*Suum cuique.* ED. MED. CIRCULAR.]"

Short but sweet! But instead of "obviously referring" to Dr. Dickson, as Mr. Ross, the Editor of the *Medical Circular*, states, Dr. Heberden obviously referred to nobody at all. Dr. Heberden, doubtless, like every other well-informed physician, knew the only man his questions could touch—but he studiously left the hiatus for others to fill up. That hiatus the Editor of the *Medical Circular* filled up with the name of Dr. Dickson. But while reluctantly doing Dr. Dickson this justice, Mr. Ross, as the reader has seen, reserved his praise, not for the discoverer, but for the person who, while recognising "Chronometry as a pervading law of the animal economy," omitted to name the man who made the discovery! There is an old proverb which holds true in physic as in everything else—"The first inventor always goes to the wall." In England, at least, the imitator and the plagiarist very generally walk off with the reward. And as there is a reason for everything, injustice included, there is a reason for this also. A man to be a discoverer or inventor must in the outset be in a minority of one. If his discovery be useful to his fellow-men, it will be sure to meet with opposition; and the extent of the opposition will be determined by the amount of interference which the discovery may cause to the interests of the class or profession whom it affects. Thus may one man, in the first instance, be opposed to a host. Envy, malice, and all uncharitableness, dog every step of the discoverer. His invention is decried as impossible, useless, dangerous, or a new form of imposture. By-and-by, under various disguises, it is plagiarised, and in part adopted to "meet the requirements of the age." Thus it was with the Chrono-thermal System. In the three kingdoms there are thirty thousand medical men who are paid for their services by the length of the disorder. To such men a quick cure has little or no recommendation. Accordingly, by the publication of a discovery that shows how every kind of sickness may be shortened, its Author made almost every individual of that powerful body his enemy. But Dr. Dickson having treated the subject in a popular manner, free from all technicalities, the people's eyes were to a certain extent opened, and one by one the doctors were compelled to dismiss many of their fallacies. But so far from becoming more reconciled to their old opponent, they have never missed an opportunity to show their rancour; and nothing gives them greater pleasure than to welcome with plaudits any writer, who, like Mr. Paget, plagiarises the doctrines they themselves have been compelled to swallow. Such is cotemporary justice. Delighted with his reception at the Royal Institution, Mr. Paget, before quitting the professorial chair, promised his auditory another lecture on the "Chronometry of Life;" but from that day to this he has not had the face to show himself as a lecturer within the walls of the Royal Institution. Dr. Heberden's letter would appear to have effectually tied the tongue of the too modest professor.

Let us now draw the reader's attention to a remarkable passage in the writings of a progenitor of the gentleman who, in the cases of Dr. Page and Mr. Paget, did such good service to truth by his boldness and honesty. The following passage from the pen of the *elder* Heberden shows that, however lightly that celebrated man estimated the medical science of his day, he did not absolutely despair of medicine:—

"The Art of Healing has scarcely hitherto had any guide but the slow one of experience, and has yet made no illustrious advances by the help of reasoning; nor will it probably make any till Providence

thinks fit to bless mankind by sending into the world some superior genius capable of contemplating the *animated* world with the sagacity shown by NEWTON in the *inanimate;* and of discovering that great principle of life upon which its existence depends, and by which all its functions are governed and directed."

These words were prophetic!—Reader, you will find them in HEBERDEN'S *Commentaries on Disease,* a work which was not printed until the year 1802.

Up to our epoch—HEBERDEN was right—
The Healing Art possessed no certain light;
Though, had he lived, that able man, perchance,
Had struck the path that just escaped his glance.
The animate world, like the inanimate sky,
Has since been scanned by an observant eye,
And Medicine, so debased in ages past,
Points to the great life-principle at last—
At last revealed!—the Periodic Law,
Seen in the sun and stars, as NEWTON saw;
Seen in the storms and calms; seen in the tides;
Seen in the seasons—chrono-thermal guides!
The Periodicity of Nature's Plan,
In all its parts, is now revealed in Man!
Throughout the animate and inanimate *Whole,*
Where but for this were order or control?
Without this great ELECTRIC LAW, earth, sea,
Sun, star, or living thing could never be;—
The highest mammal and the meanest worm,
Through this preserve their species, type, and form:
Through this man, beast, bird, reptile, fish, and fly
Are born or bred, renew their race and die—
Die and yet live!—for through this Law of Laws,
Death—their last sleep—is but a vital pause.
Come weal, come woe,—no matter what befall,
This with its tidal turns gives Life to all!

The harmony existing between all natural phenomena is very remarkable; and this harmony, to a certain extent, affords *primâ facie* evidence of the truth of Dr. Dickson's discovery, namely, the Chronometry of all vital phenomena, whether morbid or sane. But it was not on this sort of evidence only that Dr. Dickson rested his case. His proofs were of the most cogent and convincing kind, and applicable alike to health and disease.

So far as disease is concerned, if we except a few cases, and those chiefly of a mechanical kind, there is no form of disorder, whatever its real or presumed cause, in which examples of Periodicity may not be found.

The periodic disorder most familiar to medical men is Intermittent Fever or Ague. Whether recurring on alternate days, or at shorter or longer periods, the paroxysms of ague keep time, in most instances, like the clock. But the periodicity, so obvious here, instead of being ascribed by physicians to its true origin, —an *internal* chronometrical law of the living system, having its source in the brain,—was, till of late years, universally believed to be the result of an *external* hypothetical cause, which, according to them, vitiates the blood. This myth they called "Malaria." With daily and even hourly examples before them of periodic remission and exacerbation of every symptom, whether local or general, in complaints proceeding directly from blows, burns, and other similar agencies, such, up to 1836, was the settled belief of the most eminent physicians. Wherever, says the eminent Dr. Watson, of London, in his *Practice of Physic,* published in 1845,—wherever Periodicity can be traced, its "sole cause" is malaria!

It was a long time before Dr. Dickson could disabuse his professional brethren of this error.

The very fact of the Remittency of all diseases was, in the first instance, stoutly denied; nor, except in the case of the ague, could medical men at first see the value of Remission as a guide to the treatment of any disorder whatever. Naturally enough, therefore, the critics in the medical journals sneered at Dr. Dickson for making "*Intermittent* Fever," instead of "Fever in the *large sense* of the word," the type of all disease. Their ignorance of the fact that all fevers being paroxysmal, must of necessity, from the commencement to the close, have remissions of some sort, is here made very conspicuous. Full

of their school notions that the proximate cause of fever must be either some "inflammation" or "congestion" of some internal part, or some local pressure or fixity not always easy to diagnose, these gentlemen had not the remotest idea that there never can be, and never was since the world began, a fever of any description whatever without remissions more or less perfect in kind. And even when the remittency of all diseases was at last slowly and reluctantly conceded, it was almost impossible to convince the doctors that regularity in the period of paroxysmal recurrence is the rule, and irregularity the exception. But Dr. Dickson was not to be driven from his position here. The regularity of recurrence of all vital phenomena, whether morbid or sane, being a law of the living economy, he had no difficulty in logically proving by facts patent to everybody—everybody, at least, who has eyes, and will use them—that this is the law of paroxysm and remission in all complaints. Like other laws, it is, of course, subject to the interference of disturbing causes; and these causes here are twofold. Whatever, for instance, *alleviates* the instability of brain, on which paroxysmal recurrence of every kind depends, will, as a matter of course, interfere with the regularity of recurrence to the benefit of the patient. Whatever, on the contrary, *aggravates* that cerebral instability, will do the reverse. While easterly winds, for example, atmospheric humidity, bad news, bleeding, and other exhausting medical treatment very generally render the paroxysms of every disease, not only more frequent, but more rebellious; westerly breezes, a dry atmosphere, good news, bark (quinine), steel, and the judicious use of stimulants, tend as generally to the advantage of the patient, by rendering the paroxysms less frequent and more feeble, or by stopping them altogether. Whatever debilitates and exhausts the brain, fosters a wrong habit; whatever strengthens and supports the brain, helps the patient to shake it off.

The opposition raised by medical men to the use of the Peruvian bark in Ague, on its first introduction by the Jesuits, was, for obvious reasons, long and fierce. It comprised the leading doctors in every town in the empire. This opposition gave way at last: and it is but justice to the profession to say, that for years back, whenever the majority happened to detect regularity in the paroxysms of any fever, they prescribed bark at once, and stopped the fever. Most medical men give it now (in the form of quinine), wherever periodicity is traced. But their practice here, though right and proper, is to this hour dictated by a false hypothesis,—the hypothesis that the paroxysmal repetitions in all periodic complaints spring, not from a law of the living economy, but from "malaria"—that bugbear of their own creation! Acting on this belief, their treatment of diseases which arise from palpable causes—burns, blows, &c., has, till of late years, been in almost every instance bad. Their exhaustive practice, indeed, on the outset of almost all complaints, completely misled them here. Instead of alleviating or stopping the paroxysms, that practice almost always produced irregular paroxysmal frequency and continuance in cases where, without their interference, periodicity might have been easily detected; in which cases, doubtless, they might have cured their patients on their own "malaria" principle. The remissions natural to all disease, which in spite of their bad practice were sure to happen, the doctors actually mistook for the results of their own most excellent treatment! Hence, instead of trying, with febrifuge medicines to prolong the duration of these natural remissions to a permanent cure of the disease, the whole medical fraternity, when these recurred,

folded their arms and stood stock-still like so many idiots—the patient, according to their view of the case, being so much the better for the bleeding, leeching, or whatever else was done for him during the fit. *Post hoc* with them was *propter hoc* here.

> "They did not know, with all their fancied wit,
> That, bleed or not, the fiercest ills remit;
> Remit, recur, remit, and come again,
> Till Art or Nature FIRM the unstable brain."

And thus, instead of strengthening the mainspring of the man by tonics and stimulants during the remissions, and thereby preventing the return of the fits, the doctors ended as they began, by bleeding, leeching, and purging, on every fresh accession of the paroxysm, until the patient was either within an inch of his life, or until they killed him outright, as the Italian physicians managed to do in the case of Count Cavour.

With these explanations, we have a complete key to the whole subject of the intermittency of disease, whether regular or irregular, partial or perfect. We have no difficulty now in understanding how, by bad treatment, the most regular and most easily curable fever may become the most irregular and most difficult to cure of febrile complaints; and how by good treatment a fever, in the first instance only partially or irregularly remittent, may, where exhaustive measures have not been used, return very briefly to the healthy state of body in which it originated.

The reader may now settle for himself the question, to which of two things we owe the recent reversal of Medical Practice,—to the discovery of the Unity, Remittency, and Periodicity of all Disease, —or, as Dr. Page and the College of Physicians would have the world believe, to some imaginary change of the atmosphere, or to some equally imaginary change in men's bodies,—neither of which, by the way, they can themselves substantiate by anything better than the illusory word "perhaps."

All our great philosophers and poets have made the phenomena of Life more or less their study. Shakspeare, one of the most observant of men and things, and one of the profoundest and clearest thinkers of this or any other country, calls Human Life a "fitful fever." If this phrase in no way misrepresents the phenomena of Life in health,—if it in no way misrepresents the *orderly* phenomena of Life,—what can the modifications of the same phenomena which we call *Disorder* be, but modifications of Fitful Fever?

It will scarcely be denied by any reader of these pages, that the source of all disease, like the source of all ease, is the brain; and no man in his senses can possibly doubt that the brain is the source of the passions and emotions. Now it is a well-known fact that, from ague to erysipelas, from the gout to diabetes, there are very few diseases which may not be caused by the passions. The resemblance between a fit of ague and a passionate fit, —a fit of fear, rage, grief, &c.,—is very remarkable; and this resemblance has not escaped the observation of thinking men. Shakspeare, for one, makes use of the phrase, "this ague-fit of fear."

Ague is fever in its least complicated form. That is why Dr. Dickson assumes it to be the type of all fever. And as no local complaint of a constitutional character can come without some general remittent fever or feverish wrong,—some fitful error both of Time and Temperature, —he assumes, moreover, that this type of fever is the type of all disease. All diseases, he contends, begin or end with fever.

Whether, from its severity, a disease be termed an "inflammatory disease;" or, from the early prostration of the patient it takes the name of "Typhus;"—or, whether from some real or imaginary localism, the physician speaks of a given complaint as a gastric, a splenic, an hepa-

tic, or an hysteric affection;—or whether, in fine,

"From some supposed blood taint,
Some humoral myth, he christens the complaint
Scrofula, scurvy, rheumatism, gout,—
Those senseless terms men so dispute about,—
Disorders, if we trace them to the root,
All come to FEVER, chronic or acute."

Passing from diseases, the causes of which may be anything and everything the mind of man can conceive, to those disorders which can only be produced by a specific contagion—the *Exanthemata*, as they are called,—where can we find a better example of Unity of Type than in Small-pox? No physician, however able or observant, could, on the first outbreak of Small-pox, tell this disease from any other acute fever; for here we have each and all of the three stages in which a regular paroxysm of fever consists,—the cold, the hot, the sweating;—and this paroxysm may remit and re-appear more than once, before the eruption gives any hint of the true nature of the malady. Remission of the symptoms, whether local or general, is common to all complaints.

"Take chicken-pox, take measles, scarlatina,
Diphtheria, influenza—take angina,
Take any illness man may yet discover,
All will be found remittent; all, moreover,
In certain weakly frames, may sow the seeds
Of any local evil ague breeds."

Further, in these and indeed in almost every other disease, you will find febrile or aguish paroxysms more or less marked.

"In jaundice, croup, consumption—what you will,
The ague-fit is sure to meet you still.
Whate'er the external sources of disorder,
All our complaints come in this aguish order;—
Chills, heats, and sweats belong to one and all,
General or partial, as they chance to fall;
And all and each—unchecked by bark or steel,
Or other influences that tend to heal—
Follow a natural course of fit and pause,
For periods varying with the case or cause.
But some may ask,—as they may fairly do,—
What is disease's most unfailing clue?
The answer is, 'Remission!' Short or long,
This, as a rule, can never lead them wrong!"

Ah! but the local complaints! what clue, the reader will inquire, have we for the treatment of the numerous local complaints that may grow out of the various febrile diseases just enumerated? The answer is the same,—REMISSION!

"Look at the local ills that, day by day,
Grow out of febrile ailments—What are they?
Stripped of the technicalities of art,
Swelling or wasting of some given part—
Leading, of course, to loss of form and function,
A joint, for instance, thus may lose its unction;—
Secretions in excess or diminution,
Variously changed in kind and constitution;
Morbid increase or decrease of a sense;
Cramps, spasms, and palsies more or less intense;
Bleedings from lung or windpipe, stomach, gum,
Or other parts whence hæmorrhage may come;
Eruptions, ulcers, so called inflammations,
Decompositions, disorganisations;—
No matter what men style the morbid thing—
In these, as in the Fevers, whence they spring,—
Whether we look to size, pain, thermal change,
Or other signs within disease's range,
We find Remission still the common bond,
The one grand key-note whereto all respond!"

Reader, let this pause in the symptoms, whether perfect or partial, be the key-note to your treatment of all medical diseases. The greater number of these diseases will, in individual cases at least, yield to bark or iron.

It is on the brain,—the source of motion and rest, the source of ease and disease,—the source of paroxysm and remission, general as well as local—that bark, iron, and every other remedy, whether passing into the blood by the stomach, lungs, or skin, sooner or later tell. Through the organ that FEELS the hurt, must the injured parts of the human frame be touched, before they can in the very least be benefited by any kind of healing force. In diseases obvious to the eye,—diseases of the skin, for example,—what is the usual result of mere local measures? Rarely or never do skin diseases, whether chronic or acute, yield to local remedies. Why is this? Because the eruption that strikes the eye, is not the *beginning* but the *end!* Like all other local complaints not caused by direct mechanical or chemical agency, diseases of the skin gradually

grow out of successive fits of remitting febrile wrong. Accordingly, while resisting every kind of local tinkering, skin diseases will often readily yield to some medicine of a febrifuge character, — arsenic for instance,—arsenic, next to bark and steel, the most successful remedy for intermittent fever !

But what about complaints which never remit at all ? A few diseases of this kind there certainly are,—diseases of a purely surgical character,—such as strangulation from rupture, and other affections produced by some permanent mechanical obstruction. Wherever you have permanency of symptom, look for permanency of cause. Wherever the symptoms remit or intermit, the cause cannot be permanent. Therefore, whether for the detection or for the cure of disease, there is no clue which can be compared to Remission. In the case of permanency, surgical assistance may or may not be necessary ; here, at all events, doubts may arise. In the case of Remission, your course is clear.

"*Principiis obsta*—on the outset act,
And crush disease at once by skill and tact;
Crush it ere from neglect the frequent fit
Becomes a habit difficult to hit.
However fierce the storm, expect a calm;
Now is the time for the preventive balm!
Whether, as in the Ague's simpler forms,
Remission lasts a day between the storms,
Or gives ten minutes' respite to the frame,
The principle of cure remains the same.
What is that principle? As in the Ague,
To stop recurrence of the fits that plague you.
Strengthen the head, and leave the parts alone;
You know the means to give the main-spring tone?
Relying on the lull, however brief,
Push bark and steel to permanent relief;
And failing these,—for both may disagree,—
Change to whatever else makes FEVER flee.
If the Remission, treated thus, endure
For an indefinite period, that is Cure!"

It may be here asked,—In what forms of disease are bark and steel liable to disagree ? The answer is,—In all; and for a very sufficient reason—diversity of constitution. In this fact we have the explanation of the apparently contradictory results of the same medicines in different bodies, even in the same form of disorder. While keeping in mind the theory of the Unity, Remittency, and Periodicity of disease, we must never in practice forget constitutional diversity.

Allusion has been already made to the extensive bearings of the Law of Periodicity. But for this law the husbandman would neither know when to sow nor when to reap. Knowing this law, the astronomer calculates and foretels to the day, hour, and even minute, the return of eclipses and comets. Without a knowledge of the Periodic Law in Health and Disease, the man who undertakes the practice of physic is little better than a charlatan. Yet, in the cases detailed in the medical journals of the day, the references to periodicity are few and casual. The editor of the *Lancet* indeed, on one occasion, went so far as to say, that the Periodicity of Disease is of little importance as a guide to treatment. If that be true, why count the pulse watch in hand ? However much the pulse of disorder differs from that of health, it is usually very chronometrical. Even the intermittent pulse keeps more or less perfect time in its remissions.

During health the periodic repetitions of the movements of the body are, with little exception, uniform in all. During disease, on the contrary, the periodicity of the interval of paroxysmal recurrence, so far as different individuals are concerned, is as various as there are varieties in faces and forms. But whether in health or disease, the order of return, whatever the duration of the interval, is strengthened by habit. Each successive repetition of a movement, wrong or right, strengthens the disposition to a return of the same movement at the same period of *time*—more especially if the subject continues to reside in the same *place*. Some diseases, indeed, cannot be cured till the patient removes from

the place where his disease originated: and every now and then instances occur where the tendency to paroxysmal repetition may, from neglect or otherwise, become so completely the law of the individual life, as to defy all the resources of the most enlightened physician to subdue it. Epilepsy, or the "falling sickness," more frequently than any other form of disease perhaps, affords an exemplification of this rebellion against the best resources of the healing art. The disposition to recurrence in all our vital movements, whether morbid or otherwise, applies to everything human. We trace it throughout the whole of society—in our customs, crimes, prejudices, and every other good or evil thing involved in the destiny of man. In cities and communities man is a mimic —each individual is more or less the ape of each. The periods of movement and repose of the individual man are regulated by the movements of the mass of which he is an atom; and in the paroxysmal aberrations to which the body *corporate*, like the body *individual*, is from time to time liable, man performs almost unconsciously his atomic and inevitable part. At such times public opinion and public action are as the action and opinion of one man; hence national wars, national rejoicings, national panics, and all the other passionate outbreaks observable in the social system!

So far as relates to the paroxysms of human disease, the period of return, regular for the most part in the individual body, differs with different people in almost every case of the same disorder. Take the case of Ague, for example. The paroxysmal repetition in one case will take place regularly every day at the same hour of the clock, unless arrested or interfered with by accident or art. In another it will come on with the same precision every alternate day. In a third case it may come on every third or every fourth day. Instead of one fit, certain individuals may have two or more fits on the day of recurrence. In particular cases the febrile revolution may recur once a week only; while in some the interval of immunity may be prolonged to a month or months. The disease, in certain instances, may return once a year only; and within a day or two of the same day of the same month on which it assailed the patient the previous year! Dr. Dickson has met with cases where the disease returned every second year only. A gentleman applied to him with *Iritis* in one eye; having the year before lost the sight of the other by a similar attack. For something like six years, in one of the autumnal months, the subject of this case had an annual attack of Iritis; but the complaint each year alternated in the choice of the organ it assailed. This year it took the right eye, the next the left; and so on alternately during these six years, till one eye was completely destroyed. Dr. Dickson was lucky in saving the eye for which he was consulted. The patient came to him from having heard what had been said on the subject of Periodicity, in the *Fallacies of the Faculty*. A young lady, with Pulmonary Consumption, had an attack of fever, preceded by shivering, regularly every Sunday. The local disorder was increased by each repetition of the fever-fit, when medicine failed to keep it off. When that succeeded, there was improvement throughout. An old gentleman had a febrile fit with symptoms of insanity every second day, lasting from nine in the morning till three o'clock in the afternoon. The motion of a carriage broke it like a charm; but medicine had no power over it. A clergyman, subject to Epilepsy, had the disease regularly every third Sunday. A barrister had a return of the same disease every fifteenth day.

Some time ago Dr. Dickson had himself the misfortune to be attacked with

Neuralgia in his left arm. During all the time he suffered from it, he generally fell asleep as soon as he got into bed; but at three o'clock in the morning, to the minute, he was attacked with excruciating agony in the muscles of the arm and shoulder, which forced him to get out of bed. On washing his hands and face, and taking a glass of cold water, he was so far relieved as to be able to lie down again; but the pain, though thus lessened, kept him from sleep. After eating he was much relieved. His breakfast was a godsend to him. He was cured by large doses of morphia, after having in vain tried quinine, iron, arsenic, prussic acid, and other febrifuges, singly and in combination. During the year 1848 he had under his treatment somewhere about fifty cases of Neuralgia, all of which, with one exception, yielded to treatment; but no two in succession were cured by the same medicines.

It is not often possible to get rid of old familiar medical names; and where this has been done, the new names have not always been improvements on the old. However absurd their origin, we must still use the words gout, rheumatism, scrofula, scurvy, &c., as counters to reckon by. But where the symptoms of any given case of disease remit or intermit, what does it signify, so far as the treatment is concerned, whether you call the complaint gout, rheumatism, scurvy, scrofula, hysteria, or anything else? Not one of these terms will in the very least help you to cure it. But with Remission for your guide, and with febrifuges, like bark, steel, and stimulants, for your tools, you may at once stop the paroxysmal recurrence of every form of disease, baptize it how you please. Having done this, you can scarcely fail to set down the laboured distinctions, which so captivate the schoolmen, at their true worth—so much twaddle!

A doctrine so uncomplimentary to the professors of the healing art was not received with particular favour by the heads of colleges and universities, in this or any other country. Nor was it received very cordially by the great body of medical men in civil practice. By every grade, indeed, of medical practitioners in civil life—men who depend less on quick cure than on long attendance on their clients for their livelihood—the cold shoulder was naturally turned to the author of a discovery that shortens almost every kind of sickness. The opposition that met the first introduction of the Peruvian bark as a remedy for Ague, meets to this hour the early use of the same substance (in the form of quinine), in the thousand and one ills whereof Dr. Dickson discovered Ague to be the type. And the source of this opposition is now as it was then—self-interest!

But it is not in physic only that the improvement of a science by which its cultivators live may be opposed from interested motives. The same thing happens in law; and still more strange too in law, as in physic, the obstructives have almost invariably the advantage of being supported, in the outset of the struggle at least, by the public themselves, to the public damage. "The voice of all jurists," says Bentham, "is raised in concert to celebrate an established system; and the people, *misled by their unanimity*, do not stop to discover the self-interest which produces it." The people, therefore, as a matter of course, side with the majority.

Towards the close of the last century, Dr. John Brown, of Edinburgh, published a System of Medicine, wherein he divided all diseases into *two* classes, — namely, Sthenic and Asthenic diseases,—diseases of strength and diseases of weakness. In the first, he bled, leeched, and purged; in the second he gave opium and stimulants. *Ergo*—with a strange idea of logical consistency—certain modern medical critics will have it that the Chrono-thermal and Brunonian systems are one and identical!

Among the number who affect this belief we find a writer in the *Boston Medical and Surgical Journal* (for 1845), an American publication. "Now who does not know (says the writer in question) that this doctrine of accelerated or diminished atomic movement—unity and universality of all diseases, and development of local affections—is the very doctrine of Dr. John Brown, embracing all the theory of Dr. Dickson, except [EXCEPT!] his Periodicity, Temperature, and Type; and these, *ere long*, will be settled as *sheer humbuggery!*"

Begging the American writer's pardon, he is as much at sea in his facts here as subsequent events have shown him to be completely out in the matter of his prophecy. Had John Brown been aware that all diseases remit, and, moreover, periodically remit,—and that the source of paroxysm and pause in all diseases is the brain, — instead of the *diversity* of disorder which he actually did teach, he must have anticipated Dr. Dickson in the discovery of the *unity* and universality of all disease, a doctrine the direct converse of his own! For want of the clue afforded by "Periodicity, Temperature, and Type," a clue which this critic so affects to despise, the author of the "Brunonian System" did little more than, for a brief season, set medical men quarrelling about what complaints require the lancet and what do not. But as John Brown himself prescribed bleeding and other exhaustive measures in Pneumonia, Apoplexy, and many other forms of disease, for which Dr. Dickson abjures them, his writings produced no change whatever in the practice of physic generally, as every person in the very least conversant with the medical literature of our own country knows full well. Until the last ten or twelve years, as we have shown, bleeding and other exhaustive treatment continued to be the English medical rule—support the exception. And mark this significant fact—in the British schools, *up to this hour, we shall look in vain for a single text-book in which Blood-letting does not stand as the first of remedies!*

The American writer is very savage with Dr. Dickson for condemning measures which have stood the test of ages. "The measures Dr. Dickson condemns (he says) are blood-letting in all its forms, blisters, setons, and issues. For blood-letting he substitutes emetics and cold applications. These are his coolers. He recommends them both in Apoplexy and in all manner of inflammations, or at least *he would have us believe so;* but, after all he has said, *he knows better.*"

Very complimentary this, certainly! What will our critic, if he is still alive, say to the changes that have since taken place, even in the treatment of Apoplexy and all manner of inflammations? In London nobody now bleeds for one or the other. Somewhere in 1850, Dr. Todd, of King's College, printed what follows:—"The notion so long prevalent in the schools that acute disease [inflammatory disease] can be prevented or cured by means which depress and reduce vital and nervous power is *altogether fallacious.*" For the maintenance of which truth, fourteen years before Dr. Todd imagined, uttered, or printed it, Dr. Dickson was denounced as a madman by the whole profession, Dr. Todd included! If during those fourteen years a great change had not come over the spirit of his professional brethren—a change forced on them by Dr. Dickson's successful agitation—Dr. Todd had no more dared to print that paragraph than he would have dared to take his farewell of life with a leap from the Monument!

"To establish the fact that the type of all diseases is intermittent fever (we again quote the American writer), Dr. Dickson lays it down as a broad fact that all diseases commence with 'aguish fits.'

Now every practitioner knows that very many diseases,—even very extensive and severe inflammations, and sometimes general fevers,—come on without any aguishness at all [a mistake, as any man may discover for himself who goes to the bedside, and not to books for his facts!] This attempt of Dr. Dickson to make out all diseases to come on with agues or chills [why does the writer leave out "heats"?] is intended to establish the periodicity of every movement in the body, both normal and abnormal. The discovery of the periodicity of all morbid and healthy movements, is that on which he mostly plumes himself, and tenaciously and exultingly claims as his own. He extends this theory of the periodicity of movement, not only to all vital, but to all physical actions, even to all stellar movements, and to earthquakes, tornadoes, and hurricanes. The doctrine of Unity of Action he extends through all Nature's works, up to the Deity himself, but he does not claim periodicity for the Supreme Being. If, by periodicity, Dr. Dickson means simply exacerbations and remissions, without any reference to regularity of time, we shall not differ from him [the writer has already shown Dr. Dickson means quite the contrary!], for morbid and healthy movements vary every hour in the day, and every day of the disease, just as the winds blow high or blow low [the natural periodicity of disease being thereby disturbed]; and once in a year or two, or oftener, or not so often, we have earthquakes, tornadoes, &c. Now, we have no idea of calling the one or the other of these variations *periodical;* such theory is what we Yankees call a matter of moonshine, a *pure creature of Dr. Dickson's heated imagination.*"

Thus much we read in the *Boston Medical and Surgical Journal* of December, 1845.

Happily for Dr. Dickson—happily for science and common sense—there are men even in America who take a very different view of the matter. Among these can be reckoned the entire staff of Professors—ten in number—of the Penn Medical College, of Philadelphia. As the Penn Medical College is empowered by the Legislature of the State of Pennsylvania to grant degrees in medicine, the English reader may possibly peruse with some interest the following extract from the first announcement of an Institution which examines in physic on the chrono-thermal theory and practice:—

"The Faculty of the Penn Medical College believe in the Unity of ALL Diseases, as characterised by Intermittency and Periodicity;—a principle to be distinctly avowed and sustained as a fundamental principle in medical science; a principle first suggested by Hippocrates, more than twenty-three centuries ago;—a living principle in harmony with the harmonies of nature, and without the acknowledgment of which no system of medicine can possibly be of universal application.* The teachings of the Professors of the New College, so far as the subject comes within the province of the *proper chairs*, will fully develop, maintain, prove, and defend that harmonious system of medicine which embraces the *Unity* and *Integrity* of the living body, the Intermittency and Periodicity of its functions, and the Intermittency, Periodicity, and Changes of Temperature which mark the revolutions of universal nature. *Time* or *Period* (Chronos) and *Temperature* or *Heat* (Therma) are elements of every system in nature; yet

* On which statement Dr. Dickson makes this remark:—"The only allusion to Periodicity that I can find in Hippocrates, is his doctrine of 'critical days' in Fevers—days on which, according to him, when these diseases do not terminate fatally, a tendency to cure may be expected. In my own experience, I have failed to discover any such. The date of the tendency to cure differs with almost every individual case. It may, moreover, be hastened or retarded, according to the treatment employed."

these universal elements are nowhere found in any system of medicine hitherto taught in the schools. Such a system nevertheless exists, and for its development we are indebted to that master-mind—SAMUEL DICKSON, of London—a system which, in harmony with the universal harmony of all nature, acknowledges every power and principle in creation, and avails itself of all natural means in the treatment of disease; a system which boasts the fertility and not the paucity of its resources; which appeals from *authority* to *examination*, and, rejecting antiquated dogmas and conflicting theories, demands statistics; a system which employs little medicine, saves an immense amount of suffering, greatly shortens the duration of disease, and effects an unparalleled reduction in the number of deaths; a system from which the bleeding lancet, leeching, and every other form of blood-letting, is rejected, and rejected for reasons which are based upon indisputable truths. In proof of the safety and universality of the application of the Chrono-thermal system, its supporters are ever ready to compare its results—its numerical cures—with the curative results of all other systems—disease for disease, case for case, period of continuance with period of continuance, &c., &c."

This from the other side of the Atlantic must be satisfactory to Dr. Dickson. In England the truth comes out in another fashion. How Mr. Paget has plagiarised the Chrono-thermal System the reader has already seen. But Mr. Paget is not the only medical man of eminence who has similarly demeaned himself. The list of gentlemen who stand in the unenviable position of plagiarists of Dr. Dickson's views has been gradually increasing from the first promulgation of the doctrine; and this list now includes the names of Sir Henry Holland, Sir Benjamin Brodie, Dr. Todd, Professor Laycock of Edinburgh, and other practitioners of less note —Mr. Skey and Dr. Gull for example —all of whom, in their various writings since 1836, have either more or less covertly acknowledged the Remittency and Periodicity of all vital phenomena, or have plagiarised the treatment based on the discovery. In the first instance, the leaders of the profession did all they could to extinguish the light. Failing in this, their next move was to extinguish the man; they calumniated where they could not refute. Their last desperate step was, if possible, to take the light out of the hands of the discoverer altogether, and reduce it to the dimensions of a farthing candle!

To protect the rights of authors, there is a Copyright Act, but this Act, unfortunately, affords no protection to medical discoveries. Mr. Curtis, the barrister, in his work on Copyright, divides Plagiarism into three branches, and the following is his remark on No. 3:—

"No. 3. Piracy by imitation, or by reproducing with colourable alterations and disguises assuming the appearance of a new work. This is by far the most frequent form in which the Copyright of Authors is infringed."—p. 253.

It was by a manœuvre of this kind the late Dr. Todd of King's College rose to eminence. Years and years after the publication of the *Fallacies of the Faculty*, Dr. Todd continued to treat Apoplexy, Paralysis, and Pneumonia, by every form of depletion, according to the approved fashion of his early teachers, the Dublin Sangrados. In all three forms of disorder, as his own published cases show, he did as all other schoolmen were in the habit of doing—he bled, he leeched, he cupped, he purged, he blistered, and otherwise exhausted the life-force of his unfortunate patients. Somewhere about the year 1850, the King's College Professor, as we have seen, changed his tune. Then, for the first time, he published his "New Treatment of Apoplexy and

Pneumonia by Quinine and Mild Tonics from the commencement." Adopting much of Dr. Dickson's practice, Dr. Todd completely ignored Dr. Dickson's principle. For Remittency—a phenomenon traceable in all medical and in most surgical complaints—Dr. Todd substituted an invention of his own, which he termed "Blood-poison." All diseases, quoth Dr. Todd, spring from "poisoned blood,"—*ergo*, all diseases, for their cure, sooner or later, require bark, steel, and stimulants. Why? Because, according to Dr. Todd, these remedies act as "antidotes to poison!"

"As antidotes to poison—curious creed!—
A flimsy mask for a piratic deed,—
The usual practice here, as matters go,
When rogues would reap where men of genius sow.
Finding the chrono-thermal method sure,
Todd, with an eye to fees, adopts the cure;
Prescribes bark, steel, and stimulants—yet ignores
The principle whereon the plan restores,—
Ignores Disease's intermittent turns,
Yet acts upon the very law he spurns!
But, to disguise the coach wherein he rides,
He darkens the escutcheon on the sides,
Removes the owner's crest—a living head—
And paints a horror of his own instead.
Blood-poison! when a man has crushed his thumb,
And lock-jaw follows, how can poison come?
When sudden draughts set up neuralgic pain,
What organ *feels* the chill—the heart or brain?
When mental shocks cause coma, gout, or rash,
Who talks of poisoned blood talks balderdash!
What is 'blood-poison' doing,—tell us, please—
During the intermissions of disease—
During the periods when, from fever free,
Pulse, tongue, and skin are as they ought to be?
Remission, thus repeated and repeated,
Is no creation of a mind o'er-heated—
Remission is a phase you see and feel,
The surest guide for tonics—bark and steel.
But 'poisoned-blood'—what brews it? 'tis a myth
Without a particle of proof or pith—
A figment to bamboozle, and withdraw
Attention from the great Remittent law;
Making Disease's Unity depend,
Not on the part where hurts begin and end—
Not on the brain, the source of pang and pause,
But on the blood, changed by some mystic cause.
A weak invention for the sake of plunder—
A swindle, a perversion, and a blunder!"

What of that? With his blood-poison figment, the Professor of King's College made a decided hit. The medical practitioners of London were just at that moment in want of a leading card. Compelled by the "requirements of the age" to change their practice, they looked about them for a substitute for their friend Dr. Watson, who, it was notorious, carried depletion to its extreme point. In Dr. Todd they found a bird of their own feather,—a man who met them half-way;—and him accordingly they called to their "consultations,"—proof positive that Dr. Todd was no introducer of a new system! By this procedure they hoped to trip up the "chrono-thermal man" on his own ground, and in this they were not disappointed.

"Silently, slowly pilfering piecemeal
All of his system worth their while to steal,
The sordid tribe, who live for pelf alone,
Get up a mongrel system of their own,—
A cunning mixture of the old and new,
The false so slily blended with the true,
And so conforming in its outward mould,
Few can say which is pinchbeck, which is gold;—
Then in the room of Genuis place a Todd,
And Dickson's Ape is forthwith Physic's God!"

The reign of this spurious object of professional worship came to a close in the spring of the year 1860, when, being seized with a sudden vomiting of blood, Dr. Todd, after a few hours' illness, died, in the fulness of fame and fees. Great of course were the lamentations of the London medical men on the unexpected event. The press teemed with articles in praise of their favourite. Among other tributes to his talents, an obituary notice appeared in the *Times* newspaper, which the conductors of that journal, with their usual caution, headed "from a correspondent." That notice contained the following laudatory passage:—

"He (Dr. Todd) looked on all disease as *one*;—thoroughly conversant with the several avenues and processes of the body deranged by it; and he was thus enabled not only to see comprehensively, and to teach decidedly, the phenomena before him, but, with all the energy of a wonderfully active mind, to take a LEADING PART in *moulding* the theories that were

current in his youth, into *conformity* with the requirements of an epoch [the requirements of an epoch,—the old story !] in which physiology has made greater strides than in all former periods combined."

The writer does not say by whose assistance physiology has made these strides. Dr. Todd most assuredly did not discover the Chronometry of Life—a discovery that has completely changed the face of physiology ! But curiously enough, the point on which the writer of the above paragraph dwells as most worthy of praise, is that whereon Dr. Todd most deserves condemnation. How Dr. Todd could contrive to reconcile error with truth ; how he could contrive to bring Unity of Disease into harmony with the multitudinous hair-splitting of disorders taught in his younger days ; and how he could—*except by a process of adulteration*—take a leading part in MOULDING the all but exploded practice of bleeding, leeching, purging, and salivation for all complaints into CONFORMITY with his own later treatment of Apoplexy and Pneumonia by "quinine, iron, and mild tonics, from the commencement," are problems that would defy anybody but a conjuror to solve ! Come we to facts.

Do we owe to Dr. Todd the discovery of the Unity of Disease, which his friends seem so anxious to award him ? We do not.

Was it Dr. Todd, or any friend of Dr. Todd, who first introduced the tonic practice in Apoplexy and Pneumonia in any stage of either disorder ? It was not.

Whether as regards the doctrine of the Unity of Disease, or the great practical changes which for some years back have been silently taking place in medicine, Dr. Todd, and the friends of Dr. Todd, only followed in the wake of another man. Dr. Todd had neither the grace nor the honesty to acknowledge himself that man's disciple. He was a plagiarist simply ; a plagiarist, with a mask so transparent, and an adulteration so coarse, the merest tyro in the profession could scarcely fail to see through the one and detect the other !

When accused—repeatedly accused—of these plagiarisms in the columns of the *Medical Circular*, Dr. Todd was silent. When accused of the same acts in the *Times* newspaper and elsewhere, by the man whose treatment he pilfered, Dr. Todd was still silent ; neither he, nor his friends for him, had a word of defence. *Magna est veritas et prevalebit !* In the teeth of these facts, will any sane man doubt the source of Dr. Todd's "New Treatment of Apoplexy and Pneumonia by Quinine and Mild Tonics from the commencement" ? For the extravagant employment of stimulants, with which Dr. Todd would appear to have coupled his "new treatment," the physician in whose footsteps he followed is in no way responsible. Dr. Dickson advocates the use, not the abuse, of stimulants.

So much for Dr. Todd himself,—so much for the man who "with all the energy of a wonderfully active mind," took "*a leading part* in moulding the theories that were current in his youth into conformity with the requirements of an epoch in which physiology has made greater strides than in all previous periods combined" ! And now comes the question, Who assisted the Professor of King's College here ? Who took the other "leading parts" in this juggle ?

We have mentioned the names of Sir Benjamin Brodie and Sir Henry Holland ; the first is Serjeant Surgeon to the Queen ; the second is Her Majesty's Physician in Ordinary. Without very good evidence, it would not be easy to convince most people that men so highly placed could be implicated in a plot so disgraceful. But stranger things have happened ere this. Some fifty years ago, Sir Everard Home was what Sir Benjamin Brodie is now, Serjeant Surgeon to the occupant of the British Throne. This

office he obtained through the influence of John Hunter, his connexion by marriage. On the death of Hunter, Sir Everard Home came into possession of the manuscripts of his distinguished brother-in-law. The bad use Home made of Hunter's papers is matter of history. Having carefully gutted them of all that appeared valuable, he published in successive volumes of the *Philosophical Transactions*, the materials he had thus purloined, as his own contributions to Comparative Anatomy. To conceal his fraud, Sir Everard Home burnt the Hunterian manuscripts!

Reader, it was at the feet of this Gamaliel Sir B. Brodie was brought up. Sir B. Brodie, for years, assisted Sir E. Home in his practice; and it was through the good offices of Sir E. Home he first obtained a position as a London surgeon. How Sir B. Brodie managed to keep that position is a question which does not concern us. He did not *then*, at all events, interfere with the orthodox practice. The question we have to deal with now is, how far Sir B. Brodie has since plagiarised Dr. Dickson, —how far he has sucked the brains of a man he, in common with so many of his brethren, still thinks it necessary to decry. Let facts and dates speak.

So far back as 1813, Mr., now Sir, Benjamin Collins Brodie came out as a specialist on *Diseases of the Joints and Spine*. In a succession of papers which duly appeared in the *Medico-Chirurgical Transactions* of that and the two following years, Mr. Brodie with all the unction of a newly-fledged hospital surgeon, recommended bleeding, leeches, cupping, calomel, blisters, setons, and caustic issues as the best treatment in these diseases. This of course he may plead was in his "early life." Doubtless it was, and the fact is here most readily admitted. It was, besides, quite in accordance with the then prevalent English practice in all complaints, whether surgical or medical. But, for many a long day after, Mr. Brodie triumphantly pointed to the success of this treatment in diseases of the joints and spine. During a further experience of TWENTY-ONE years in hospital and private practice he never once deviated from the curative measures he first propounded in 1813. So far from that, in each and every of four separate and well-considered editions of a subsequent treatise *On the Diseases of the Joints and Spine*, which during these thrice seven years Mr. Brodie at intervals deemed it necessary to publish, he repeated and re-repeated the advantages to be gained by thus lowering and torturing the patient in each and every of the diseases in question. The last of these four editions of his book bears the date of 1834, an important era in the life of Sir B. Brodie;—for in that very year the now eminent surgeon of St. George's Hospital, having previously attained the court rank of Serjeant Surgeon, was created a Baronet of the United Kingdom. Mark that, Dr. Page! Mark that, Mr. President and Fellows of the College of Physicians! Thus in the zenith of his professional reputation, and when somewhat past the meridian of his life as a man, Sir B. Brodie treated the diseases of the joints and spine precisely as he treated them in the earlier days of his chirurgical career—namely, by bleeding, leeches, calomel, and cupping, using these exhaustive and repulsive measures, *then* even, in cases of "chronic inflammation." And in so far as regards blisters, setons, and caustic issues, the now great top sawyer of English surgery still continued to express himself perfectly pleased with the "*singular benefit*"—to quote his own words—"*usually*" resulting from these "advantageous" remedies.

Now it is a curious fact, that so long ago as the year 1839—five years, be it observed, after the date of Sir. B. Brodie's edition of 1834—the author of the Chrono-

thermal System sent him a copy of the Unity of Disease, a work in which Sir B. Brodie's system of practice is denounced as a barbarism throughout. "In that work," writes Dr. Dickson, "I condemned everything he did. I condemned the bleeding, leeching, cupping, blistering, and aperients; I condemned the setons and issues; I condemned the abuse of calomel; I condemned the long confinement to the recumbent position, which he recommended his patients to undergo; I condemned Sir B. Brodie's whole practice, both local and general, so far as regards the management of diseases of the joints and spine. Each and all of these diseases, according to my view of the matter, growing out of a great *antecedent* constitutional wrong,—each and all of them being special developments of a remittent or intermittent febrile affection of the whole frame,—each and every of them I contended might be far more safely combated by quinine, iron, and other internal remedies, proper to the treatment of remittent or intermittent fever, than by any *local* measures whatever. Over and over again I reiterated that statement, giving cases at the same time to verify my assertion."

What effect had all this on Sir B. Brodie? At first little or none apparently, if we may judge from what he himself published seven years afterwards in his Lectures on *Pathology and Surgery*. In that work, which bears date 1846, Sir B. Brodie cautions his readers against "this modern fashion of resorting on all occasions to novel methods of treatment." "Make yourselves masters of the old remedies (he says), learn how to handle them, and what good they will do; and as a general rule, have recourse to them in the first instance. If the old remedies fail, and you are at a loss as to what you should do, then, and not till then, have recourse to the new ones. If you always begin with new remedies you throw away the valuable results, not only of your own experience, but of the experience of those who have gone before you."

It was a long time before Sir B. Brodie acknowledged his own error in pursuing the old treatment, in the first instance, on all occasions; but he did at last acknowledge it, though, as will presently be seen, not in the handsomest manner.

In 1850—reader, note the date!—turning his back on all his own previous experience,—turning his back on a practice which, though the practice of the greater portion of his professional life, he was evidently now very heartily ashamed of,—Sir B. Brodie published a new work, which he was pleased to call the "Fifth Edition" of his treatise on "Diseases of the Joints and Spine, with *Additions* and *Alterations*."

Many and great are the alterations here, but graver and greater are the omissions. One case in particular is omitted, which, as it was published in all the four previous editions, he evidently considered to be a model of his *superior* treatment. The case of an unfortunate boy whose *legs* he leeched and blistered, and whose body he purged for a periodic *head*-ache of "a few minutes' duration," has no place here! Every page of this new edition is strangely mutilated and altered; yet Sir B. Brodie tells his readers how happy he is that all his "subsequent experience has tended to *confirm the general accuracy* of those pathological views which he was led to adopt" in his first publications! Such actually is the astounding statement he makes in his introduction to this new *Edition*—an edition wherein he absolutely abandons every one of the more prominent measures and opinions on which in so many previous publications he had, for upwards of *thirty years*, very particularly plumed himself. The "additions" with which in his title-page Sir B. Brodie couples his "alterations" he omits to tell his readers are neither more nor less

than so many "subtractions" from the pages of a writer he and his friends had for years affected to despise as "the madman" who wrote the *Fallacies of the Faculty!*

In a chapter on *Neuralgia of the Joints*, which chapter, be it observed, has no place in his book of 1834, Sir B. Brodie, in 1850, thus delivers himself:—

"By far the most frequent cause of Neuralgia is a *hysterical* state of the constitution. It may therefore well be supposed that the disease is more common in the female than in the male sex. The latter, however, is not altogether exempt from it."

Now the word "hysterical," being derived from the Greek word ὑστερη (*hysterà*) the *womb*, how are we to understand Sir B. Brodie? Does he mean that the male, as well as the female, is liable to a disease proceeding from or pertaining to the womb? That is the meaning of the word "hysterical." Is this sense or nonsense?—science or drivelling? But let Sir Benjamin proceed.

"Some years ago, a *large proportion* of the cases which were treated as diseased joints, were of this description; and looking back at the early part of my own practice, I am sensible that the mistake is one which I often made myself."

What was the result of his frequent mistakes here? Sir B. Brodie does not say. For the reader's benefit we shall supply the omission. Worn out by repeated torture, and by every kind of exhaustive medical treatment which mistaken ingenuity could devise, a "large proportion" of Sir B. Brodie's neuralgic patients, during the "early part" of his practice, were relieved of their limbs on the amputating table. Why does the eminent operator forget to tell us that the "early part" of his practice comprised something like thirty years of his professional life? Does not this particular instance of forgetfulness look like a *suppressio veri?* Does it not savour of the *suggestio falsi?*

"The subject is now (he informs us) better understood by surgeons." This is satisfactory, so far as it goes; but Sir B. Brodie does not tell us who first taught surgeons to understand the subject better; though he admits "the same mistake is occasionally made even at the present time."

In this we can bear him out. A year or two ago, the writer of these pages was called to a lady who had her limb amputated for neuralgia of the knee; but the operation gave no relief. For months afterwards she continued to suffer from neuralgia in the stump!

"Occasionally," Sir Benjamin Brodie goes on to say, "occasionally, when a joint has been a considerable time the seat of *hysterical* pain [what kind of pain may that be?], a slight degree of suffused swelling is perceptible in it, apparently the consequence of some effusion into the cells of the cellular texture external to it. This corresponds with what may be observed in some other cases of neuralgia. In a gentleman who was the subject of facial neuralgia (*tic douloureux*), attended with an unusual degree of suffering, there was the same kind of swelling of the face, although there could be no doubt that the real seat of the disease was *not in the nerves, but in the brain itself.*"

The brain itself! Why, that sounds more like *cerebral* than *hysterical* disease. Sir Benjamin Brodie makes no mention of the brain in any of the four previous editions of his work, in connexion with local disorders. But—

"At other times (he informs us) there is a periodical change of temperature, not only of the affected joint, but even of the whole limb. In the morning it is *cold*, and pale, and shrunk; towards evening there is evidence of a more active circulation—the surface of the skin is *hot*, red, and shining."

Sir Benjamin Brodie says nothing of

those general "chills and heats," on which Dr. Dickson lays such stress; but he makes the important remark that—

"During the night the heat and redness subside, and these alternations are as regular as the paroxysms of an *Ague*."

The Ague, or Fever, of which the local symptoms are in reality developments, would appear to have escaped his notice!

"Such cases," nevertheless, he tells us, "are not very uncommon, and they are always very perplexing to the practitioner who for the first time is consulted about them."

Not very uncommon! They are of daily and hourly occurrence, Sir Benjamin; and you know it. Every man of any standing in the profession knows it now! But taking your own words, that they are "not very uncommon," why should any case of any disease in that category puzzle a properly educated practitioner? Why indeed? This is the answer. The Schools of Medicine do not teach medicine; they do not teach the remittent nature of disease. Till the schools do that, the practitioner must be in a perpetual state of perplexity, in every kind of disorder. To practise medicine scientifically without that knowledge, is an impossibility; and the want of that knowledge imposes on the practitioner the necessity of a daily succession of lie and subterfuge, to screen his ignorance. How came Sir B. Brodie to be wiser than his fellows here? He owed the discovery, he tells us, to his own "more enlarged experience." And what was the practical conclusion to which that discovery led? This:—

"The sulphate of quinine, preparations of iron, the citrate of quinine, and iron, may generally be exhibited with advantage."

Not one word of thanks to the man who, so far back as 1839, sent him the book that taught him the necessity of reversing the entire treatment of the diseases of his own specialty! He had never read it,—so his friends say.—*Credat Judæus!* We recommend to Sir B. Brodie an advice of Lord Bacon:—

"Always when thou changest thine opinion or course, profess it plainly, and declare it openly, *together with the reasons that move thee to change*, and do not *steal it*."

Having given the reader specimens of the manner in which Dr. Dickson's discovery has been pilfered by the "adulteration dodge," and the "more enlarged experience dodge," we come now to the "prophecy dodge," or plagiarism by prophecy—after fulfilment!

Who was the predictor of past events here? No less a man than Sir Henry Holland, the Queen's physician!

In Sir Henry Holland's *Medical Notes and Reflections*, a work which has run to three editions—we shall speak of their respective dates by-and-by—the reader will find what follows:—

"Has sufficient weight been assigned in our pathological reasonings to that principle which associates together so many facts in the history of disease—namely, the tendency, in various morbid actions, to distinct INTERMISSIONS of longer or shorter duration, and more or less PERFECT in kind. The subjection of so many diseased actions to this common law, establishes relations which could not have been learned from other sources, and which have much value even in the details of practice." "It will probably be one of the most certain results of *future research*, to associate together, by the connexion of causes of common kind, diseases now regarded as wholly distinct in their nature, and arranged as such in our systems of nosology. This remark applies very generally through all the *genera* of disease. The influence of certain medicines, and particularly of Bark, in curing even the

most anomalous varieties of intermittent disorder, is a fact of great interest. It enables us to denote and class together symptoms, apparently the most remote in kind, but which, presumably, could not be thus relieved unless depending on some COMMON MORBID CAUSE."

Some common morbid cause! A mistake, Sir Henry. Each and every one of the symptoms you mention, instead of depending on "some common morbid cause," may proceed from any one of a thousand morbid causes, acting on a common centre—the Brain!

But for an instability of Brain common to all diseases, an instability of Brain which any cause of sickness may produce, there could be no such thing as a periodically intermittent or remittent disorder at all. To the Brain, then, the source of pang and pause—to the Brain, the source of remission and exacerbation of every disease, general or local—local, so called—to the Brain, the main-spring of all action and all sensation—must we look for the cure of all complaints, name them how we please. In the Unity of internal *source*, not in the Unity of external *cause*—lies the secret of the Unity of influence of the Peruvian bark! While taking advantage of Dr. Dickson's materials, Sir H. Holland, like Dr. Todd and some others, has only addled the eggs he attempted to poach. Mark his conclusion:—

"We can hardly touch on this subject of FEVER, without finding in it a bond with which to associate together numerous forms of disease, but withal a knot so intricate, that no research has hitherto succeeded in unravelling it."

No research has hitherto succeeded in unravelling it! Sir H. Holland first printed this passage in 1839; he repeated it in the second edition of his work in 1845; he re-repeated it, word for word, in the third and last edition in 1856. In the teeth of the facts recorded in these pages, Sir H. Holland three times deliberately and knowingly repeated this gross mis-statement!

The following extract from the *Destructive Art of Healing* will show to what littlenesses a pseudo-great man will stoop when caught tripping:—

"Vilified and misrepresented by the medical press of the country as the most ridiculous heresy of modern times, the Chrono-thermal Discovery, when first brought out, proved anything but a source of gratification to its author. I was, therefore (Dr. Dickson confesses), not a little agreeably startled to find so much of my own doctrines received with such complacency by Sir H. Holland in his observations 'On Morbid Actions of an Intermittent Kind,' as they appeared in his *Medical Notes and Reflections*, in 1839. But the disappointment which followed, when I saw no mention of my name in his volume, determined me at once to send the writer a copy of the '*Unity of Disease*.' A simple note of thanks told me of its receipt. It now became clear to me that Sir H. Holland wished to appropriate to himself the merit of a discovery that was even then beginning materially to change the medical practice of England. Being at the time engaged in writing the '*Fallacies of the Faculty, with the Chrono-thermal System of Medicine*,' I took care therein to bring the conduct of the court physician before the world; and as soon as my charge of plagiarism was in print, I thought it only just to send a copy to Sir. H. Holland himself. A letter bearing his signature, marked '*private*,' came to me shortly afterwards by way of 'explanation:'—but it contained no explanation whatever—it was very full of civility, and fuller still of mystification. What right had Sir H. Holland, in the position of a man charged with a mean act, to address a 'private' letter to the person who publicly de-

nounced his conduct, in the expectation that his communication would be held as confidential? I never was his confidant; on the contrary, I was his accuser. At the bar of the profession—the extent of whose corruption and want of principle I did not then know—I had openly charged Sir H. Holland with scientific larceny; quoting in my printed charge the passages in his book which appear in these pages, and stating at the same time the dates of our respective publications in proof. Nevertheless, I have refrained from publishing his 'private' letter. But this was what I said in my reply:—

"'If to YOUR OWN observations solely, or to the works of OTHERS, you, sir, owe the sentiments expressed in the quotations made from the *Medical Notes and Reflections*, I shall be too happy to retract any remarks of mine that may appear harsh or any way unfair. If, on the contrary, the passages I have quoted from your volume were SUGGESTED by MY writings, I think it would be creditable to yourself, and just to me, that you should still say so. In either case, I shall be glad to publish in my next lecture, any statement you may wish to make to me on the subject.'

"Sir Henry Holland's rejoinder was as great a curiosity as the private letter with which he first tried to talk me over and bind me to silence. Scrupulously evading all reply to my question thus clearly and categorically put, in respect of the *authorship* of the Periodic and Febrile doctrine of all disease, Sir Henry again adopted a style of friendship which it was impossible for me to believe sincere. Reader, this letter *not* being marked 'private,' I make no scruple in giving its concluding paragraphs here, with a few running comments of my own:—

"'Without expressing *any opinion* upon the General Doctrine *you* propose [I asked no *opinion;* I asked a *question!*], I may simply state, that no closer relation occurred to me between *this* and any passages I recollected in my own volume, than might naturally be expected on points WHOLLY SUBORDINATE TO YOUR LARGER CONCLUSIONS [a most important *private* admission which he has never yet *printed*]. To the few sentences you quote *taken from amidst old notes* [By whom made, and from what author?], I attach importance only as briefly expressing what I think to be true, and as bearing upon the topics under discussion. I did *not introduce* them as *new views* [another important *private* admission on the part of one who, with silent complacency, sees them daily placed to his credit, by his friends, in the medical journals!], nor dwell upon them further than as *subserving* to those topics. I feel assurance that you will be satisfied on these points. But, nevertheless, I do not avail myself of your kind offer to retract anything in your lecture [That offer rested on a condition as yet unfulfilled — a specific answer on the score of the authorship of the 'views' in question]. I may repeat (what I said before in perfect truth), that I feel at any time most anxious to avoid any sort of controversial publicity [To provoke controversy is not the best way to prevent it — all delinquents, whether morally or legally such, shrink from publicity!]; and I shall be satisfied in knowing that this topic will not come again into print in the same light [No doubt!]. It gives me pleasure to know that you find anything of truth, or useful *suggestion*, in what *I have published* [Where did I ever express myself to that effect?]; and I shall feel gratified by any opportunity which may hereafter occur, of talking with you on these subjects of common interest to us, *out of print*.—Ever, my dear Sir, yours faithfully, H. HOLLAND.'

"Such is the pith and marrow of a letter Her Majesty's Physician in Ordinary thought it no degradation to address to a

writer who had publicly charged him with the meanest thing of which a man can be guilty—scientific larceny! The reader may be curious to know how Sir Henry Holland demeaned himself towards the same accusing spirit when an opportunity did 'hereafter occur' to have a little pleasant chat 'on these subjects of common interest to *us*, out of print.' The very first time he was asked to meet 'us' in consultation, he refused!"

In two subsequent editions of his work Sir H. Holland, as we have seen, repeated word for word the passages which appeared in his first edition in 1839; and in his third edition of 1856 he moreover adopted —with some little disguise of course—the greater part of the "General Doctrine" on which he declined, unasked, to give an opinion! Not once did Sir H. Holland in any of his three editions name the name of the writer to whose "LARGER CONCLUSIONS" the "passages in his own volume," according to his *private* admission, were "WHOLLY SUBORDINATE!" Shortsighted Sir H. Holland! those damning facts, in quarters where they cannot fail to tell, will be quoted against you some day!

From this digression return we to the Chrono-thermal Discovery. Till within the last few years, what knew the great mass of medical people about paroxysm and remission as a law of all disease? What knew they of the "tendency in various morbid actions to distinct intermissions, of longer or shorter duration, and more or less perfect in kind?" What knew they of the "bond with which to associate together numerous forms of disease"—"Fever"—Intermittent Fever—AGUE? In all our text-books up to this hour, so far from being recognized as a *law* of all disorder, Periodic Intermission and Return are declared to be *exceptions* to the whole history of disease!

Every man in the profession knows better now. But do the public profit to the extent they ought to do by Dr. Dickson's discovery? They do not. Why? Because the public, seeing with their ears instead of their eyes, give, for placebo practice and long attendance, what they deny to talent and quick cure!

The profession now is inundated with Specialists of every kind—one for this part, another for that—people who reduce the whole Science and Art of physic to a mere system of local tinkering.—

"No longer looked on as a living Whole—
A clock-like Unity from crown to sole,
Whose every move the Main-spring must control!—
The Body now, like a dismembered thing,
Of ravenous birds becomes the toss and fling.
Owl, kite, and vulture, each with special mark,
Pounce on the spoil, and fatten in the dark.
One takes the 'Heart'—another tries the 'Lungs,'
O'er which they chatter in conflicting tongues;
A third, less dainty in his choice of meats,
The 'Stomach and its difficulties' treats;
This with the 'Liver' manages to dine;
That banquets doubly from the 'Joints and Spine.'
Some with the 'Spleen' their hungry bellies fill;
Some feast on 'Kidney,'—devilled if you will.
These take the 'Mucous Membrane'—these the 'Skin;'
Those with the 'Colon' their repast begin.—
No part so loathsome, no disease so foul,
But has its furtive kite or peering owl,
Who with the instinct of his carrion caste,
Sticks to the living quarry till the last.—
But blackest, vilest, of the moral scum,
Is that false harpy with the speculum!
Out on the wretched quacks who would divorce,
The body's fragments from the ruling force!
Out on all specialists! while such exist,
How can God's truth the public mind enlist?
Nay, how or where, till the great human hive
Themselves in Natural Science deeper dive,
Can any but these tinkering creatures thrive?"

In London, at this moment, there are specialists and special hospitals for diseases of almost every part of the body. We see there Hospitals for the Eye and Ear —Hospitals for the Chest—a Cancer Hospital—a Spinal Hospital—an Hospital for Palsy—an Hospital for Stone and diseases of the Urinary Organs, &c., &c., &c.! In all these hospitals, as may be readily imagined, local tinkering is the rule; constitutional treatment, not always the best, the rare exception.

Recently, it is true there has been a sort of reaction in the profession against this utter destruction of the Unity of Medical Science. But many, even of those who join in the cry against the "Special Hospital Nuisance," are either specialists themselves or belong to a class known by the name of the Negative, or Do-Nothing School. Professing an unlimited faith in the powers of Nature, the men of this school instead of preventing the recurrence of the paroxysms of disorder are content to watch events as they arise. This they call studying the "Natural History of Disease;" and certainly it is very much better than killing people outright, as the doctors used to do by their exhaustive measures. But if this is all that Medical Science can accomplish for the sick, the sick may as well be without its assistance as with it. Practitioners who treat their patients in this manner are traitors to the Art of Healing. A very little reflection will prove the fact. Take the case of Ague;—this disease is either amenable to good medical treatment, or it is not. Who, with the smallest experience of the readiness with which the Ague-fit may be checked by quinine, would withhold its use in that complaint till the patient, worn out by repeated paroxysms, finds himself at death's door? No man with a name to gain, or a character to lose. Why, then, permit any other of the thousand and one forms of disease—whereof Ague has been shown to be the type—paroxysmally to repeat and re-repeat itself, till recurrence becomes a habit so inveterate, the best remedial means may fail to stop it;—to say nothing of the local disorders, certain in many cases to ensue? Local complaints, of a constitutional kind, can only come through fever or a feverish state of body—they cannot come of themselves. Local complaints, like chickens, must be hatched! What better method could be devised to produce local diseases, than to let constitutional disturbance proceed, fit after fit, unchecked? Yet such is actually the course which is now, to a great extent, pursued in ordinary practice. This study of the Natural History of Disease is a mean pretence. Its object is procrastination. Those who recommend it are not physicians—they are tradesmen. To men of this stamp, the following lines are addressed, on the principle of Dean Swift's *Advice to Servants*:—

We've traced the Natural History of Disease;
Study it, doctors, while it brings you fees—
Heaven grant the case may yield a golden crop—
But how can people study what they stop?
Festina lente!—take a leaf from Law;
And make the most of every little flaw.
Mark in succession what the sick endure;
Nature is potent, give her time to cure.
If, like the Ague, all complaints remit,
Business is business, mitigate the fit;
Repeat the process every fresh return—
Cheer men who shiver—cool them when they burn!
With each new phase disorder passes through,
Your patient more and more will interest you;
But how can he or those about him know it,
Till you've had opportunities to show it?
Save and except where Death is at the gate,
Why Nature thwart?—why interfere with Fate?
Stop not a case, whatever else you do, sirs,
Science and shop were equally the losers!*
To watch disease, and profit by the act,
Require no little management and tact.
Study men's tempers and distempers well;
Note the weak point, and learn to make it tell;
Encourage men to take their favourite bent,
And while they harp upon it, nod assent.
If with "soft sawder" you contrive to please,
And give a restive patient present ease,
Then you may play upon him like a flute,
Whether his case be chronic or acute;
Making a great man's pocket, so to speak,
A "pail of milk" to last you many a week!
To crown your work, be careful to instil
A due respect for his physician's skill;

* "Our present *successful* plan of cure—for this, undoubtedly, *cannot* be made the subject of a difference of opinion [?]—is, I apprehend, due to our general *non-interference* with the course of nature in the *succession* of morbid actions, SAVE—and THEN only—when we *see them running on rapidly* to a FATAL RESULT. The modern triumph of our art is more in the happy forbearance exemplified in our *negative* treatment, that in the positive success of any heroic remedy."—Editorial article by Dr. Bushnan in the *Medical Times*.

When, for example, paroxysms depart,
Place the remissions to the effect of art;
On the recurrence of the chills and heats,
Tell him to be more cautious what he eats;
Should local mischief *follow*, change your ground,
And say how glad you are the *cause* is found!
Of local means exhaust the usual list,
Then call some special artist to assist:
While work is to be had, it must be done;
Two heads, of course, are better now than one.
An occulist perchance may help you here;
An aurist through the throat may pierce the ear;
A stethoscopist, perfect in his part,
Will find a flaw in the most healthy heart.
The patient, if a lady, you presume
May want some special doctoring for her womb;
Here, too, are pliant men to solve a doubt,
And help a friend to ferret business out.
In consulation—*Anglicé* collusion—
Keep chrono-thermal influence from intrusion;
Daylight, unpleasant daylight, once let in,
No one can tell where ruin might begin.
Preventive practice—cry it up who may—
As things are managed now will never pay;
Do what you can to knock it on the head,
And thus, like men of sense, preserve your bread.
Damn every statement DICKSON dares to print,
And treat his so-called facts with shrug and hint;
Or, if need be, with slander more direct,
Send to perdition him and all his sect!
While yet Expediency in Physic rules,
Leave abstract justice to good-natured fools;
Stand by your Order—you are safe, at least
So long as crowds are willing to be fleeced!
Where were the triumphs of the Healing Art,
Did all complaints with the first pill depart?
With fiddle-faddle few are discontent,
But who will pay you simply to prevent?
Numbers will fee you twice a day while sick,
Yet grudge a guinea where the cure is quick;
Thinking, no doubt, that what so nimbly flees
May, after all, be no such grave disease!
If then, while down, men pay without demur,
By all means let the paroxysm recur;
For cure rely on Life's repairing force,
And leave disease to take its natural course;
Conduct it—guide it—till it mends or ends—
Why stop a thing on which your bread depends?

The simple-minded reader will laugh at all this, of course. The same man who looks sharp after his lawyer will give the most unbounded faith to his doctor—Wherefore so?

The "Law's delay" is a proverbial fact;
But Physic apes it now in every act;
Now both professions use the same device
To sell their Science at the highest price,
And few in either craft account it sin
To "nurse a case" so long as fees come in!

It is the common cry of a section of the profession now that Fever will run its course, do what you will. And the same thing is said of small-pox, measles, chicken-pox, &c. Gout and rheumatism also, it is said, will run their course. Believe it not! There are very few forms of general disorder which may not be shortened by good medical treatment. In Physic, as in most things, where there is a will there is a way.

Hitherto we have said nothing of the most efficient practice in disease during the paroxysm. What, for example, is the best method of shortening or alleviating the severity of the Fever-fit? The cold affusion—of which Hydropathy is only an extension—was at one time a great favourite with the profession for that purpose, and deservedly so. Of course it could not cure everybody, and for that and other less disinterested reasons it soon got out of fashion. But any agency, medicinal or otherwise, which will act as a cerebral Soother, or a cerebral Revulsive, may at once cut short the paroxysm of most forms of febrile disease. As a Soother, chloroform, when skilfully and discriminately used, is much to be depended on; and it may be tried in every stage of disease. Of Revulsives, the best are emetics. When you name emetics, the majority of medical men will talk to you of purgatives as equivalents. They mistake—purgatives too often exhaust and keep up wrong action—emetics as usually reverse it. Every paroxysm of disease that has a name may yield to an emetic, administered in the outset. Followed up by quinine, steel, or some other febrifuge, this is by far the most successful plan of cure in Acute disorders. Small-pox, treated thus, is seldom or never confluent, —Diphtheria rarely fatal. What is the usual result of the present fashion of local tinkering in Diphtheria? In an overwhelming majority of cases—death! Dr.

Dickson seldom interferes with the throat at all in diphtheritic disease. He treats this complaint like every other, on constitutional principles—with emetics and quinine for example ;—and as yet he has never had to deplore a fatal result in diphtheria. The effect of emetics here is magical !*

By this practice Pneumonia, Pleurisy, Asthma, Rheumatism, Gout, Mania, &c., may also in numerous instances be at once completely subdued. In all, the inhalation of chloroform may be equally successful in arresting the paroxysm in the first instance—proof positive that, however variously these various forms of disease locally manifest themselves, one and all have their source in the Brain !

What a death-blow all this to the straw-splitting and elaborate distinctions of the men of the Anatomical Schools ! It is a great mistake to suppose that diseases cannot be cured without a knowledge of Anatomy—a mistake into which the conductors of our popular literature have occasionally fallen.

"Every living being," says a writer in the *Household Words*, "every man, woman, and child, endures a certain ascertained amount of sickness during life ; for the alleviation of which medical knowledge and skill are required. But medical efficiency in the treatment of disease cannot be gained unless the young doctor bases all his subsequent studies upon a thorough knowledge of the structure of the human body. This information can only be had by *the use of the scalpel on the dead.* The very notion is apt to send a thrill through every nerve of those unaccustomed to regard the subject in a philosophical light. But the terms are absolute—no dissection, no knowledge !"

Were this statement correct it would be utterly hopeless to attempt to enlighten the public on the subject of medicine. What can be more repulsive to the mass of mankind, than the blood and filth of the dissecting-room ? Luckily for the human race, there cannot possibly be a greater mistake than the assertion that medical knowledge can only be obtained by dissection. In rare cases only is an acquaintance with the minutiæ of the internal structure of our bodies at all necessary to the treatment of the various maladies that come under the charge of the Physician. But even this kind of knowledge may be very competently taught without dissection at all. Anatomy, like geography, may be taught by drawings and models. Far be it from us to deprecate the practice of dissection by professional men. However repulsive this may be in the first instance to the medical student, he is soon reconciled to it by habit and example. With the public at large, things are different. Medicine, to be a popular study, must be taught in a popular manner. With the principle of Remission for our guidance, a knowledge of Anatomy is not in the least necessary for the cure of the great majority of human diseases. As a rule, the Anatomy of the dead too often misleads men who principally depend on it in their treatment of the living !

The greater number of medical men, when they leave the schools, know almost as much of Anatomy as their teachers. When Sir Benjamin Brodie commenced business as a surgeon, there was perhaps no better anatomist in London. Notwithstanding this, for upwards of thirty years—

* "It happens not rarely that the Ague comes on in irregular, instead of regular fits—has, in a word, no decided intermissions. Holding no type, it resembles more a continued Fever. Here administer an emetic, and the consequence will be that the Fever will become a regular ague, with decided intermissions, which may then be quickly and happily cured by quinine."—*Hufeland's Enchiridion Medicinæ.*

"I know no remedy, equally capable, in so many cases, of arresting disorder in its earliest stage, without shock or injury to any organ or function of the body, or of abating the severity and duration of disease, where its sudden suspension is unattainable." —*Sir H. Holland.*

which long period he chooses to call the "early part" of his professional life—almost everything he did for the cure of the sick, by his own confession, was a mistake.

"In the early part of my professional life (Sir B. Brodie tells us) I was led to follow the practice which was then very generally adopted for treating caries (ulceration) of the spine by means of setons and caustic issues—one on each side of the diseased vertebræ. A more enlarged experience [since when?] has satisfied me, that in the *very great majority of cases*, this painful and loathsome treatment is not only *not useful, but actually injurious.* For many years past [how many?] I have ceased to torment my patients who were thus afflicted in this manner, and I am convinced that the change of treatment [by what or by whom suggested?] has been attended with the happiest results. In the *early* part of my practice, I was accustomed to regard the ulceration of the articular cartilages as a disease which was to be relieved almost exclusively by *local* remedies."—"Experience has long since [Sir B. Brodie has his reasons for not giving the date!] led me to a very different conclusion, and has satisfied me that there are remedies [Bark and Iron he means] which, acting through the medium of the constitution, exercise a most beneficial influence over the *local* malady, and by the judicious application of which, many cases may be brought to a favourable termination, in which this could not have been accomplished otherwise."—"Indeed, I must confess, in proportion as I have acquired a more extended experience in my profession, I have found more and more reason to believe that *local diseases, in the strict sense of the term, are extremely rare.*"*

What then, as a general rule, is the use of Anatomy here? What has the cure of diseases of a joint, or the cure of diseases of any other part of the body by *bark* or *steel*, to do with Anatomy? The doctors, who for centuries bled, leeched, purged, and exhausted their patients—erroneously as is now admited by all—were in most cases as good anatomists as we have in the present day. Yet when the Bishop of Exeter lately proposed to teach the deacons of his diocese a knowledge of medicine, it was objected by the medical profession, that these clerical gentlemen would run the risk of killing more than they could cure, on account of their ignorance of Anatomy! Where people object to what does not suit their interests, they usually give any reason but the right one.

Not many centuries ago, all throughout Europe, the clergy were the principal mediciners. Linacre, physician to Henry the Eighth, and, moreover, the first president of the London College of Physicians, was a priest. The priesthood of that day would have looked upon it as a dereliction of their sacred duty to neglect the precept

* Reader, contrast this with what Sir Benjamin Brodie printed in his *fourth* edition in 1834, when he was senior surgeon of St. George's Hospital,—printed the very year he was made a Baronet, and when he had made money enough to support his new rank. Speaking of chronic complaints, he makes the following remarks:

"As the chronic inflammation is relieved more slowly [than the acute] in the first instance the joint should be kept in a state of perfect quietude; blood should be taken from the part by means of leeching or cupping."—"It will in general be right to repeat the blood-letting twice or three times, or even oftener."—"A blister may be applied, and if necessary several blisters may be employed in succession."—"The blisters should be of a considerable size."—"I have employed caustic issues, and seen them employed in a great number and variety of instances, and have found them to be *usually productive of singular benefit, where the cartilages are in a state of ulceration.*"—"Setons and blisters kept open by means of savine cerate, appear to operate nearly in the same manner, and may be used with *advantage* in the same description of cases."

With results so advantageous, why did Sir B. Brodie change his practice? Why did he change a practice usually productive of singular benefit? What led him to "throw away the valuable results, not only of his own experience, but of the experience of those who had gone before him?"

of the Divine Founder of their Faith, "Heal the sick!" Most of them, in fact, had some knowledge of simples: and in every monastery there were persons of experience to prescribe for the poor and afflicted. We owe to the priests of Paraguay one of the best febrifuges in the Materia Medica—the Peruvian bark. On its first introduction, the leading anatomists of London scouted the bark as the most dangerous of remedies. So much for Anatomy and the anatomists. My Lord Bishop of Exeter, we are not among those who sneer at your "Medical Diaconate."

We have yet a few words to say to a class of medical men who ascribe some, if not all diseases, like Dr. Todd, to a humoral origin—to a humour or morbific matter of the blood. Dr. Watson, among others, still adheres to this idea in certain cases. In his *Practice of Physic*, published in 1845, he adduces the Gout as an instance of disease from this presumed source.

"The pathology of Gout," Dr. Watson tells us, "has been the theme of endless controversy. Humoralists and Solidists contend alike for the triumph of including the disease within the pale of their respective theories. The very name *Gout*, derived through the French *goutte* from the Latin *gutta*, expresses summarily the doctrine of those who imposed it; and we trace the same, or a similar idea, in the application of the kindred disorder *Rheumatism*. 'The opinion,' says Cullen, 'which has generally prevailed is, that Gout depends upon a certain morbific matter *always* present in the body, and that this matter, by certain causes thrown upon the joints, or other parts, produces the several phenomena of the disease.' You will find this doctrine at the bottom of all Sydenham's speculations on the subject; but Cullen doubted it, and even endeavoured, in an elaborate argument, which you may read in his *First Lines*, to disprove it. He held Gout to be an affection of the *nervous* system. I shall not trouble you by detailing his argument, for I consider it an utter failure. I am satisfied that the ancient doctrine, which asserts the *humoral* origin of the disease, is the true one. 'Morbific matter'—it may well be called a *poison*—is generated or detained, under certain circumstances, within the body, and *silently collects* in the blood; until after obscure threats, perhaps, and prelusive mutterings, it explodes in the part, and the bodily economy, like the atmosphere after a thunderstorm, is for a while unusually pure and tranquil."

Reader, what is all this but mere rhapsody? Who, with the slightest knowledge of the true nature of any disease whatever, would be so absurd as to put such nonsense on paper?

Is, or is not, the disease we call the Gout a periodic disease,—subject, of course, like all other diseases, to have its periodicity disturbed by the interference of accident or art? Do, or do not, the paroxysms of Gout obey the law of repetition common to all disorders? Has, or has not, the gouty patient chills, heats, and remissions, as surely as the subject of any other disease? What are the swellings of the joints but the successive local developments of a remittent fever of the whole body—a fever involving the solids as well as the fluids; a fever which never, and under no circumstances, can occur without a coincident remittent affection of the cerebro-nervous system? The same external causes which have set up an epilepsy in one man, or an ague in another, may set up gout in any constitution predisposed to Gout. How can the north-east wind, or mental worry, produce any one disease—Gout among the number—without previously affecting the brain and nerves? Can you cure one or other

of those paroxysms without also, in the first instance, influencing the great nervous centres? Have not the passions—terror and rage—caused and cured the Gout in persons predisposed to it, as certainly as they have caused and cured a fit of hysterics, or a fit of the epilepsy in patients predisposed, by hereditary or other tendencies, to either of these confessedly nervous disorders? Even Dr. Watson admits this; Dr. Watson, who laughs to scorn Cullen's idea that Gout is a nervous disease. The following from Dr. Watson's own pen is an absolute refutation of his own position!

"Strange stories are recorded," he says, "strange—but I believe true—of *instantaneous cures* of the Gout by strong mental emotion—by sudden terror—by violent wrath. Dr. Rush relates an instance of this:—An old man, who for several years had suffered an *annual* [periodic?] attack of Gout, was lying in one of these paroxysms, when his son, by some accident, drove the shaft of a waggon through the window of his room with vast noise, and a great smashing and destruction of glass. The old man leaped out of bed, forgetting his crutches; and his wife, on entering the apartment, was surprised to see him walking up and down, and exclaiming angrily against the author of the mischief. The late Professor Gregory, of Edinburgh, was in the habit of mentioning another example to the same effect, authenticated to him by a naval surgeon. It occurred in the person of an officer, who was freed from an attack of Gout, when at sea, by an alarm of fire. Whether this influence of certain states of the mind be rightly alleged or not, we can never hope to make any practical use of such a remedy. Indeed, a fit of the Gout has been sometimes brought on by a mental shock." "Sydenham relates, that one of the most atrocious attacks of Gout he ever underwent was induced by intense thought and study in the composition of his medical works."

All this we have from the pen of the man who laughs at Cullen for thinking Gout a nervous disease! This much Dr. Watson confesses, yet, with a *naïveté* utterly inconceivable, he cannot for the life of him, he tells us, turn this particular knowledge to a practical account! Not once do the admitted facts, that Gout may be caused and cured by a mental emotion, suggest to him the particular system which plays the *primary* part in this disease, and on which, moreover, if the physician wishes to do his duty to his patient, he should be prepared to act with his instruments of cure—namely, on the brain and nerves. What could be a better refutation of Dr. Watson's own position, that Gout is caused by a poison in the blood, than its instantaneous cure "by a mental emotion"? When a man gets instantaneously cured of Gout by a passion, or by anything else, what becomes of this imaginary poison of the blood? By what "explosion" does it vanish? Or how can a mental emotion suddenly purge the blood of *lithic acid*, which certain other writers—Sir B. Brodie included—assume to be the chief cause of Gout, without a previous action of the brain and nerves?

"There is reason to believe," Sir B. Brodie tells us, in his edition of 1850, "that the real and efficient cause of Gout is the presence of an unusual quantity of *lithic acid* in the blood; and, indeed, the fact has been established by the interesting researches of Dr. Garrod."

The interesting researches of Dr. Garrod do no such thing, Sir Benjamin. The interesting researches of Dr. Garrod simply establish the fact that lithic acid may be detected in the blood of the gouty patient, if the practitioner be so ignorant of his art as to bleed in the gouty paroxysm. But is this *coincidence, consequence,* or *cause?*

During the paroxysm of Gout, as during the paroxysm of every other disease, however set up, the blood ceases to maintain the condition of healthy blood; but this altered condition of its constituent principles is no more the cause of the gouty fits than the crassamentum, observable in blood drawn during a paroxysm of acute fever, is the cause of the febrile disturbance! In the case of Gout, so far from lithic acid, or any other morbid product in the blood drawn during the paroxysm, being the cause of the paroxysm, neither the one nor the other could possibly be created without that great coincident constitutional wrong. The lithic acid here is the result of a previous nervous disturbance of the whole frame. It is part and parcel of a paroxysmal attack, occurring in a person predisposed to gouty disorder of the joints—precisely as the so-called scrofulous diseases of the same localities are the results of a previous remittent febrile attack of the whole body of patients predisposed to such complaints. The conclusion which Dr. Watson, Sir B. Brodie, and Dr. Garrod, have drawn from the facts before them, is utterly untenable on any theory whatever. The simple admission that the Gout may be instantaneously caused or cured by a mental emotion is a complete death-blow to the humoral view of the case. Equally destructive to that idea of the cause of Gout is the fact that, like epilepsy and mania, Gout has been indubitably brought on by a purge, and also by loss of blood. The difference between an attack of gouty disease of the joints, and an attack of scrofulous disease of the same parts is, that in the one case there is a tendency to chalky deposit, and in the other a predisposition, on the contrary, to the deposit of tuberculous matter. But both diseases may be brought on, in different individuals, by the same cause —mental trouble, the east wind, or anything else. They have, moreover, this analogy—that both are always the results of previous remittent disease of the whole body; and, moreover, both may be cured by one and the same febrifugal agency—arsenic, quinine, hydrocyanic acid, or iron, for example. Combined with colchicum or guaiac, these remedies are very effectual. Few cases of Gout, if treated in the early stage, will resist one or other of these particular febrifugal combinations. Were lithic acid, or any other real or pretended poison in the blood, the cause of Gout, how could these remedies cure the disease? How could a passion cure it or cause it? Like the passions, one and all of these produce a favourable or unfavourable influence—for they may do both—in the case of Gout, as in the case of other diseases—by their action on the brain and nervous system. How does the action of colchicum, a febrifuge which Dr. Watson erroneously believes to be a "specific" for Gout, square with the humoral doctrine of a blood poison?

"Colchicum, judiciously employed," Dr. Watson says, "may fairly be accounted a *specific* for the gouty paroxysm." "This drug has certainly the property of easing, in an almost magical manner, the pain of Gout. *How it operates, is not so clear.* It is apt to produce nausea, faintness, and diarrhœa; but its curative influence *is not conditional upon the occurrence of these symptoms.* Sometimes, the rapid disappearance of the gouty inflammation is its only perceptible effect. The patient may be in helpless agony, with a tumefied red joint to-day, and walking about, quite well, to-morrow. The colchicum, therefore, is plainly an anodyne."

An "anodyne!"—a soother! Why, then, on your own admission, Dr. Watson, the primary action of colchicum must be on the brain and nerves; it must begin with the nervous system. That, at least, is the generally-admitted action of an "anodyne!"

"The colchicum," continues Dr. Watson, "also sensibly modifies the condition of the urine, rendering it less acid, and even alkaline, and increasing its quantity. These effects are consequent, I *presume*, upon changes in the blood, wrought by this substance, which thus and there proves *somehow* [without any previous influence on the brain and nerves?] an antidote to the poison of Gout!"

Dr. Watson mistakes very greatly when he supposes colchicum to be a "specific" for Gout, or that there is in nature a specific for any disease whatever. A specific means something that will, in every case of a given disease, do the same thing. Were colchicum such a medicine as he believes it to be—were it the case, that this remedy could *always* produce a good effect in gouty subjects, how comes it that so many who have tried it, in every form and stage of the complaint, are at this moment suffering from chalk stones in their joints? How comes it that certain gouty subjects, so far from being relieved by colchicum, have their pains aggravated every time they take it, in whatever form it may be prescribed? In a word, what does Dr. Watson know of either the rationale of Gout, or its treatment? Read his *Practice of Physic*, and you will find this great schoolman equally ignorant on every subject he takes in hand!

In each of the three so-called "liberal professions," very great changes of opinion are at this moment manifesting themselves. Whether as regards the Church, the Bar, or the Medical Profession, the necessity for reform is every day becoming more and more urgent; and it is gratifying to know, that in each of these professions, something has already been done to forward the march of improvement. The men who live by the Law, more particularly, have lately, to a certain extent, been compelled, however reluctantly, to bend to the intelligence of the age. In the establishment of the County Courts, England has obtained the first instalment of a great beneficial legal change—a change which, at no distant day, must be made to extend to the iniquitous proceedings of our so called "Courts of Equity." The good example America has so recently set us in that respect, cannot much longer be resisted by any interest, or combination of interests, however powerful. Speaking of the new order of procedure, which has been so successfully introduced into the Courts of Law of *New York*, Judge Brown makes the following observations:—

"The Code, in the first period of its being, has been met by great opposition—not unnatural or unreasonable by any means—which every just and beneficial reform encounters, and which every measure of reform should be prepared to encounter upon its first application to the affairs of men. It necessarily unsettled many questions touching the practice of the Courts. It temporarily embarrassed the judges, perplexed the lawyers, and subjected both to some inconveniencies. It rendered the learning, labour, and experience of many years in the practical part of their profession in a measure useless—and required them to give up their time and attention to the study of an entirely new system. In this respect, men of the largest experience, and men just on the threshhold of professional life, were reduced to a common level. Yet I venture to doubt whether there is an intelligent man amongst them all, who has witnessed its operation from the Bench or the Bar, who will deny to the Code of Procedure very great merit and superiority in many particulars over the old practice."

Mutatis mutandis, how completely every word of these observations apply to the Chrono-thermal System of Medicine, and the changes which that system has

already worked in the medical practice, whether of the Old World or the New; for, in America, as in England, a great revolution is now taking place in the opinions and practice of the regular physicians.* From the universal darkness which prevailed throughout the medical profession before the announcement of Dr. Dickson's discovery, that announcement fell upon the doctors like a thunderbolt. If to some it gave light instantaneous, the greater number were only stupefied by the suddenness and intensity of the blaze. Indeed, for the first few years after its introduction, the Chrono-thermal Discovery was still a dead letter to the mass of professional men.—It was not the interest of the medical press to give it currency. Directly, or indirectly, the English medical periodicals are the mere organs of so many London medical cliques—they support the men who support them. During the life-time of Dr. Todd, the conductors of the medical press were very shy of naming the "Tonic and supporting Practice" at all; but after his death, in the face of the facts with which the reader is familiar, one and all of them—with the single exception of the *British and Foreign Medical and Chirurgical Review*—ascribed the honour of the recent changes in Medical Practice to the "improved pathological views of the King's College Professor."—Invaluable "pathological views" those, wherein the nervous or pathetic system is almost entirely ignored, and a figment of Dr. Todd's own brain—"blood-poison"—substituted for the Law of Periodicity!

Many persons only know the Chrono-thermal System through the distorted representations of men interested in keeping up the reign of corruption. "The light shineth in darkness, and the darkness comprehendeth it not." So far as regards the great mass of professional men, these now secretly acknowledge that the science and the learning, on which in their early years they were so accustomed to pride themselves, were, all through, the greatest mistakes. But few of the seniors, even when admitting this, will forgive the individual who compelled them to lower their pretensions to superiority as men of Science. It would indeed be wonderful if they did; for, we have yet to learn that any men, or body of men, have ever been remarkable for magnanimity under such circumstances. What marvel, then, if the so-called Heads of the Profession should still exhibit the most determined hostility to the author of their humiliation—a humiliation so complete, that the practitioner of thirty years' standing found himself all at once reduced to the level of the last arrival from the medical schools!

* Ten years ago, Professor Draper, in his Introductory Lecture at the Medical College of New York, made the following extraordinary admission:—

"So rapid is the advance of the great sciences—Anatomy, Chemistry, and Physiology—that most assuredly in less than twenty years the Great Physician will have come: *the man is now born who will seize the grand prize.* Even those amongst us who have most upheld our old professional theories, and have tried to keep in reverence the old opinions and the old times, find that under the advances of the exact sciences our *position is becoming untenable.* The ground is slipping away from beneath our feet. *We are on the brink of a great Revolution.* Go where you will amongst intelligent physicians, you will find a deep, though it may be an indistinct perception, that a great change is imminent. In politics and religion, every crisis finds its representative and embodiment in some man. Is it too much to hope that in this nation of practical men, one may be found who will stand forth the teacher and master of Physicians—the greatest of all the benefactors of our race, who will do for Medicine what NEWTON did for Astronomy? And oh, what a glory if he should do it in these walls!"

On this patriotic wish the Editor of the *New York Sunday Despatch*, from which the above extract is taken, makes the following curt remark:—

"He has come already, Dr. Draper!—He has been on hand ever since 1836, when he, Dr. DICKSON of London, announced the discovery of the Law of the Periodicity of all Diseases—a law which was taught most impressively from the very chair you sat in when you made the above confession, by Dr. S. H. Dickson, now of South Carolina; but who was *crowded out of his Professorship in your Institution*, because of his teaching that important medical truth, a truth so unpalatable to those steeped to the lips in error."—*New York Sunday Despatch*, 1850.

From Sir B. Brodie and Dr. Watson to the Graduate of a year, all were compelled to learn and unlearn; and some, as we have seen, to write down almost all they had previously written up! The greater number have altered their plans with no very good grace. Pretending every kind of excuse for their change of practice but the true one, few or none of any eminence now bleed or leech as they were accustomed to do during the first twenty or thirty years of their "early professional life." Here and there some grey-headed individual may possibly be found who still pours out the heart's blood as if it were so much ditchwater. Before the announcement of Dr. Dickson's discovery of the Remittency of all Disease, that practice was universal. By refusing to give credit to the man who actually forced this change upon them, the profession unconsciously establish the charge of want of principle brought against them in so many quarters! But, even with the great change already introduced through Dr. Dickson's exertions, much still remains in the *practice* of physic to make it utterly nugatory as a Conservative Art. Before Medicine can be what it pretends to be—the art of shortening the sufferings and lengthening the lives of the sick—the mode of remunerating the medical practitioner must be completely altered. His interest and the interest of the patient must not be, as they are at present, in direct opposition. Skill and reward should go hand-and-hand here, as in other professions. It is quite the reverse now; and yet, while human nature continues to be what it is, to make men of business prefer the interests of others to their own is impossible.

Until the medical profession are paid for talent instead of for time, the doctor, like the lawyer, will look for his reward more to the insidious procrastination of the diseases of those who employ him, than to any amount of benefit he may confer on them by his science and skill. Without such procrastination—without such fiddle-faddle treatment, as things are now managed, four-fifths of those who at the present time contrive to live by physic, would be doomed to starvation. Hence, with medical men now, procrastination is the life and soul of business. The public have only to will a change in the mode of remunerating their doctors, to produce such a change in the practice of physic as would ultimately secure the interest both of patient and practitioner. Until that is done, Quackery, both in and out of the profession, will ramp and triumph. The only possible manner in which the regular physician can compete with the homœopathists, and others of that class, by whose invasions his means are now so crippled, is to embrace the Chrono-thermal System in its entirety—not secretly and by stealth, like Sir B. Brodie, Sir H. Holland, and others—but openly, honestly, and unreservedly, giving to Cæsar what is due to Cæsar. This system is catholic and eclectic. It rejects no agent, old or new, which can be shown to act as a remedial force; on the contrary, it gives a ready welcome to any new substance of a soothing, supporting, or revulsive character. It moreover points out the true principle of the action and application of all febrifuge medicines, namely, their power of influencing Temperature and Time. When the chief business of the physician shall be to prevent the recurrence of the paroxysm of disease, whatever be its name or supposed nature, he need have no fear of any class of quacks. The increasing intelligence of the nation will bear him up against all dishonest opposition. But this, it is obvious, cannot be done without an alteration in the mode of remunerating him for this right application of his zeal and real science. The public sooner or later must make it the interest of the medical profession to shorten sickness. They

should pay their ordinary attendant so much for yearly attendance, whether sick or well; when calling in other assistance they should pay for skill and the case—the quicker the cure the better the reward!

Before entering on the perusal of the *Fallacies of the Faculty*, the reader's attention is requested to what more immediately follows:—

Evidences of Military Medical Officers and others, in favour of the Chrono-thermal System.

Dr. HUME, Principal Medical Officer at Fort Pitt, Chatham, writes thus:—

"Deny it who please, Dr. Dickson's writings have forced—though not to the full extent—a change upon the practice of the men who conspire to cry him down. They have all but worked a complete revolution in *Army* practice; and when I look to what is going on in *Civil* life, I may say the same of the whole medical world. It is as difficult at this moment to find a doctor or apothecary under forty who bleeds at all, as it was to find one who did not bleed in almost every case when Dr. Dickson first startled the profession with the announcement of his new manner of treating diseases. All now plagiarise him more or less—even those who abuse him most. My various Annual Reports to the Director-General of the Medical Department of the Army, testify to the success of the Chrono-Thermal practice, and to its immeasurable superiority over all other modes of treatment."—Dr. Hume, in *Chrono-Thermalist*.

Dr. DARTNELL, Inspector-General of Hospitals, thus writes to Dr. Dickson from Chatham:—

"The profession, for some years past, have been gradually adopting your views without having the honesty or manliness to acknowledge it. I can assure you that since I read your '*Fallacies of the Faculty*,' in 1843, I have never used a lancet; and my only regret now is that I had ever used one at all. Shortly before I left India, in 1831, I was bled largely myself, contrary to my own earnest entreaties, and the effect upon me was such, that from that time I very rarely used the lancet for others; and after reading your book, I gave it up altogether. In Canada I was once called to see an officer who had fallen down in an apoplectic fit—a powerful young man, of full robust habit. His family stared in astonishment and alarm when I declared that I should not bleed him, and even hinted that if I did not do so, they would lay his death to my door. I did not bleed him, and fortunately for me, as well as for my patient, he recovered. I treated him on your plan. His feet were put in a mustard bath while I poured a stream of cold water on his head. I have done the same many times since, and have not lost an apoplectic patient."

Dr. MACKINTOSH, Principal Medical Officer of Ordnance, Southsea, thus writes to Dr. Dickson:—

"Southsea, *May* 18*th*, 1857.

"My dear Sir,—I have just re-read, with renewed interest and benefit, your '*Fallacies of the Faculty*,' and I fully subscribe to the value of your ideas and practice therein contained.

"I have been now seventeen years a Surgeon of Artillery, and have had extensive practice in different parts of the world. For the last sixteen years I have been practising medicine after your own model, and always with the most marked success. I was one of the first who decried *blood-letting*, leeching, cupping, and other butcher-like practices in our extensive Military Hospital at Woolwich; and I fully proved to all who looked on, that your Chrono-Thermal treatment, more especially in the acute cases of young recruits, so abundant in that hospital, was the only scientific, and the most successful treatment.

"At page 115 of the 'Fallacies,' you mention the name of my father (the late Dr. Mackintosh, of Edinburgh) in connection with blood-letting, in 1825. I used to attend cases with him in his after years, and I well remember that, although he never gave up the *lancet*, he used the cold douche, emetics, opium, and other remedies of your Chrono-Thermal System; and I am sure that had he read your '*Fallacies of the Faculty*,' he would willingly have admitted the great and valuable services you have rendered to mankind, by your fearlessness and talent.—Yours very truly,

"W. H. MACKINTOSH, M.D.

"Dr. Dickson, 28, Bolton Street, Piccadilly."

Dr. JOHN FINDLEY, Surgeon, Royal Navy, while stationed off the African Coast, thus wrote in praise of Chrono-thermalism, in the treatment of the fevers of the tropics:—

"Epidemics we do not lack, and, though not molested with influenza, or cholera, we have a fiercer enemy to contend with in the shape of Bilious Remittent Fever, peculiar to the tropics. During the last three months I have had *sixty-six* cases without losing one. I have stuck entirely to DICKSON's practice. None of your bleeding, leeching, salivating, and drugging; but QUININE in large doses! This knocks the disease on the head at once, and your patient recovers, not a blanched and wretched remnant of humanity, but in a few days is as useful as ever."

Dr. MOFFIT, H.M.S. Arethusa, in corroboration of Dr. Findley's statement, writes thus to Dr. Dickson:—

"I must tell you I was first led to employ Chrono-thermal medicines in a case of Remittent Fever, in Rio Janeiro, by one who had, without acknowledgment, adopted your practice; and the effects were so startling that I never dared return to the old practice. Had I got your book then, it would have saved me a world of trouble, for I had all my old prejudices to contend with. A subsequent commission of nearly five years on the West and East coasts of Africa, brought me in contact with the Fever peculiar to these coasts; and although I had many very bad cases, all terminated favourably; and the great dread I felt of the African Fever gave way to the delightful feeling, that at last a remedy was found for this hitherto fatal disease, in Chrono-thermal treatment, which I look upon as the true KEY TO OPEN AFRICA to the commerce of the world. It affords me much pleasure to add, that I have been enabled to inoculate many of my brother officers with your doctrines; and I hope the day is not far distant, when the medical officers in Her Majesty's Navy will be Chrono-thermalists to a man. I know well, if they once give the system a fair trial, they will never leave it off again, until the last trace of the bleeding, blistering, and calomelizing system is purged from their minds. During the whole of my practice in Her Majesty's service, I am not conscious of having slain any one; and I think, under God, I am indebted to you for this happy result. I will ever feel much pleasure in acknowledging you as my chief in the healing art, and sitting at your feet for further instructions."

Dr. LACOMBE, Physician to the Military Hospital of Puerto Cabello, Venezuela, writes to Dr. Dickson under date 2nd April, 1850:—

"The Chrono-thermal practice is indubitably the most efficacious in every kind of fever, as will be readily admitted by all capable of forming a fair judgment—should *interest* not interfere. In former years, the general practice of this country, in fever, was bleeding in the first stage of the disease; and the average of deaths was from 20 to 30 per cent. The average of deaths now, since bleeding is less used, is only from 2½ to 4 per cent. Dr. Otto Urich, a respectable medical gentleman, of the Island of Trinidad, told me—some years ago, in Caracas—that the average of deaths, in the above island, when bleeding was profusely used there, was 48 per cent. in cases called 'Fever.' If the

approval of your system of medicine, by one so out of the world, can be of any service to its extension, pray use this letter as you think proper."

Dr. BREIT, a Medical Officer, attached to the Fever Hospital, Brownlow Hill, Liverpool, where fever is generally of the Typhoid form, under date November, 1847, writes thus:—

"I have treated 700 cases of the worst form of FEVER Chrono-thermally with extraordinary success. The general mortality of Liverpool has been one in six. My deaths have been only 1 in 10½ This is a great difference."

Dr. DUNCAN, of Lochalsh, thus writes to Dr. Dickson:—

"Lochalsh, Ross-shire, N.B., *4th Feb.*, 1859.

"SIR,—I feel I owe you a debt of both honour and duty, which I ought to have discharged long ago; however, it is 'better late than never.'

"I have read several of your valuable medical works with as much pleasure as I did Robinson Crusoe, or Don Quixote, in my schoolboy days; and with infinitely more profit, in a practical point of view, than the most elaborate treatises on disease. I have in my possession the '*Fallacies of the Faculty*,' the '*Unity of Disease*,' the '*Chrono-Thermalist*,' and '*The Destructive Art of Healing;*' and have read them all over and over again, and each time with increased delight and instruction.

"I happened, one lucky day, to be ransacking the library of an old medical friend, in search of medical works, and accidentally came upon the gem—hidden amongst a lot of rubbish, ancient and modern—your *Fallacies of the Faculty*. 'Fallacies of the Faculty!' I ejaculated; 'that's surely a strange work.' And having naturally a great liking for anything in the shape of satire, I promised myself some amusement from the perusal of it; conceiving that it must be full of jokes at the expense of the doctors, but not anticipating profit as well as pleasure.

"As I had no disposition to put implicit faith in the teachings of my professional preceptors, and wished to reserve to myself the right of honest doubt, I can assure you that your doctrines and precepts fell like good seeds on a genial soil ready for their reception; and they have sprung up, and yielded me a crop of very precious fruits. I have ever since been a willing disciple and faithful follower of your system, and my success has been commensurate with its sense and simplicity. I have never once since used a lancet or a leech in my practice.

"In conclusion, allow me, sir, to express my great respect for you as the first reformer of medical abuses in this country; nay, more, as a general benefactor to mankind. I feel myself under many and great obligations to you, as the person who first taught me how—

"'To render with my precepts less
The sum of human wretchedness,
And strengthen man with his own mind.'

Your writings were the means of strengthening my heart and hands, dispelling my doubts, and allaying my fears; so that my hopes are no longer vain, nor my efforts fruitless.—I am, honoured sir, most respectfully yours,

"GEO. DUNCAN, M.D.

"Samuel Dickson, Esq., M.D.,
Bolton Street, Piccadilly, London."

"THE MEDICAL DIACONATE.

"*To the Editor of the Exeter and Plymouth Gazette.*

"SIR,—Believing that a clergyman does not necessarily forfeit respect by combining in certain cases secular with spiritual duties, I now proceed to consider the dicta of the British Medical Association, that 'The attainment of medical knowledge is in itself a matter of a lifetime,' and that any one (a clergyman especially) venturing to relieve

the bodily disorders of his poor neighbours, 'runs the risk of killing more than he cures.'

"It is doubtless quite true, that the observant medical practitioner may through life find many opportunities of adding to his knowledge, and in this sense the attainment of medical knowledge may be the matter of a lifetime. But if, by this dictum, it be meant to assert that none can with any safety minister to the relief of bodily ailments but such as have made medicine their professional and well-nigh exclusive study, then, sir, I own, this appears to be but a piece of the same '*Red* Tapism' which led so many military authorities to ridicule the present great Volunteer movement for the defence of the country. I would willingly yield the palm of knowledge upon every subject to those who have studied it the most deeply and philosophically; but this need not make it impossible for others to have acquired at least a very useful degree of knowledge on these same subjects.

"Of course, there will always be cases of incurable disease, and others such as to call forth the utmost skill of the most talented physician; but the successful treatment, after all, of the great mass of disease, does not seem so great a mystery as some would have us suppose.

"In 1836, if I mistake not, Dr. Dickson published his conviction, that there is a *Unity* in all disorders, of which *Ague* or *Intermittent Fever* is in his judgment the *type*. That again, all disorders, at least in their earlier stages, have periods of *remission* recurring with more or less regularity. And hence his simple method of treatment, which advises in every case to take advantage of these periods of remission, to support and strengthen the patient for a successful struggle with the paroxysm of disorder, should it recur, and to *postpone* or *prevent* the recurrence of the paroxysm, by administering the various well-known remedies for fever.

"The simple question is (and it is one which every man of common sense can answer for himself), Will this theory of the *unity*, *remittency*, and *periodicity* of all diseases, stand the test of experience? Let me ask, does not every one, on the approach of disease, use some such language as this: 'I am sure I shall be ill, I don't know what is come to me; I am so cold and chilly, or I am so hot and burning in my skin,' according as the hot and cold stage is present, and this *without the least reference to the peculiar development of the disorder* which may follow? It was by asking myself this and similar questions, that I first convinced myself that Dr. Dickson's theory was true; and by following the advice which, some two or three years since, he most kindly gave me, in favour of my poor neighbours, I may safely say that I have not practically found, novice as I was in the healing art, that I have 'run any risk of killing more than I cured'—although the diseases of my somewhat numerous patients have been pretty various, and not unimportant in their character. But, sir, one principal reason for this happy success has been, that my poor neighbours come to me as soon as ever they are ill, and do not wait for the development of their disorders. This they often do, before applying to a medical man. They are afraid of the expense. They have no messenger to send to the distance at which he resides. The overseer is from home, and they cannot get an order for the medical officer of their union, and thus most valuable time is unfortunately lost. Now the parson has none of these difficulties in his way, and thus is enabled to administer his simple remedies at the very earliest moment, and consequently with the best possible prospect of success.

"Dr. Dickson's instructions were given me during the short period of a professional visit to my wife, and have called forth great thankfulness to 'The London Doctor,' as they call him, from my poor neighbours.

"Where, then, is the impossibility of good and great results from a regular instruction of the clergy, especially of the country clergy, in the healing art; or, at all events, of such of them as are conscious of any aptitude for such a study? I believe among our own poor at home, quite as much as among the heathen inhabitants of other lands, the gospel truths will not be less readily listened to from the lips of the Ministers of God, whose heads and hands have contributed to the alleviation and the cure of bodily disease,—I am, &c.,

"W. H. KARSLAKE.

"*Meshaw Rectory, Southmolton, October 3rd*, 1860."

We have on more than one occasion alluded to the *Practice of Physic* of Dr. Watson, published in 1845. The following *Lectures*, being reprinted without a word of alteration from the stereotyped plates used in the edition of the *Fallacies of the Faculty* of the *same year*, afford an amusing example of the old adage—Doctors differ!

THE

CHRONO-THERMAL SYSTEM OF MEDICINE.

LECTURE I.

INTRODUCTION—PHENOMENA OF HEALTH AND SLEEP —DISEASE AND ITS TYPE—CAUSES.

GENTLEMEN,

We daily hear of the march of intellect, of the progress or perfection of many branches of science. Has MEDICINE kept pace with the other arts of life—has it fallen short or excelled them in the rivalry of improvement? Satisfactorily to solve this question, we must look a little deeper than the surface—for TRUTH, as the ancients said, lies in a WELL,—meaning thereby that few people are *deep*-sighted enough to find it out. In the case of Medicine, we must neither be mystified by the boasting assertions of disingenuous teachers, nor suffer ourselves to be misled by the medical press; the conductors of which, for the most part, are the mere hirelings of party, their principal business being to crush and cry down such truths or discoveries as may chance to militate against the interests of the schools and *coteries* they are employed to serve. The late Sir William Knighton was at the head of his profession; he was, moreover, physician to George the Fourth. Joining, as he did, much worldly wisdom and sagacity to a competent knowledge of the medical science of his age, his opinion of the state of our art in these days may be worth your knowing; more especially as it was given in private, and at a time when he had ceased to be pecuniarily interested in its practice. In a letter to a friend, published after his death, he thus delivers himself:—"It is somewhat strange that, though in many arts and sciences improvement has advanced in a step of regular progression from the first, in others, it has kept no pace with time; and we look back to ancient excellence with wonder not unmixed with awe. Medicine seems to be one of those ill-fated arts whose improvement bears no proportion to its antiquity. This is lamentably true, although Anatomy has been better illustrated, the Materia Medica enlarged, and Chemistry better understood." Dr. James Gregory, a man accomplished in all the science and literature of his time, was for many years the leading physician of Edinburgh; but he nevertheless held his profession in contempt. On visiting London, he had an opportunity of being introduced to his equally celebrated countryman Baillie. Curious to know Gregory's opinion of the man who then swayed the medical sceptre of the metropolis, his friends asked him what he thought of Baillie. "Baillie," he replied, "knows nothing but Physic;" in revenge for which, Baillie afterwards wittily rejoined, "Gregory knows everything but Physic." But what was Dr. Baillie's own opinion of his art after all? I do not allude to his language during the many years he was in full practice; then, doubtless, with the multitude who thronged his door, he really believed he knew a great deal; but what did he say when he retired from his profession, and settled at his country seat in Gloucestershire? *Then*, gentlemen, without the slightest hesitation, he declared he had no faith in Physic whatever! But, you must not from this imagine that the fortunate doctor intended to say that the world had all along been dreaming when it believed Opium could produce sleep, Mercury salivate, and Rhubarb purge. No such thing; he only confessed that he knew nothing of the manner of action

of these substances on the body, nor the principle upon which they should be used. Now, what would you think of a sailor who had expressed himself in the same way, in regard to the rudder and compass,—who had told you that he had no faith in either instrument as a guide to steer a vessel by?—why, certainly that he knew nothing of the profession by which he gained his living. And such really was Dr. Baillie's case. The great bulk of mankind measure the professional abilities of individuals solely by their degree of reputation—forgetting Shakspeare's remark, that a name is very often got without merit and lost without a fault. That Baillie actually attained to the eminence he did, without any very great desert of his, what better proof than his own declaration?—a declaration which fully bears out what Johnson tells us in his life of Akenside: "A physician in a great city, seems to be the mere plaything of fortune; his degree of reputation is for the most part totally casual; they that employ him know not his excellence—they that reject him know not his deficiency." But still, some of you may very naturally ask, How could Dr. Baillie, in such a blissful state of ignorance or uncertainty, contrive to preserve for so long a period his high position with the *professional* public? This I take to be the true answer:—The medical art, like every other art, must have had its *infancy*—a period when, knowing nothing, its professors may fairly be excused for believing anything. When Baillie began practice, the profession were slowly and timidly groping their way in the gloom; a few practical points they of course knew; but of the true principle of the application of those points, they were, as I shall afterwards show you, entirely ignorant. Most of them were, therefore, very ready to follow any one of their own number who should most lustily cry, EUREKA—I HAVE FOUND IT!—In the dark we mistake a pigmy for a giant, the more especially if he talks grandiloquently. That was what Dr. Baillie did. At the commencement of his career, few medical men opened the bodies of their dead patients; for Sydenham, the English Hippocrates, had long before ridiculed the practice. It was, therefore, all but in disuse, and all but forgotten, when Dr. Baillie published his book on Morbid Anatomy,—a book wherein, with a praiseworthy minuteness and assiduity, he detailed a great many of the curious appearances so usually found in the dissection of dead bodies. Had he stopped here, Dr. Baillie would have done Medicine some little service; but by doing more he accomplished less—more for himself, less for the public; for by further teaching that the only way to learn the cure of the living is to dissect the bodies of the dead, he put the profession on a wrong path,—one from which it will be long before the unthinking majority can in all likelihood be easily reclaimed. In the earlier part of his career, Dr. Baillie, it is only fair to suppose, believed what he wrote, though by his after declaration he admitted himself wrong. His arguments, nevertheless, succeeded but too well with the profession; proving the truth of Savage Landor's observation, that "in the intellectual as in the physical, men grasp you firmly and tenaciously by the hand, creeping close at your side, step by step, while you lead them into darkness, but when you lead them into sudden light, they start and quit you!" To impose upon the world is to secure your fortune; to tell it a truth it did not know before, is to make your ruin equally sure. How was the exposition of the Circulation of the Blood first received? Harvey, its discoverer, was persecuted through life; his enemies in derision styled him the *Circulator*,—a word in its original Latin signifying vagabond or quack; and their efforts to destroy him were so far successful, that he lost the greater part of his practice through their united machinations. "Morbi non eloquentia sed remediis curantur" is an observation some of you may have met in Celsus, which, if you will allow me, I will translate:—Diseases are cured by Remedies, not by Wrangling. Yet strange to say, the generality of great professors who have successively obtained the public ear since the time of the Roman physician, have been almost all as remarkable for their love of disputation as they have been inveterate against every thing savouring of innovation in the shape of remedies. When a limb is amputated, to prevent the patient bleeding to death, you tie the arteries. Before the time of Francis the

First, surgeons followed another fashion: they staunched the blood by the application of boiling pitch to the surface of the stump. Ambrose Paré, principal surgeon to that king, introduced the *ligature* as a substitute —he first tied the arteries. Mark the reward of Ambrose Paré: he was hooted and howled down by the Faculty of Physic, who ridiculed the idea of hanging human life upon a thread, when boiling pitch had stood the test of centuries. In vain he pleaded the agony of the old application; in vain he showed the success of the ligature. Corporations, colleges, or coteries of whatsoever kind, seldom forgive merit in an adversary; they continued to persecute him with the most remorseless rancour: but Paré had a spirit to despise and a master to protect him against all the efforts of their malice. What physician now-a-days would dispute the value of antimony as a medicine? no one with a grain of sense in his head—yet, when first introduced, its employment was voted a crime. Perhaps there was a reason! Oh certainly! it was introduced by Paracelsus —Paracelsus, the arch-enemy of the established practice. At the instigation of the college, the French parliament accordingly passed an act making it penal to prescribe antimony. To the Jesuits of Peru, Protestant England owes the invaluable bark; how did Protestant England first receive this gift of the Jesuits? Being a popish remedy, they at once rejected the drug as the invention of the father of all papists—the devil. For the same reason, possibly, the physicians of Frederick the Great dissuaded him from trying it to cure his ague: luckily for the King, he laughed at their advice, took bark, and got well. In 1693, Dr. Groenvelt discovered the curative power of Cantharides in dropsy; what an excellent thing for Dr. Groenvelt!—Excellent indeed; for no sooner did his cures begin to make a noise than he was at once committed to Newgate, by warrant of the president of the College of Physicians, for prescribing cantharides internally. Blush! most sapient College of Physicians—your late president, Sir Henry Halford, was a humble imitator of the ruined Groenvelt! Before the discovery of vaccination, *Inoculation* for Small Pox was found greatly to mitigate that terrible disease. Who first introduced small pox inoculation? Lady Mary Montague, who had seen its success in Turkey. Happy Lady Mary Montague! Rank, sex, beauty, genius—these all doubtless conspired to bring the practice into notice. Listen to Lord Wharncliffe, who has written her life, and learn from his story this terrible truth—that *persecution* ever has been, and ever will be, the only reward of the benefactors of the human race. "Lady Mary," says his Lordship, "protested that in the four or five years immediately succeeding her arrival at home, she seldom passed a day without repenting of her patriotic undertaking; and she vowed she never would have attempted it if she had foreseen the vexation, the persecution, and even the obloquy it brought upon her. The clamours raised against the practice, and of course against her, were beyond belief. The faculty all rose in arms to a man, foretelling failure and the most disastrous consequences; the clergy descanted from their pulpits on the impiety of thus seeking to take events out of the hands of Providence; and the common people were taught to hoot at her as an unnatural mother who had risked the lives of her own children. We now read in grave medical biography, that the discovery was instantly hailed, and the method adopted by the principal members of that profession. Very likely they left this recorded—for, whenever an invention or a project, and the same may be said of persons, has made its way so well by itself as to establish a certain reputation, most people are sure to find out that they always patronised it from the beginning, and a happy gift of forgetfulness enables many to believe their own assertion. But what said Lady Mary of the actual fact and actual time? Why, that the four great physicians deputed by government to watch the progress of her daughter's inoculation, betrayed not only such incredulity as to its success, but such *an unwillingness to have it succeed*—such an evident spirit of rancour and malignity, that she never cared to leave the child alone with them one second, lest it should in some secret way suffer from their interference."

Gentlemen, how was the still greater discovery of the immortal Jenner received—Vaccination? Like every other discovery—with

ridicule and contempt. By the Royal College of Physicians, not only was Jenner persecuted and oppressed; but long even after the benefits which his practice had conferred upon mankind had been universally admitted, the pedants of that most pedantic of bodies refused to give him their license to practise his profession in London; because, with a proper feeling of self-respect, he declined to undergo at their hands an examination in Greek and Latin. The qualifications of the schoolmaster, not the attainments of the physician; the locality of study, rather than the extent of information possessed by the candidate, were, till very lately, the indispensable preliminaries to the honours of the College. Public opinion has since forced this corporation to a more liberal course. But, to return to Jenner;—even religion and the Bible were made engines of attack against him. From these Errhman of Frankfort deduced his chief grounds of accusation against the new practice; and he gravely attempted to prove, from quotations of the prophetical parts of Scripture, and the writings of the fathers of the church, that Vaccination was the real *Antichrist!* From all this you perceive that mankind have not very greatly changed since the time of Solomon, who, after searching the world, "returned and saw under the sun, that there was *neither bread to the wise, nor riches to men of understanding, nor favour to men of skill.*"

Gentlemen, the ancients endeavoured to elevate physic to the dignity of a science, but failed. The moderns, with more success, have endeavoured to reduce it to the level of a trade. Till the emoluments of those who chiefly practise it cease to depend upon the quantity of useless drugs they mercilessly inflict upon their deluded patients—till surgeons shall be other than mechanics, and physicians something more than mere puppets of the apothecary—till the terrible system of collusion, which at present prevails under the name of a "good understanding among the different branches of the profession" be exposed, the medical art must continue to be a source of destruction to the many—a butt for the ridicule of the discerning few. The Wits of every age and country have amused themselves at the expense of the physician; against his science they have directed all the shafts of their satire; and in the numerous inconsistencies and contradictions of its professors they have found matter for some of their richest scenes. Molière, so long the terror of the apothecaries of Paris, makes one of his *dramatis personæ* say to another,—"Call in a doctor, and if you do not like his physic, I'll soon find you another who will condemn it." Rousseau showed his distrust of the entire faculty when he said, "Science which instructs and physic which cures us, are excellent certainly; but science which misleads, and physic which destroys us, are equally execrable; teach us how to distinguish them." Quite as sceptical as to its use, and rather more sarcastic in his satire of the profession, was Le Sage—"Death," says he, "has two wings; on one are painted war, plague, famine, fire, shipwreck, with all the other miseries that every instant offer him a new prey. On the other wing you behold a crowd of young physicians about to take their degree before him. Death proceeds to dub them doctors, *(leur donne le bonnet)* having first made them swear never in any way to alter the established practice of physic."

The established practice of physic! Who could possibly think of altering it? Altering perfection! According to every professor in every university where medicine is studied, there is no science so glorious—so Godlike! Outside the walls of the schools, it is true, you occasionally hear people speaking against it. Gentlemen, take no heed of such unbelievers! What could persons like Molière, or Rousseau, or Le Sage, know of an art they were never bred to? That the Great Frederick all his life laughed at medical men, is nothing remarkable. A man who, in one day, had killed more than all the doctors in Europe could do in a month, might well be excused his laugh. On that score, too, we pardon Napoleon, who expressed a similar contempt for medicine. But the Prince de Ligne, though a wit as well as a warrior, is not to be forgiven so easily. With all their professed scorn, Frederick and Napoleon, when sick, took physic. Not so the Prince de Ligne: when attacked with fever he had the presumption to thank Heaven he had no doctor near him; and he actually attributed his recovery to his good

fortune in that respect! If ever a man deserved death, it was that Prince de Ligne, for giving Nature the trouble of curing his fever, without once calling in the Baillie or Halford of his day to assist! The misfortune is, this unbelieving spirit is not confined to the continent. Locke, Smollett, Goldsmith, (all three physicians) held their art in contempt. Swift, Temple, Hume, Adam Smith—to say nothing of Byron, Hazlitt, and other contemporaries—were equally severe on its professors. Byron, indeed, anathematised it as "the destructive art of healing;" and when writing to a friend the details of a fever from which he had suffered, in something like the vein of the Prince de Ligne, he tells him, "I got well by the blessings of barley-water, and refusing to see my physician!"—Gentlemen, do you think that all these remarkable persons were inferior in observation and reflection, to the herd of doctors and apothecaries who swarm in these times?

But so completely at variance with each other are even the greatest *medical* authorities on every subject in medicine, that I do not know a single disease in which you will find any two of them agreeing. Take the subject of Pulmonary Consumption, for example: The celebrated Stohl attributed the frequency of consumption to the introduction of the Peruvian bark. The equally celebrated Morton considered the bark an effectual cure. Reid ascribed its frequency to the use of mercury. Brillonet asserted that it is only curable by this mineral. Rush says, that consumption is an inflammatory disease, and should be treated by bleeding, purging, cooling medicines, and starvation. With a greater show of reason, Salvadori maintained the disease to be one of debility, and that it should be treated by tonics, stimulating remedies, and a generous diet. Galen, among the ancients, recommended vinegar as the best preventive of consumption. Dessault, and other modern writers, assert that consumption is often brought on by a common practice of young people taking vinegar to prevent their getting fat. Dr. Beddoes recommended foxglove as a specific in consumption. Dr. Parr, with equal confidence, declared that he found foxglove more injurious in his practice than beneficial! Now, what are we to infer from all this? Not as some of you might be tempted to believe, that the science is deceptive or incomprehensible throughout, but that its professors to this very hour have neglected to make themselves acquainted with the true principle upon which remedies act, and know as little of the true nature of the diseases whose treatment they so confidently undertake. And what is the daily, the hourly result of this terrible ignorance and uncertainty? In the words of Frank, "*Thousands are slaughtered in the quiet sick-room.*" "Governments," continues the same physician, "should at once either banish medical men and their art, or they should take proper means that the lives of people may be safer than at present, when they look far less after the practice of this dangerous profession, and the murders committed in it, than after the lowest trades."

"If false facts," says Lord Bacon, "be once on foot, what through neglect of examination, the countenance of antiquity, and the use made of them in discourse, they are scarce ever retracted." The late Professor Gregory scrupled not to declare in his class-room, that ninety-nine out of every hundred medical facts were so many medical lies, and that medical doctrines were for the most part little better than stark-staring nonsense;—and this, Gentlemen, we shall have some amusement in proving to you. In the mean time, I may observe, that nothing can more clearly explain the difficulties which beset the student of physic—for who can understand nonsense, and, when clothed in phrases which now admit one sense, now another, what so difficult to refute? "Nothing," says Sir Humphrey Davy, "has so much checked the progress of philosophy, as the confidence of teachers in delivering dogmas as truths, which it would be presumptuous to question. It was this spirit which, for more than ten centuries, made the crude physics of Aristotle the natural philosophy of the whole of Europe. It was this spirit which produced the imprisonment of the elder Bacon and the recantation of Galileo. It *is* this spirit, notwithstanding the example of the second Bacon assisted by his reproof, his genius, and his influence, which has, even in later times, attached men to imaginary systems, —to mere abstracted combinations of words,

rather than to the *visible* and *living* world; and which has often induced them to delight more in brilliant dreams than in beautiful and grand realities."

Imposed upon by these abstracted combinations of words, we find it difficult to divest ourselves of the erroneous and mystical distinctions by which our teachers have too often endeavoured to conceal their own ignorance: —for in the "physical sciences,"—I again quote Sir Humphrey Davy,—"there are much greater obstacles in overcoming old errors, than in discovering new truths—the mind in the first case being fettered; in the last, perfectly free in its progress." "To say that any class of opinions shall not be impugned—that their truth shall not be called in question, is at once to declare that these opinions are infallible, and that their authors cannot err. What can be more egregiously absurd and presumptuous? It is fixing bounds to human knowledge, and saying men cannot learn by experience—that they can never be wiser in future than they are to-day. The vanity and folly of this is sufficiently evinced by the history of religion and philosophy. Great changes have taken place in both, and what our ancestors considered indisputable truths, their posterity discovered to be gross errors. To continue the work of improvement, no dogmas, however plausible, ought to be protected from investigation."

In the early history of every people, we find the priest exercising the functions of the physician. Looking upon the throes of disease as the workings of devils, his resource was prayer and exorcism; the maniac and epileptic were termed by him *demoniacs,* and when a cure was accomplished, the *demon* was said to be cast out. Even now, the traces of clerical influence on our art are not extinct in England; for though our churchmen have long ceased to arrogate to themselves the exclusive right, as well as the exclusive power of healing, an Archbishop of Canterbury is still permitted, by the laws of his country, to confer degrees in physic! nor does he fail even in these days to avail himself occasionally of his prerogative.

We are told by the ingenious John Brown that he "*wasted* more than twenty years in learning, teaching, and diligently scrutinising every part of medicine. The first five passed away in hearing others, studying what he had heard, implicitly believing it, and entering upon the possession as a rich and valuable inheritance. His mode of employment the next five years was to explain more clearly the several particulars,—to refine and give them a nicer polish. During the next equal space of time, because no part of it had succeeded to his mind, he became cold upon the subject, and with many eminent men, even with the vulgar themselves, began to deplore the healing art as altogether uncertain and incomprehensible. All this time passed away without the acquisition of any advantage, and of that which of all things is most agreeable to the mind—the light of truth; and so great, so precious a portion of the fading and short-lived age of man was lost. It was only betwixt the fifteenth and twentieth year of his studies that, like a traveller in an unknown country, wandering in the shade of night, after losing every trace of his road, a very obscure gleam of light, like that of the first break of day, dawned upon him."

Gentlemen, it was my fortune to be more early staggered with the inadequacy of received doctrines either to explain Disease or cure it. I therefore determined to read anew the Book of Nature, and study it by the light of such common sense as God in his goodness had given me, rather than trust any longer to the reports of fallacious commentators. To this investigation I came with a different spirit from that with which I entered the schools of physic. In my noviciate I yielded implicit faith to my teachers; in my later researches after truth, I have often had to guard myself as much against a too rigorous scepticism of their facts as a too great contempt of their opinions. With Lord Bolingbroke, I can truly say, "few men have consulted others, both the living and the dead, with less presumption and in a greater spirit of docility than I have done; and the more I have consulted the less I have found of that inward conviction on which a mind that is not absolutely implicit can rest. I thought for a time that this must be my fault; I distrusted myself, not my teachers—men of the greatest name, ancient and modern; but I found at last it was safer to trust myself than them, and to proceed by the light of my

own understanding, than to wander after these *ignes fatui* of philosophy."

After a long and diligent scrutiny of Nature in this spirit, I have at last been enabled to place before the profession a Doctrine of Disease, and a Method of Cure, which, when the unity of principle of the one and the universality of application of the other have been fairly tested, will tend, I hope, to rescue physic and physicians from the obloquy and contempt with which the more thinking part of the public have too long looked upon both.

In the course of these Lectures, gentlemen, it shall be my business to prove to you the UNITY OR IDENTITY of all morbid action, and the unity and identity of the source of power of the various agencies by which disease of every kind may be caused or cured. "The universe," says D'Alembert, "to him who should have sufficient *comprehension* to behold it at a single view, would only appear one great fact—one mighty truth." And in the same spirit Sir James M'Intosh observes, "the *comprehensive* understanding discovers the IDENTITY of facts which seem dissimilar, and binds together into a system the most apparently unconnected and unlike results of experience." Beware, then, of differences—of divisions; for as Lord Bacon well observes, "divisions only give us the husks and outer parts of a science, while they allow the juice and kernel to escape in the splitting." And from this you may learn not only the absurdity of nosological distinctions and differences, but also the utter nothingness and vanity of the many disputes that daily occur in practice, whether disorders resembling each other, and amenable to the same treatment, should be called by one name or another. In the language of Hobbes, "*words* are wise men's counters,—they do but reckon by them, but they are the money of fools, that value them by the authority of an Aristotle, a Cicero, a Thomas Aquinas, or any other doctor whatsoever."

More than twenty-three centuries have elapsed since Hippocrates distinctly announced the Unity of Morbid Action,—"*Omnium morborum unus et idem modus est.*" THE TYPE OF ALL DISEASE IS ONE AND IDENTICAL. These are his words, and that is my Case. That is the cause I am prepared to enter upon with as perfect a chain of positive and circumstantial proof in its support as ever was offered to human investigation. Gentlemen, what Johnson said of poets is equally applicable to physicians: "The first, whoever they be, must take their sentiments and descriptions immediately from knowledge—their descriptions are verified by every eye, and their sentiments acknowledged by every breast. Those whom their fame invites to the same studies copy partly them and partly nature, till the books of one age gain such *authority* as to stand in the place of nature to another." It is in this manner that the descriptions of disease in our nosological systems have become a mere tissue of unnatural division, not to say of the most obvious contradiction; if the words in which they be conveyed have in many instances, any meaning at all. What, then, shall we say of reasoning founded upon facts which are no facts—upon mere assumptions which have no foundation in nature!

The schools of Egypt and Arabia, the eminent men of Greece and Rome, the great anatomical teachers and philosophers of the middle ages, knew not the circulation of the blood. How wild were their theories, how fanciful their hypotheses, may be gleaned from the fact of their naming certain blood-vessels, *arteries*, or *air*-vessels;—tubes which you have only to wound, to see them pour out the living current in jets, were for ages supposed to contain not blood, but air! What innumerable fallacies must have entered into reasoning founded on such premises! Yet it was not till the seventeenth century that the illustrious Harvey demonstrated the true nature of the arteries, and the manner in which the blood circulates through the body. The more immediate reward of his discovery was calumny, misrepresentation, and loss of his professional practice. The same College of Physicians who, in after years, opposed the improvements of Montague and Jenner, made the Circulation of the Blood the subject of their bitterest satire. Not content with slandering the character of its discoverer, the more vile and venal of his medical brethren made it a pretext for declining to meet him in consultation. Harvey lived, nevertheless, to neutralise the malice of his enemies; he be-

came successively the physician of the first two English kings of the Stuart race, James and Charles.

The more you can explain and facilitate the attainment of any science, the more you will find that science approach perfection. The true philosopher has always studied to find out relations and *resemblances* in nature, thus simplifying the apparently wonderful;—the schools, on the contrary, have as invariably endeavoured to draw fine-spun distinctions and *differences*, the more effectually to perplex and make the most simple things difficult of access. "In universities and colleges," says Lord Bacon, "men's studies are almost confined to certain authors, from which if any dissenteth or propoundeth matter of redargution, it is enough to make him be thought a person turbulent." Any exposition of the singleness of principle which pervades a particular science will be sure to meet the censure of schools and colleges; nor will their disciples always forgive you for making that easy which they themselves, after years of study, have declared to be incomprehensible.

The most perfect system has ever been allowed to be that which can reconcile and bring together the greatest number of facts that come within the sphere of the subject of it. In this consists the sole glory of Newton, whose discovery rests upon no higher order of proof. How was this discovery received on its first announcement? In the words of Dr. Chalmers, "authority scowled upon it; and taste was disgusted by it; and fashion was ashamed of it; and all the beauteous speculation of former days was cruelly broken up by this new announcement of the better philosophy, and scattered like the fragments of an aërial vision over which the past generations of the world had been slumbering their profound and their pleasing reverie." For upwards of ten centuries had the false philosophy of Aristotle enslaved the minds of civilised Europe, thus at last to perish and pass away! So that Time itself is no sure test of a doctrine, nor ages of ignorance any standard by which to measure a system. To Nature, eternal Nature, must Truth ever make her first and last appeal. By this, and this only, am I willing that the new fabric of medicine which I have presumed to erect upon the ruins and reveries of the past, should be tested and tried. Till the world shall detect one real—one indubitable fact militating against the Views I am now about to develope, let not innovation be charged against me as a crime. Hippocrates, Galen, Boerhaave, Cullen, were all innovators in their day, nay, revolutionists in physic. The revolution I meditate, unlike those of some of my predecessors, is at least free from the imputation of being either painful or sanguinary in its character. The only agents it rejects are the leech, the bleeding lancet, and the cupping instrument. Let us now enter upon the developement of this NEW, but NATURAL SYSTEM.

Gentlemen, in the higher powers of Observation, Comparison, Comprehension, and Direction, termed *Mind* or *Intellect*, Man stands pre-eminent above all animals; in so far as regards the more immediate observation of certain things around him, he is nevertheless excelled in some respects by many. The eagle has a finer and farther sight; the hearing of the mole is more acute; the dog and the vulture distinguish odours wholly inappreciable by him; not a few of the wilder denizens of the forest have even a keener sense of taste and touch. In mere perceptive power, then, the beasts of the field are in some things permitted to surpass us; while the sagacity of the elephant and the dog, the courage and emulation of the horse, the foresight of the ant, the cunning of the fox, and the social and building habits of the beaver, declare to us—however unpleasing the announcement—that others of God's creatures besides ourselves, possess the elements, at least, of that REASON, upon which we so highly pride ourselves. To the greater degree of complexity,—perhaps I should rather say *completeness*, of his CEREBRAL organisation,—to his more perfect developement of that source of all reasoning power, the BRAIN,—man assuredly owes this corresponding increase in the number and force of his reasoning faculties. The more complete mechanism of his prehensile organ, the HAND, gives him the power to execute what his HEAD conceives, in a degree of perfectibility that we look for in vain in the works of any other tribe of the animal kingdom. Look at "man's full fair front;"

it is a superadded—not a superfluous part;—the more it diminishes and recedes, the nearer you will find its possessor to be akin to the brute. But, Gentlemen, the rudiments of every portion of this instrument of man's reasoning faculties,—this directing Brain,—variously developed, may be detected in almost every link of the great chain of animated beings of which he is confessedly the chief. To every variety of race that animates the globe, whether in external or internal configuration, we have undeniably many features of relationship; nor let us spurn even the meanest and most shapeless as beneath our notice—for of every organic production of their common Maker, Man, while yet in the womb of his parent, has been the type!—his fœtal form successively partaking of the nature of the worm, fish, and reptile, and rapidly traversing still higher gradations in the scale of organised existence, to burst at last upon the view in all the fulness and fairness of the perfect infant. But it is not in his outward form only that he passes through these various gradations of animal life. From Comparative Anatomy we also learn that each of his separate internal organs, on first coming into fœtal existence, assumes the lowest type of the same organ in the animal kingdom; and it is only by successive periodic transformations that it gradually approaches to the degree of completeness in which we find it in the new-born child. The heart of the embryo-infant is a mere canal, nearly straight at first, and then slightly curved, corresponding exactly with the simplicity of heart of insect life,—that of the snail, and other insects of the lowest *Crustacea* tribe, for example. And not the heart alone, but each and all of the several organs and systems of the body are brought to their perfection by periodic additions and superadditions of the simpler and more complex parts of the same organs and systems of the several orders of animals, from the least noble to the highest class of all—the MAMMALIA, of which Man is the head. Man, proud man, then, commences his fœtal life in reality a worm!—and even when he has come into the world, and has breathed and cried, it is long before the child possesses the mental intelligence of many of the adult brutes; in this respect Man is for a period lower than the monkey—the monkey he so hates and despises for its caricature likeness of himself. Between the same Man in his maturity, and his animal fellow-creatures, we perceive many differences; the resemblances, being infinitely more numerous, as a matter of course escape our memory! Are not the higher order of animals, and most of the very lowest, propagated by sexes? Does not the female endure her period of travail like woman, and produce and suckle her young in a similar manner? Have not animals senses to see, hear, smell, taste, and touch, and has not each its respective language of sounds and signs by which it conveys its meaning to the other individuals of its race? Nay, have not Animals many of Man's passions and emotions—most of his sympathies and antipathies—his power of choice and resistance—the knowledge by *Comparison*, who is their friend, and who their foe,—*Reflection*, whom to conciliate, whom to attack; where to hide, and when to show themselves—the *Memory* of injury and kindness—*Imitation*, and consequent docility—in some instances, *Simulation* and *Dissimulation*, each pursuing its own mode of artifice? Do not their young, too, as in the instance of the child, gambol and play, and like it leave off both as they grow older, for other pleasures? And yet there are persons of a temper so unphilosophical as to deny them MIND! Does man possess a mental superiority over the dog greater, or as great, as the dog has over the oyster? Of mental as of physical power, there are gradations. If we have stupid and clever men, so have we stupid and clever animals, according to their respective races. But there are dogs that will observe, calculate, and act more rationally than some human fools you may see every day. When did you find the dog prostrating himself before a figure of his own making, asking it questions, supplicating it, and howling, and tearing his hair, because it answered him not? Which of all the Brutes quarrels with his fellow-brute for going his own road, whether circuitous or otherwise, to a town or village that does not concern the other in the least? Or which of all the animal tribes manifests such a paucity of intellect as, more than once, to mistake the same false signs for real sense,

imposture for integrity, gravity for wisdom, antiquity for desert? Never in my life, Gentlemen, did I see the dog or monkey implicitly submitting himself to another of his race in matters that especially interested himself. The monkey, for example, instead of trusting to the authority of his fellow-monkey, in a spirit of laudable curiosity, always handles with his tiny fingers, and *examines* with his quick prying eyes, everything that takes his fancy; in no single instance that I remember did I ever see him allow himself to be taken by the ears. Even in his language of chatter and gibber, he never seems to mistake the meaning of his comrades, never takes one *sign* in two or more *senses*,—senses the most opposite,—so as to get confused and bewildered in his manner or his actions. Can you always say this of man? Have you never heard him, even in his discussions on this very subject, one moment charging everything of animal intellect to *Mind*, at another to *Instinct*,—instinct which, to have a meaning at all, must mean this—right action *without* experience,—such as the infant taking its mother's breast as soon as born, or the chick picking up grain the moment it leaves the shell. True, the chick may mistake a particle of chalk for a grain of wheat, even as the infant may mistake his nurse's finger for the nipple of his mother. Experience corrects the error of both; and this correction of error is one of the first efforts of the three mental faculties, Observation, Comparison, and Reflection. It is with these identical faculties that both men and animals perceive a relationship betwixt two or more things, and act in regard to such things according to their respective interests,—rightly in some instances, wrongly in others. The correction to-day of the errors of yesterday is the chief business of Man. As he grows in years, his experience of things enlarges, and his judgment as to their true value and relationship to himself becomes more and more matured. The Brutes, then, have the very same intellectual faculties variously developed, which, when stimulated to their utmost in Man, and with the assistance of his higher *moral* faculties, become GENIUS,—if by genius is meant the discovery of relationships in nature hitherto undiscovered, and leading, as all such discoveries do, to practical results beyond cotemporary anticipation—Newton's system and Watt's steam-engine for example. Gentlemen, you now clearly see that in the power of gaining knowledge by experience,—call it Mind, Reason, Intellect, or what you please,—the Beast of the field partakes in common with man, though not in the same degree; yet both partake of it in a degree equal to the particular condition and exigencies in which they are individually or socially placed. For animals, like men, have their cities and sentinels—their watchwords of battle, siege, and defence: nature, too, has given them all their respective weapons of offence and defence. Man, less gifted in either of these respects, first fashioned his sword, and his shield, and his armour of proof. It was only after the experience of centuries, he reached, by higher mental efforts, to the knowledge necessary for the construction of the musket, the cannon, and the other munitions of modern warfare. Necessity was the mother of his invention here, as, indeed, in every other instance; but by this also the lower animals profit. What but necessity enables our domestic animals to change their habits so as to live in peace, harmony, or slavery with man?—even as necessity obliges man enslaved to do and bear for his fellow-man things the most repugnant to his nature. How different the habits of the domestic dog from the dog or wolf of the prairie, from which he originally sprang! In the wilderness, the one would all but perish for want, till stern necessity should *teach* him to hunt down his prey; the other would require stripes and blows through successive generations, before he could be *taught* like the shepherd's dog to come at his name, and to drive the sheep at his master's call, or *arithmetically* to single out from the herd two, three, or more, and watch or urge them on at his bidding. To deny animals mind is to deny them design, without which, putting mere *instinct* apart, neither men nor animals act in any manner or matter. The great DESIGNER of the UNIVERSE, in the creation of the first crystal, showed this. He proclaimed it when he made the sexes of the vegetable kingdom;—when, by the Zoophyte or plant-animal, he united the

vegetable to the lowest link of the animal world, he made his design still more manifest. When he further progressively developed his plan of insect, fish, and reptile life, and added the higher animals last of all, before he completed the chain with Man their master, he showed not only design, but Unity of Design; and when to men and animals he gave a power neither the crystal nor the vegetable possesses, —the power of following out designs of their own making,—he imbued them both with a portion of his Spirit—varying in degree, but to each he gave it in a measure equal to their respective wants and necessities. Deny this, and you deny God,—you deny God's works and words—words upon which the question of *interpolation* can never arise; for every leaf of every plant is a letter of His alphabet,—every tree a combination of the letters composing it, and every hill, valley, and stream—every tribe of men and animals—so many sentences by which we may perceive His will, and deduce His law. The stars, and constellations of stars, and their periodic motions, teach, even to our frail senses, the analogies which subsist in this respect between the motions of man's body and all the movements of Nature. In their harmony of design, they give us an insight into the UNITY of the ETERNAL. And we find embodied in them a principle by which we not only may know the past and present, but to a certain extent read the future, in its dim outline of twilight and shadow. In all humility, then, let us *inwardly* prostrate ourselves before the Omnipotent: but let us at the same time beware of that *outward* mock humility which too often leads to religious pride, and engenders anything but Christian charity; and let it rather be our delight to trace resemblances and harmonies, than to see in Nature only discords and differences. The world—the universe is a UNITY; and in no single instance do we find a perfect independence in any one thing pertaining to it. Betwixt man and the lower animals, we have traced link by link the chain of contiguity—mental as well as corporeal. Like them, he comes into the world, and like them, his body periodically grows, decays, and dies. When injured in any of its parts, it has similar powers of repair and reproduction. I know not why such powers should be greater the further we descend the scale; but in the crab and lobster, whole limbs may be severed and reproduced; in the worm, the regeneration of half the body may take place; while in man, the highest of the chain, only limited portions of a tissue can be materially injured and recover. Disease, like death, is the destiny of all. To understand either aright, we must first know what Health is. In the state of

HEALTH,

an equable and medium temperature prevails throughout the frame. The voluntary and other muscles obey with the requisite alacrity the several necessities that periodically call them into action. The mind neither sinks nor rises but upon great emergencies; the respiration, easy and continuous, requires no hurried effort,—no lengthened sigh. The heart is equal in its beats, and not easily disturbed; the appetite moderate and uniform. At their appointed periods, the various secreting organs perform their office. The structures of the body, so far as bulk is concerned, remain, to appearance, though not in reality, unchanged; their possessor being neither encumbered with obesity, nor wasted to a shadow. His sensorium is neither painfully acute nor morbidly apathetic; he preserves in this instance, as in every other, a happy moderation. His sleep is tranquil, dreamless.

If we analyze these various phenomena, we shall find that they all consist of a series of periodic repetitions, each separate organ having its own particular period for the proper performance of its function; some of these phenomena are diurnal, some recur in a greater or less number of hours,—while others exhibit a minutary or momentary succession. At morn, man rises to his labour; at night, he returns to the repose of sleep; again he wakes and labours—at the appointed period he "steeps his senses in forgetfulness" once more. His lungs now inspire air, now expel it—his heart successively contracts and dilates—his blood brightens into crimson in the arterial circle of its vessels—again to darken and assume the hue of modena in the veins. The female partner of his lot—she who shares with him

the succession of petty joys and sorrows, hopes and fears, which make up the day-dream of life, has yet another revolution, the *Catamenial;* and *Parturition*, or the process by which she brings their mutual offspring into the world, is a series of *periodic* pains and remissions.

Every atom of the material body is constantly undergoing a revolution or alternation;—liquid or aëriform one hour, it becomes solid the next—again to pass into the liquid or aëriform state; and ever and anon varying its properties, colours, and combinations, as, in brief, but regular PERIODIC succession it assumes the nature of every organ, tissue, and secretion, entering into, or proceeding from, the corporeal frame. "It is every thing by turns, and nothing long."

The phenomena of the human body, like every other phenomenon in nature, have all a relation to MATTER, SPACE, and TIME;—and there is another word—MOTION, which may be said to bring all three to a unity; for without matter and space, there can be no motion, and motion being either quick or slow, must also express time or PERIOD.

Moreover, there can be no *motion* in matter without *change of temperature*, and no change of temperature without *motion in matter*. This is so indisputable an axiom in physics, that Bacon and others supposed motion and change of temperature to be one and the same. You cannot, for example, rotate a wheel for a few seconds, without heat being produced, and the iron that binds it becomes expanded; in other words, it exhibits a motion *outwards:* when the same wheel is allowed to stand still, the temperature falls, and the iron hoop decreases in size. There is in that case motion *inwards*. By the same law, if, even in the middle of winter, you run for any length of time, you will become heated and bloated; and you again shrink in size when you stand still to cool yourselves. To the mind's eye, *extremis probatis media presumuntur*. Having shown the truth in extremes, we presume the rest; for as there are motions both of quickness and slowness that elude the eye, so are there changes of temperature that the thermometer may not reach. Those, then, who ascribe the source of animal heat exclusively to the lungs, seem to have forgotten these facts; they have forgotten, that in the constant mutation of its atoms, every organ, nay, every atom of that organ being ever in motion, must equally contribute to this end; for to this common law of ALL matter, every change in the body is subjected. The powers by which the corporeal motions are influenced, are the same that influence the motions of every kind of matter, namely, the electric, mechanical, and chemical forces, and the force of gravitation. When rightly considered, the whole of these powers resolve themselves into ATTRACTION and REPULSION. It is by attraction that the fluid matter of the blood first assumes the solid consistence of an organ; again to pass by repulsion into the fluidity of secretion. *From* the earth and *to* the earth, the matter composing our bodies comes and goes many times even in the brief space of our mortal existence. In this, the human system resembles a great city, the inhabitants of which, in the course of years, are constantly changing, while the same city, like the body, betrays no other outward appearance of change than what naturally belongs to the PERIODS of its rise, progress, maturity, or tendency to decay.

The last, and one of the most important of the revolutions of the healthy state, is

SLEEP.

Philosophers of all ages have made this an object of their most anxious study, its relation to death perhaps being their chief inducement to do so. "Half our days," says Sir Thomas Browne, "we pass in the shadow of the earth, and Sleep, the brother of Death, extracteth a third part of our lives." In the state of perfect sleep, the pupil of the eye will not contract on the approach of light—the skin has no feeling—the ear no sense of hearing—the taste and smell are not to be roused by any of the ordinary stimuli. What is this (figuratively speaking) but a periodic *half*-death—speaking truly, but a periodic palsy or cessation of internal motion of the nerves by which we maintain a consciousness of existence, and perceive our relationship to the world around us? Broken sleep consists either in brief remissions of the whole sleeping state, or in a wakefulness of one or more of the five senses. There are

individuals, for example, who always sleep with their eyes open, and who would see you, were you to enter their chamber with the most noiseless tread. These tell you they are always half awake. In the condition of body termed *nightmare*, there is a consciousness of existence with a wakefulness of the nerves of sight or feeling; but with a total inability to influence the voluntary muscles by any effort of the will. The subject of it can neither sleep nor turn himself. The dreamer, portions of whose brain think, and therefore act or move, is partially awake. The *somnambulist* and *sleep-talker*, are dreamers, who, having portions of the brain in a state of action, and others torpid, perform exploits of deed or word, that bring you a mind of the maniac and the drunkard, whose powers of judging are defective. A man may be entirely awake with the exception of a single member; and this we still refer to a torpid state of some portion of the brain. Such a man will tell you that his arm or leg is asleep or dead. But, as this is a soporific subject, and may have a soporific influence on some of you, I may as well wake you up with an anecdote a brother medical officer of the army once told me of himself:—While serving in the East Indies, Dr. C—— one night awoke, or I should rather say half awoke suddenly, when his hand at the instant came in contact with a cold animal body. His fears magnifying this into a cobra capel, he called out most lustily, "A snake, a snake!" But before his drowsy domestics had time to appear, he found he had mistaken his own sleeping arm for this most unwelcome of oriental intruders!

Gentlemen, the human body in health is never asleep throughout, for when volition is paralysed—when we are all but dead to everything that connects us with the external world, the heart still continues to beat, the lungs perform their office, and the other internal organs, over which volition has no control, keep on their usual harmony of motion—in other words, the digestion of the food, the circulation of the blood, and the other lesser motions of *organic* life, proceed as in the waking state. The more important motions of the heart and lungs could not cease for many minutes without endangering the entire life in the higher animals—though these organs in the bat, dormouse, and snake, appear to be inactive for months. Nevertheless, even in those animals, they are not entirely so—the wasted state of their bodies, when they wake, proving the movement that had been going on in all the atoms of their various organs during the period of hybernation. The state termed a fainting fit, it is true, comprehends, even in man, a temporary palsy or death of the whole body; but such state prolonged to a very brief period passes into death perpetual. *Catalepsy*, or trance, being a sleep of ALL the organs, internal as well as external, though not of their *atoms*, has so great a resemblance to death, as to have been frequently mistaken for it. The subject of this condition of body, by something like the same inexplicable power which enables the dormouse to hybernate, may remain apparently dead for days and yet recover. More inexplicable still, if what travellers tell us be true, is the recovery to life of fish, that have been completely frozen for months.

We now pass to the consideration of those alterations of the temperature, and periodic movements of the body, termed

Disease or Disorder.

Till the hour of sickness comes, how few non-medical persons ever think of a subject which ought to be of interest to all! The same men who discuss with becoming gravity the artificial inflections of a Greek or Latin verb, neglect to inform themselves of the natural laws that govern the motions of their own bodies! No wonder that the world should be so long kept in darkness on medicine and its mode of action,—no wonder that even educated persons should still know so little of the proper study of mankind—MAN! In the throes of disease, the early priests, as I have already told you, imagined they detected the workings of demons. Medical theorists, on the contrary, attributed them to morbid ingredients in the blood or bowels. One age bowed the knee to an "acrimony" or "putridity;" another acknowledged no cause but a "crudity," an "acidity," or a "humour." The moderns hold the notion that a mysterious process, which they term "inflammation," is the head and front of

all offending. How absurd each and all of these doctrines will appear in the sequel! Disease, Gentlemen, is neither a devil to "cast out," an acrimony or crudity to be expelled, nor any fanciful chemical goblin to be chemically neutralised;—neither is the state erroneously termed inflammation, so commonly the *cause* as a *coincident part* of general disorder. Disease is an error of action—a greater or less variation in the motion, rest, and revolutions of the different parts of the body—reducible, like the revolutions of Health, into a systematic series of periodic alternations. Whatever be the cause or causes of corporeal aberration, in obedience to the law of all matter, the first effects are change of *motion* and change of *temperature*. The patient accordingly has a feeling of *heat* or *cold*. His muscular movements less under the control of their respective influences, become tremulous, spasmodic; or wearied, palsied, the functions of particular muscles cease. The breathing is hurried on slight exertion; or it is maintained slowly and at intervals, and with a long occasional inspiration and expiration—familiar to you all in the act of sighing. The heart is quick, palpitating; or languid or remittent in its beats; the appetite craving, capricious, or lost. The secretions are either hurried and increased in quantity; or sluggish, or suppressed. The body shows a partial or general waste; or becomes in part or in whole preternaturally tumid and bloated. Alive to the slightest stimulus, the patient is easily impassioned or depressed; his mind, comprehending in its various relations every shade of unreasonable sadness or gaiety, prodigality or cupidity, vacillation or pertinacity, suspicious caution or too confident security; with every colour of imagination, from highly intellectual conception to the dream-like vagaries and reveries of hallucination. His sensations are perceptibly diminished or increased. Light and sound, for example, confuse or distract him; like the soft Sybarite, a ruffled rose-leaf frets him. With the smallest increase in the medium temperature of the atmosphere, he becomes hot and uncomfortable, and the slightest breeze shivers and discomposes him; or, as you may sometimes observe in the case of extreme age or idiocy, he becomes equally insensible to excess of light, sound, heat, and cold.

Contrast, if you please, these simpler forms of Disease with what we have said of Health, and you will at a glance perceive that the difference betwixt the two states consists in mere variation of the sum or amount of particular corporeal motions, and in a difference of effect of external agency on the matter and functions of the body. Structural change, or tendency to *decomposition* of any part of the frame, so frequently but erroneously associated with disease as a cause, is not even a necessary element in a fatal result. What are *Toothache, Consumption, Rheumatism,* but developements of constitutional change?—they are phenomena which may or may not arise out of general corporeal disturbance, according to particular habits and predispositions. By predisposition, I mean the readiness or fitness of one part of the body more than another to be acted upon by influences from without,—occasioned by a weakness in the cohesive power of the atoms of that part to each other. We have all our particular predispositions.

Let us now inquire into the

Causes of Disease.

What are the agencies that give rise to

——— "Maladies
Of ghastly spasms, or racking tortures, qualms
Of heart-sick agony, all feverish kinds,
Convulsions, epilepsies, fierce catarrhs,
Intestine stone, and ulcer, colic pangs,
Demoniac phrenzy, moping melancholy
And moonstruck madness, pining atrophy,
Marasmus, and wide-wasting pestilence,
Dropsies and asthmas, and joint-racking rheums?"
Milton.

Gentlemen, the Causes of all these various diseases—Various in name, place, and degree—One only in their real nature—may be found either in a *deprivation* or *wrong adaptation* of the identical forces which continue Life in health,—the same natural agencies, in a word, by which every motion or event is produced throughout the universe. They comprise, therefore, everything that connects us, directly or indirectly, with the external world; and most, if not all of them, act upon us, in the first place, through the different modifications of nervous perception. The causes of disease, then, never originate in any one organ of the body,—except in so far as that organ may be

predisposed by an inherent weakness of the attractive power of the atoms of its parts to receive grave impressions from outward agencies that affect the more stable portions of the same body in a slighter manner. I conceive with Hobbes, that "nothing taketh beginning from itself, but from the action of some immediate agent *without* itself." If this be true, how delusive the idea of those professors who look for the *Causes* of disease in the bodies of the dead! In the schools we constantly hear that Anatomy is the foundation of medical science. Sydenham, on the contrary, held it so cheap, as to say, "Anatomy is a fit study for painters;"—he might have added, and also for surgeons; but so far as Medicine is concerned, the best anatomists have been seldom good physicians. They have been all too mechanical in their notions. Do not, Gentlemen, for a moment suppose I mean to condemn the study of Anatomy, or that I would desire to leave it out in any system of medical education. Cultivated in a proper spirit, I would rather, on the contrary, make it a part of the useful education of the people. By surgeons Anatomy must be studied minutely, and few men in these days would care to practise *Physic* without possessing a competent knowledge of the various organs of the body on which medicines operate. But let the student keep in mind that a dead body is one thing and a living body another—and that a man may know anatomy as well as the best professor who ever taught it, and yet be utterly ignorant what medicines to prescribe if he wished to alter the motions of any one organ of a living body. To Physic, anatomy is a mere accessory—and the Physicians of some countries, India and China for example, practise their profession with wonderful success, though they never saw the inside of a dead body. Sydenham is called to this day the English Hippocrates, and yet you have seen how little he prized anatomy.—And, certainly, in his own words, it is a knowledge "easily and soon attained, and it may be shortened more than other things that are more difficult, for it may be learned by sight in human bodies, or in some animals, and that very easily, by such as are *not* sharp-witted," [meaning thereby that any blockhead with a tolerable memory may easily master it.] "But in acute diseases," he continues, "which kind contains more than two-thirds of diseases; and moreover, in most chronic complaints, it must be confessed there is some specific property" [depending, as I shall afterwards show you, on the electrical condition of the *living* brain,] "which no contemplation reduced from the speculation of the [*dead*] human body can ever discover:—wherefore, that men should not so place the main of the business upon the dissection of carcases, as if thereby the medical art might be rather promoted, than by the diligent observation of the *natural phenomena*, and of such things as *do good* and *hurt*,"—the action of medicine, for example, and other external agency upon the *living*. How different this from the language of Dr. Baillie, who says, "The *dead* body is that great basis on which we are to build the knowledge that is to guide us in distributing life and health to our fellow-creatures!" Here, then, so far as mere authority goes, you have the opinions of two celebrated men in direct opposition. But in the course of these lectures I will give you something better than any human authority, however respectable.

The too exclusive spirit in which professors have urged the necessity of investigating the bodies of the dead, not in England only, but throughout Europe, has given rise to a class of medical materialists, who, hoping to find the *origin* of every disease made manifest by the scalpel, are ever mistaking effects for causes. Loth to believe that death may take place without even a palpable change of structure, these individuals direct their attention to the minutiæ of the dead—and finding, in their search, some petty enlargement, some trifling ulceration, or, it may be, some formidable tumor or abscess, hastily set this down as the first *cause* of a general disease of which it was only a developement or coincident part. "These people," in the words of the late Dr. Uwins, "put consequence for cause, incident for source, change in the condition of blood-vessels for *powers* producing such change. It is an error which has its origin in the blood and filth of the dissecting-room, and which tends to degrade medicine from the dignity of a science to the mere detail of an art." What

has practical medicine gained at the hands of anatomical professors? The greater number of their pupils have been sceptics in Physic; and no wonder, since they have been so constantly accustomed to hear, *ex cathedrâ*, that anatomy is the foundation of all medical science. That were true enough, if by the word "foundation" be meant that anatomy is the *lowest* part of it. The fact is, this kind of language is the natural result of a too great preponderance of Surgical influence in the schools. It is the effect of a too great influence of your "great operators,"—tending to make young men expert anatomical mechanics, but nothing more. These leave their universities, not only with a contempt for Physic, but without a single correct idea of the action of medicine on the living system; and yet to these the people of this country chiefly entrust the treatment of their diseases, which, in ninety-nine cases out of the hundred, demand *medical*, not surgical knowledge for their cure. Beware, then, of trusting to great operators, to men whose art Shakspeare truly says has "no honour in it,"—for were Physic better cultivated, there would be little need of such an opprobrium in medicine as operative mutilation. It is an art, too, that blunts the feelings and inclines its professors too often to use the knife more to gratify their own love of display, than to give relief to their suffering fellow-creatures. No "great operator" should be permitted to perform any capital operation without the previous consent of one or more physicians. In its present mechanical and degraded state, who can wonder that those who practise Medicine should so frequently cut the sorry figures they do when examined as witnesses in our courts of law, or that their evidence in most instances should appear to both the Bench and Bar a tissue of incoherency and inconsistency throughout? At an inquest medical practitioners seldom get beyond the appearances of a *post mortem* examination, though in a great many instances such appearances, as I shall afterwards show you, have been produced by their own bad practice! It is somewhat strange that their too numerous opportunities of dissecting dead bodies should not long ago have opened their eyes to their paucity of resource for the ailments of the living! So great and universal has the prevalent delusion upon the subject of dissection become, that almost everybody, from the peer to the peasant, shares in it. Lord Brougham, in a speech he once made, declared that "the only good medical education is to be got in the dissecting-room." The same nobleman, in his work on Natural Theology, speculates upon the power of MIND apart from MATTER; proving himself to be equally superficial in mental as in medical science. But what advantages, let me ask, have centuries of dissection contributed to the healing art? We hear of a great many, truly; but lungs decomposed, livers enlarged, bone, muscle, and intestine in various stages of corruption, would seem to comprise the whole. These are nevertheless what modern professors put up in bottles and cases, and exultingly show off as "beautiful specimens!" "superb collections!" pointing them out at the same time to their credulous pupils as the trophies of science, when they might better describe them as the triumphs of death over their own want of skill; or,—in the words of Gray,

> "Rich windows that *exclude the light*,
> And passages that lead to *nothing!*"

Now, what has the most patient study of these done for Physic? has it given us one new remedy, or told us better how to use our old? Where were the virtues of bark and opium ascertained? In the dead house? No, certainly! The one was discovered by a Peruvian peasant who cured himself of the ague by it: what had anatomy to do with that? For the other we may thank the Brahmins of Hindustan, who hold the dissecting-room in horror. Antimony, rhubarb, mercury,—whence got we our knowledge of these?—From the quack and the old woman—individuals who will ever successfuly compete with physicians, while the latter busy themselves with dead bodies to the neglect of the powers and principles that affect the living. "A cripple in the right way," says Lord Bacon, "will beat a racer in the wrong." So great a stumbling-block to a proper knowledge of medicine has been this exclusive and too minute attention to dissection, that Dr. Baillie, its greatest patron, after retiring from practice, confessed, as I have

already told you, his total want of faith in physic. The experience of his whole life was equally a satire on anatomical knowledge, and the value too often attaching to a medical reputation.

To return to the CAUSES of disease,—are they not infinite? The seasons and the sideral influences—the earth and its emanations—the air and its electrical conditions—the degrees of temperature, dryness, and moisture of surrounding *media*—the nature and extent of our food and drink—the passions by which we are agitated, with all the other changes and chances of our social and individual position; these are the elements to which we must look not only for the causes of disorders, but for the causes of health itself.

Having alluded to the great error of the "anatomical," or, as it is sometimes called, the "pathological" school, we may now glance at the doctrines of another class of partialists, those who, with the quantity or quality of our food or air, associate every disorder,—as if passions, burns, blows, wounds, &c., were mere words. The late Mr. Abernethy, to whom science nevertheless owes something, was an example of the first. To the stomach and bowels, he almost invariably pointed as the first cause of every disturbance. He forgot his own observation, that a passion or a blow will alter the secretions of both. He ascribed the first link in the chain of causes to a feature, which could only be improved by an agent affecting the nervous or perceptive system, in which that and every other symptom could alone have their origin.

But what shall we say of those who, like M'Culloch and others, attribute every disorder in which remittency of symptom takes place to *marsh-miasma* or *malaria*,—to exhalations from the fens, marshes, &c.,—when, as we shall shortly show, every disease which has obtained a name, may not only admit of this phenomenon; but that none, by whatever caused or characterised, are in the first instance without their remissions or intermissions, all more or less periodic and perfect. Man is not an isolated being; without air or food he cannot exist—and a partial deprivation or depravity of either, will give rise to almost every affection to which he is liable; but his success in life, his reception from friend and foe, the state of his family or finances, will equally excite, depress, and disorder his various organs and functions, as a deprivation or depravity of the food he eats, or the air he breathes. An unexpected reverse of fortune, good or bad, may lay the foundation of a thousand maladies; nay, examples are on record, where individuals have instantly expired from intensity of sudden joy. Of sudden grief many have been the victims.

"It has been too much the fashion in philosophy," says Sir Humphrey Davy, "to refer operations and effects to *single* agencies, but there are in fact in nature two grand species of relationship between phenomena; in one an infinite *variety of effects* is produced by a single cause,—in the other, a great variety of causes is subservient to *one effect*." This observation applies with particular force to everything pertaining both to the causes of disease and its cure. The single agency of thermal change, for example, has given rise to cough, catarrh, rheumatism, dropsy, and a host of other disorders in one class of individuals; while in another class, to call forth any one of such states, it would require the united influence of intemperance, domestic trouble, and deprivation of food, in addition to that thermal change, which of itself singly produced all these diseases in the former. Physicians are in the habit of dividing diseases into two classes, namely, *constitutional* and *local*, and they treat them as such accordingly; but, properly speaking, there never was a purely local disease. You will doubtless ask me if toothache, consumption, and ulcers, are not local diseases? So far from this, it is impossible for such states to take place, (unless where they happen to be produced by outward injury,) without the previous condition of entire constitutional disturbance,—of which, instead of being causes, as many suppose and teach, they are only effects or features. Let the physician recur to nature, he will find that the subjects of all such diseases laboured under a general derangement of the whole habit, previously to the developement of the local consequences from which these diseases take their designations. Now, some will call this disturbance by one name, and some by another; for myself, I am satisfied with the phrase, "loss of health," but

as many of you, Gentlemen, may not be content without a medical term, I will call it, to please you, FEVER; and as remissions or periods of comparative ease are enjoyed by the subjects of all these diseases, I will go farther, and call it REMITTENT Fever. Yes, Gentlemen, all diseases have *remissions*, and "this," says John Hunter, "is an attribute belonging to life, and shows that life cannot go on the same continually, but must have its hours of rest and hours of action."

We have already analyzed the Life of Health;—we have seen that it consists in a *periodic* alternation of harmonious movements, some long, some short,—greater and lesser movements, otherwise *fits;* in Shakspeare's language, Life is a "*fitful* FEVER." If so, what can the morbid modifications of that Life be, but modifications of Fitful or Intermittent Fever? "All diseases," says Hippocrates, "resemble each other in their form, invasion, march, and decline." "The type of all diseases," he adds, "is one and the same." What, then, is that type? If we succeed in proving to you that toothache, asthma, epilepsy, gout, mania, and apoplexy, all come on in *fits;* that all have febrile chills or heats; that *intermissions* or periods of immunity from suffering, more or less complete, are common to each; and that every one of these supposed different diseases may, moreover, be cured by any one of the agents most generally successful in the treatment of Intermittent Fever, popularly termed AGUE; to what other conclusion can we possibly come, but that this same Ague is the type which pervades, and the bond which associates together every one of these variously named diseases? If, in the course of these Lectures, we further prove that what are called "inflammations" also come on in fits; that the subjects of them have equally their periods of immunity from pain, and that these forms of disorder yield with equal readiness to the same remedial means;—who can be so unreasonable as to doubt or dispute that Ague is the model or likeness—the TYPE OF ALL DISEASE!

But here let me be clearly understood;—let me not be supposed to say that every disease is an ague and *nothing* more. A canoe is the model of all sea-vessels,—the TYPE of every brig, barque, frigate, sloop, and so forth, nautically termed SHIP. But, a ship is a canoe, and *something* more—a canoe enlarged and variously modified. Here, then, you have UNITY of type with VARIETY of developement,—simplicity of principle with numerous modifications of form. This is what I wish to impress upon you in the case of Disease. Let that, then, be your motto and your mark, and do not forget it in the practical application. Remember the constantly changing phenomena of Health,—their FEVER-like *fit*-fulness,—the slow manner in one case, the rapid manner in another, in which these *healthy* fitful motions run into motions *unhealthily* fitful,—run into the true ague or agueish fits, with which I shall hereafter prove to you all diseases commence. And beware of mistaking the end for the beginning,—the consequence or coincidence for the cause; beware of that all but universal medical error—that fallacy in many instances so fatal—of mistaking the decay, or tendency to decay, of a PART for the primary *cause* of the febrile disturbance of the WHOLE;—when, as by numerous proofs, I shall bring it home to your conviction that such *local* disease, in the majority of instances, is a mere consequence or developement simply,—a termination or *effect*, though sometimes a coincidence from the beginning, of repeated constitutional febrile attacks. Health and Disease, Gentlemen, are *convertible* states;—else why should the aid of the physician be asked? The same moving matter of the body, when influenced by one agency, may become Disease, and acted upon by another while in the diseased state, may return again to the condition of Health.

The human body, whether in health or disorder, is an epitome of every great system in nature. Like the globe we inhabit, it has in health its diurnal and other revolutions—its sun and its shade—its times and seasons—its alternations of heat and moisture. In disease, we recognise the same long chills and droughts,—the same passionate storms and outpourings of the streams, by which the earth at times is agitated,—the matter of the body assuming in the course of these various

alternations, changes of character and composition, such as abscesses, tumours, and eruptions, typical of new-formed mountain masses, earthquakes, and volcanoes; all these, too, like the tempests and hurricanes of nature, *intermitting* with longer or shorter periods of tranquillity, till the wearied body either regains, like our common mother, its wonted harmony of motion; or, like what we may conceive of a world destroyed, becomes resolved into its pristine elements.

In the language of the schools, the phases of Disease are termed the *Paroxysm* and *Intermission*,—the first, or period of suffering, being synonymous with access, exacerbation, throe, fit;—the second, as we have already seen, meaning the period or interval of comparative freedom from disorder;—though when less completely periodic, *Intermission* is usually termed *Remission*. For my own part, I shall occasionally be compelled to use Remission and Intermission synonymously. But as I have already explained to you, so far from having been recognised as a law of universal occurrence, and harmonising with every thing which we know of our own or other worlds, periodic intermission and return have been vaguely supposed to stamp the disorders where they were too striking to be overlooked, as the exclusive offspring of a malarious or miasmatic atmosphere! Gentlemen, there can be no greater error than this. The actions of life in health are all, as you have seen, periodic; and however, or by whatever caused, their morbid modifications, termed disease, are periodic also.

What are the remedies most influential in preventing the return of an Ague-fit? The profession will answer, and rightly answer, the Peruvian BARK—or its better substitute QUININE, in fact, its essence—ARSENIC, and OPIUM; to which you will permit me to add HYDROCYANIC ACID, better known as Prussic Acid, IRON, SILVER, COPPER, STRYCHNIA, MUSK, ASSAFETIDA, VALERIAN, COLCHICUM, ZINC, BISMUTH, TURPENTINE; and there are others, doubtless, in nature, which time and accident may yet discover. These agents, Gentlemen, are generally most effective when taken during the intermission. From the relation which their influence must thus bear to *Time* or Period, and *Temperature* (Cold and Heat,) I term them CHRONO-THERMAL—χρόνος (Chronos) being the Greek word for Time—θέρμη (Thermà) for Heat or Temperature. But as some of you, in common with many *in* the profession, and not a few *out* of it, may possibly be sceptical in regard to the curative power of any medicine in any disease, I will here tell you how I lately settled this matter with a certain young barrister, who thought he should be able to prove to me that physic is all nonsense. "Do you mean to tell *me*," said the gentleman in question, "that putting little bits of pounded stick or stone into a man's stomach, will cure any disease whatever?" "Oh! certainly not," said I; for when you find people obstinate, it is better to humour them a little at first; "but perhaps," I continued, "you may just be disposed to admit, that little bits of pounded stick and stone *may* cause disease, and even death;—otherwise you must be ready to swallow hemlock and arsenic in any quantity required of you." To this the man of law at once put in a *demurrer*. The causing and killing part of the business he could not by any sophistry get rid of. So I then thought it time to explain to him, as I now do to you, that the principle upon which these substances can cure and cause disease is ONE and the SAME; namely, their power, for good or for evil, as the case may be, of ELECTRICALLY altering the *motive* state of certain parts of the body, and of altering at the same time their *thermal* conditions.

Gentlemen, turn over the history of medicine, and mark well the remedies upon which authors dilate as being most beneficial in any form of disease; you will find them to be, one and all, agents having the power of controlling Temperature,—of exalting or depressing this in the stages of exacerbation, or of continuing and prolonging the more healthy and moderate degrees of it, characteristic of the period of remission; thereby at the same time controlling motion, or *vice versâ*.

For this latter indication, the most generally efficient of all remedies is the Peruvian Bark, or Quinine; but it is not specific, nor is

there such a thing as a specific, for this or any other purpose, in physic; arsenic, opium, hydrocyanic acid, all proving better or worse than another in particular cases of disease, and this less with reference to the disorder and its cause, than to the constitution or peculiarity of system of individual patients. This peculiarity, we shall afterwards prove, depends upon certain *Electrical* conditions of the Brain. But upon the nature and the mode of action of all Remedial substances, we shall enter at length at a more advanced period of the course. In our next lecture we shall consider the phenomena of AGUE, and show you its relation to Spasmodic disease,—Asthma, Epilepsy,—to Palsy, Curved Spine, Squint, &c. These disorders we shall prove are merely so many developements occurring in its course,—*analytically*, by rigidly scrutinising their symptoms; *synthetically*, by detailing to you cases of each cured on CHRONO-THERMAL principles.

LECTURE II.

AGUE—SPASMODIC AND PARALYTIC DISEASE—DISORDERS OF SENSATION.

IN our former Lecture, Gentlemen, you will remember that, after a brief allusion to a few of the many errors which, from time to time, have prevailed in the schools, we took a more simple, though, at the same time, a much more bold and sweeping view of the subject of Medicine than would appear to have hitherto come within the grasp of teachers and professors. The nature of Health, Sleep, and Disease, we in some measure explained;—and we proposed, as matter for future argumentation, that INTERMITTENT FEVER OR AGUE is the type, model, or likeness of all the maladies to which man is liable,—referring, at the same time, to certain natural analogies in the world around us; and hazarding the statement, (which, until we prove, we by no means wish you to take for granted) that the chrono-thermal or ague medicines are the most generally influential in the treatment of every kind of disease. Let it not, however, be supposed that, in our high estimate of this particular class of remedies, we reject, in practice, any earthly agent which God has given us; for there is no substance in nature which may not be turned to good account by the wise and judicious physician. Besides the chrono-thermal remedies, which we chiefly use as remedies of Prevention, we possess a multitude of powers which have all more or less influence upon the human body, both in health and disease: and though few or no substances can act upon any part of the frame without implicating every other part, yet do we find that certain medicines have relations of affinity to particular organs of the body greater than to others—some affecting one organ, some another. Of this class, Vomits, Purgatives, and Diuretics, (as their names import,) Mercury, Creosote, Cantharides, and the various Gums and Balsams, are the principal: Iodine, Lead, the Earths, and Acids are also examples. But while, in the more simple cases of disease, the chrono-thermal medicines, singly, may answer every purpose, particular cases of disorder will be more efficiently treated with alternations and combinations of both classes, than by the exhibition of either simply. Of the action of remedies of every kind, we shall speak more particularly when we come to treat of individual substances. For the present, we shall content ourselves with repeating what we stated in our former Lecture, in connexion with this subject, that the action of REMEDY and CAUSE, in every case, comes at last to the common principle of their capacity to affect temperature or motion—change in one never taking place without change in the other. It will be a subject of interest to pursue DISEASE through all its modifications and varieties, step by step, and to show you the source and the extent of our influence over it;—for which purpose we shall call our different witnesses before you in the shape of Cases,—taking these, as often as possible, from the experience of others, and when this fails us, from the results of our own practice; leaving to you, of course, to compare and cross-examine these last at your leisure, with such facts and cases

of a similar description, as may come before you during your attendance at the various hospitals with which you are respectively connected. Of this we feel assured, that whether or not you individually pronounce a verdict in our favour upon all counts, you will at least collectively admit that we have compelled you to alter your sentiments most materially upon many measures which you previously supposed to be as unquestionable in practice as they were orthodox in precept. But if, according to Lord Bacon, "disciples do owe unto masters only a *temporary* belief, and a *suspension* of their own judgment *until they be fully instructed*, and not an absolute resignation or perpetual captivity," you will not be sorry to escape from the thraldom of men who, when asked for bread, gave you a substance which, in the darkness of your ignorance, you could not by any possibility tell was a stone! No longer mocked by mystic gibberish, you will now take your places as judges of the very doctrines you formerly, as pupils, implicitly and without examination believed; and according to the evidence which I shall bring before you, you will pronounce between your teachers and me—whether the infinity of distinctions and differences, upon which they so pride themselves, be founded in nature and reason,—or whether, in the words of the same great philosopher, "all things do by *scale* ascend to UNITY, so then, always that knowledge is worthiest which is charged with least multiplicity."

Gentlemen, there was a time when the greater number of people imagined that the only thing worth acquiring in this life, was a knowledge of the dead languages. A new era has since sprung up, and mankind have begun to appreciate the advantages to be obtained from an acquaintance with the chemical and physical sciences. They now prefer the study of the natural bodies around them, to pedantic discussions about Greek articles and Latin verbs. It is only in the cloisters of Oxford and Cambridge, that men sneer at "utilitarianism," or in that antiquated off-shoot of these monkish institutions—the *College of Physicians*. Railroads, steam-boats, galvanism, and gas, have all come to light within the last half century. A revolution in thought and action has been the result; petty objects have given way to comprehensive views, and petty interests have been destroyed by the general improvement that has already been accomplished. Is Medicine the only branch of human knowledge destined to stand still, while all around it is in motion? Is the march of intellect to sweep on and on, and leave behind it this so-called science, untouched and unimproved in its progress? When the monarchs who have successively wielded the medical sceptre—who in their day were looked upon as demigods in physic, have in turn declared that all that they knew of it was that "they nothing knew," shall blame be attached to him who would attempt to rescue his profession from this worse than darkness visible? If, by their own confession the Knightons and Baillies were ignorant of the first principles of correct practice, surely it were but charitable to suppose that men so successful in their worldly pursuits may, in this instance at least, have followed a deceptive mode of investigation? Like the racer on the wrong road, how could they in that case get to the end of their journey? Pursuing their professional studies chiefly in the dead house, these physicians forgot that medicine has no power over a corpse. Gentlemen, the reflections which I shall have the honour to submit for your consideration, were the result of observations made on the ever-shifting motions of the living. Who will tell me that this kind of study is only proper for medical persons? Who shall say that this description of knowledge may not be made interesting to the world at large? Greek, Latin, High Dutch, Hebrew,—are these repetitions of the same *Signs* more important than an enlarged knowledge of the *Sense*—more instructive to those who pursue them as a study, than a consideration of the revolutions and constantly changing relations of the matter of their own bodies? Without a proper knowledge of the laws of your own organisation, how can you possibly put in practice the good old maxim, "Know yourselves?"

Having premised this much, I now come to

consider in detail the phenomena of Periodic Fever commonly called

INTERMITTENT FEVER OR AGUE;

for Ague being the type of every other modification of disease, it is necessary you should be well acquainted with the principal shades of suffering so denominated. I have already told you there can be no disease, no morbid *motion* without change of *temperature*. The subject of ague, then, among other sensations and changes, successively experiences a CHILL and HEAT, followed by a profuse PERSPIRATION. These three stages, commonly called the Cold, Hot, and Sweating stages, constitute the PAROXYSM or FIT. The patient, during each stage, is in a different condition of body from either of the others; his sensations, consequently, differ during each of them. To the state of Perspiration, which terminates the fit, a periodic INTERMISSION, or regular interval of comparative health, succeeds; and this interval of immunity from suffering usually lasts one, two, or more days, (giving rise to the terms, *Tertian*, *Quartan*, and other agues, according to the duration of the interval,) before the recurrence of another similar fit;—such fit generally making its invasion with a wonderful degree of exactness at the same hour of the clock as the former, and lasting about the same time,—when it is again followed by a similar periodic intermission of the symptoms as before. In every stage of the fit, all the functions of the body are more or less disturbed. During the cold stage, the face becomes pale, the features shrink, and the muscles are tremulous or even spasmodic: the patient, in other words, shivers, has cramp, and his strength is prostrate. The breathing and circulation are variously altered,—the urine, if any passes, is generally pale and plentiful, and the other secretions are similarly changed in quantity and quality. The senses and mental powers are for the most part depressed, or even curiously vitiated; sometimes, though seldom, they are preternaturally exalted. The patient has nausea and loss of appetite; occasionally sickness; less frequently looseness of bowels; —or he has hunger amounting to voracity,—thirst more seldom. A reaction now comes on. The temperature of the body gradually changes from cold to hot—the pallor of the face gives place to redness—the cheek is now flushed—the eye suffused, and the patient suffers from headache, more or less agonising. This is the *Hot* stage.

The thirst, whether it existed before or not, is now a most prominent symptom; the appetite is thoroughly lost; the patient manifesting, in most instances, a repugnance to the very name of food. If you inspect the tongue, you will find it comparatively dry and loaded, and of a brown colour; and though the skin feel to your hand like a burning coal, so to speak, the patient himself may complain of such excessive coldness, as to induce the attendants to cover him with numerous blankets; —more generally, however, he has a sensation of heat equally severe. Every muscle of his body in this stage is more or less painful and enfeebled; though in some instances, he may appear to have a greater command over them than in health; and if delirium supervene, which it may do, his strength will appear almost superhuman. During the excitement of this stage, individuals have been known to become musical, poetical, oratorical, and have exercised other talents which they never were known to manifest in health. The heart now beats violently, and the pulse is full and bounding; the urine, instead of being pale and plentiful, as in the preceding stage, is scanty and high coloured. The secretions generally are sluggish, and in some instances they are altogether suppressed. A long *Sweat* succeeds, during which the greater number of the suppressed secretions gradually reappear. As with a feeling of languor, lassitude and a disposition to yawn and stretch the various members of the body, the fit is usually preceded; so with the same symptoms does it usually end. Then comes the state of comparative health, which may either again periodically pass into the Fever-fit, or continue for an indefinite space, so as eventually to become Health.

As every individual has, from birth, some part of his body less strongly constructed than

the other parts, it would be wonderful indeed, if, during some of the repetitions of this terrible tempest of body, termed an *Ague*-fit, that weak point were not very often discovered; but discovered, more or less, in most instances, it is. Is the Brain the least strongly constructed point? Then, according to the part of the organ most implicated, and the degree of implication, will you have vertigo, epilepsy, apoplexy, insanity, imbecility of mind, palsy, or their shades superadded. Is the original weakness of conformation seated in the Lungs? Look, then, for spitting of blood, asthma, or consumption.—In the Heart? how it palpitates or remits in its beats!—it may even stand still *for ever;* and more than once in my life have I known it to do this during the ague-fit. But the Joints may be the weak points of the patient's body?—then, as a matter of course, the joints swell and become more or less hot and painful. And if just at this epoch, some wiseacre of the profession chance to drop in,—with the usual scholastic sagacity, he discovers the disease is not Fever, but *Rheumatism.* The lancet, of course, is immediately bared—the leech and the blister are ordered;—from this moment, the entire treatment is directed, not to the beginning, but to the end—not to the Fever, but to its developement. The state of the joints is the sole subject of thought and action; the Brain—that Pandora's box of the whole—that organ upon which every motion of the body, wrong or right, depends,—never once enters into the wonderfully wise man's head; —he never once dreams of influencing this key to all the corporeal actions, in any manner whatever. And what is the result of this treatment? Daily promises, and daily disappointments—hope deferred and the heart made sick —the health, the happiness, and the home of the patient too often made desolate for ever.

Thus far, Gentlemen, I have detailed to you the beginning, the progress, and some of the more important terminations of what is usually called a perfect Ague-fit. I must now tell you that all agues are not equally perfect; the stages of the fit in particular cases may vary in duration—the bolder features or symptoms may be all more or less subdued—the intermission, or immunity from suffering, instead of extending to a day or days, may be only an hour or two in duration. The disease is now no longer Intermittent Fever or Ague; Physicians change its name to *Remittent* Fever. Remittent Fever may be either the primary disease; or the Fever may, in the commencement, be a veritable ague,—recurring and re-recurring, in the first instance, at perfectly periodic intervals of a day or more; yet slide by degrees into a fever of the Remittent form. And this Remittent Fever again, whether it be the original or secondary disease, from its periods of access and interval becoming still less obviously marked, may assume the shape and shade of disease incorrectly termed "*Continued*" Fever; which last, from long duration and other circumstances, may terminate in that most terrible state of mental and corporeal prostration, by the schools denominated *Typhus* Fever,—from a Greek word signifying stupor or unconsciousness, that being one of the most common symptoms.

What, then, are all these Fevers, but varieties or shades of each other? What can a SICK man be but the alteration of a HEALTHY man—his temperature altered—his movements altered—the PERIODICITY of most of his functions altered?—the MATERIAL of his body in both states must be the SAME! During the course of all or any of the fevers we have mentioned, every organic affection, every possible local change you can name or imagine, may, with more or less quickness, be developed,—giving occasion, of course, to the attending practitioner to baptize the disease anew: and this he may either do, according to the locality of such organic change, or according to the locality in which particular symptoms may induce him to suspect its existence. Should a new doctor chance, just at this time, to be asked to see the patient, what a fine opportunity for a very pretty quarrel! And the practitioner who attended from the beginning, though he may have practised the right, shall very likely be dismissed, while the other for advising the wrong may as certainly be retained, and be esteemed, at the same time, as an angel, or an oracle at least. You are doubtless curious to know the "*Wherefore*" of this. But there is nothing so very curious

in the matter after all. For if you only reflect how few people in this world can get further than the surface of things,—how few can see beyond present signs and present symptoms, you will not be astonished that the new doctor who shall place his finger on the organ for the time most implicated, and wrongly set that down, not as the *End*, but as the *Beginning*—not as the consequence or effect, but as the origin and cause of the totality of disturbance, will be preferred to him whose experience of the whole case led him rightly to look upon the local disease as the gradual developement of repeated febrile attacks. But the new practitioner will not always be content merely to seize upon the local termination as the cause or beginning of the mischief, and proceed to treat it accordingly; he will very often drop a hint, at the same time, that but for neglect of this the case might have taken a more favourable turn. Suppose, for example, Pulmonary *Consumption* to be the after-result of the original fever. "What a pity," the learned man will say, "I was not called in at first, for *then* I should have at once attacked the SEAT of the disease—the chest." *Then*, Gentlemen, when no consumptive symptom existed,—*then*, when the *weak point* of the patient, for all you, I, or any other doctor knew, or could know, might have been the liver, stomach, or anything else! And by that pretty speech of his, nine times out of ten, such new doctor will succeed in securing the esteem of the persons who employ him. Now this is a hard case for the honest and more able practitioner; but so the world wags!

Until the publication of my Work, the *Fallacy of Physic as taught in the Schools*, it was the almost universal belief of medical professors that Ague could only be caused by emanations from the fens; the complaint being very common in fenny countries; indeed I am not sure that this belief is not even now one of the numerous absurdities still taught in our schools and universities. But, Gentlemen, there is no agent in nature which may not cause ague, from a blow to a passion. Lord Byron's mother, according to Mr. Moore, died of a "fit of ague brought on by rage or vexation, caused by reading her upholsterer's bill." The close analogy subsisting between ague and the passions has not escaped the observation of the poets. Shakspeare, as I shall afterwards show you, often alludes to it; and Coleridge, if I mistake not, says,

> "There 's no philosopher but sees
> That Rage and Fear are ONE disease,
> Though this may *burn* and that may *freeze*,
> They 're both alike the AGUE."

You see, then, there can be no corporeal agitation, no constitutional revolution, without a change of temperature of some kind. Butler in his *Hudibras*, tells us,

> "LOVE 's but an ague fit reversed,
> The *hot* fit takes the patient first."

Seriously, you will do well to ponder on the relations which the effects of the various Passions bear to ague. Throughout them all you may observe the same tremor and thermal changes; and in many cases the diseases which they may cause become equally periodic and recurrent. A young lady was to have been married on a particular day; but on the very morning of that day the bridegroom was accidentally killed. The grief of the lady ended in insanity. The *fit* in this case, came on every day at the same time; but during the remainder of the twenty-four hours, she had, in scholastic phrase, a "lucid interval;" in other words, an intermission amounting to sanity.

What are the constitutional effects of a fall or a severe blow? Do we not perceive the same tremor in the first instance—the same pallor and loss of strength so remarkable in the cold stage of ague? Have we not the same hot or febrile fit succeeding? "The fevers," says Mr. Abernethy, "produced by local disease [local injury?] are the very *identical* fevers which physicians meet with when there is no external injury." How can they be otherwise, since it is only by the matter of the body changing its motive relations and consequent thermal conditions in an identical manner in both cases, that we obtain the group of symptoms included by physicians under the abstract word "FEVER?" The agents which cure fever from a blow, are the same agents which cure fever from a passion,

a poison, or a viewless and unknown cause. When a man is hot, and his skin dry all over, no matter what the cause be, you may bring his condition to the state of health by throwing cold water over him. You may do the same by an emetic. Oh! an emetic has a wonderful power in Fever; and the old physicians treated all fevers in the first instance by emetics. They did not trouble themselves much about the cause. The *state* of the patient was what they cared most about. When he was cold, they warmed him, sometimes with one thing, sometimes with another. When hot, they cooled him—not in the Sangrado fashion of these days, by draining him of his life's blood; but by the employment of an emetic, or by sponging him over with cold water! By bleeding a man in the hot stage of fever, you may cool him certainly; but unless you cool him to death, you cannot thereby keep the fit from returning. When it does return, you may bleed him again, it is true; but how often may you do this safely? So far as my experience of medical matters goes, few people in these times are permitted to die of disease. The orthodox fashion is to die of the doctor! Gentlemen, we daily hear of the terms "*Constant*" and "*Continued*" fever; but there never was, nor can there be a fever without a remission or *period of comparative immunity* from suffering, more or less marked. Most writers of name from Cullen downwards admit this; but what does it signify whether they admit it or not? use your own eyes, and you will find it to be the truth. You have only, then, to prolong that period of immunity to an indefinite time, and whatever be the name of the disease, you have health. By Bark, Opium, and the various chrono-thermal medicines, you may in most cases succeed. But instead of trying to prevent recurrence, practitioners now-a-days only temporise during the fit; and this is the most *profitable* practice; for a long sickness makes many fees! The honest physician will do his best to keep the fit from returning. Now if blood-letting were certain to do that, how could we possibly hear of people being bled more than once for fever? Do we not hear of repeated applications of the lancet, and of the patient dying notwithstanding? When I come to speak of Inflammation, you shall see how little that instrument is to be relied on in fever, or rather you shall find that its employment at all, is one of the greatest and most terribly fatal of medical mistakes! How then is it, that this practice has so long maintained its ground? By the same influence that for thirty centuries determined the Indian widow to perish on the funeral pile of her husband—the influence of authority and custom simply! In physic, Gentlemen, as in other things, men are "bred to think as well as speak by rote; they furnish their minds as they furnish their houses, or clothe their bodies, with the fancies of other men, and according to the age and country. They pick up their ideas and notions in common conversation or in their schools. The first are always superficial, and *both* are commonly *false*."—[Bolingbroke.] The first step that I myself made in rational medicine, was to unlearn all I had been taught; and that at the beginning was difficult. How I ever came to believe one-half the rubbish propounded by medical teachers, I cannot now understand; for the whole doctrines of the schools are a tissue of the most glaring and self-evident absurdities. At a future period of this course I shall prove my assertion; but before you can detect error, you must first know truth, and this it shall be my endeavour to point out to you. To return then to Fever. From the facts and observations already stated, you at once perceive that during each of the paroxysmal stages of an ague, the entire economy is more or less altered and revolutionised. It matters very little upon what part of the body the exciting cause or causes of this corporeal disturbance shall first fall—whether directly upon the brain in the shape of a *Passion*, a poison, or a blow on the head—or more remotely, as in the case of a sudden chill of the whole body or the mechanical injury of a joint or other external part—to the consequent derangement of the Brain and Nervous System we still refer the paroxysmal symptoms. Why, after these symptoms have once completely passed away, and the economy has been comparatively restored to its usual healthy motive condition, periodical repetitions of the diseased motions

should yet recur, is a thing not more inexplicable than that the various habits of Health should,—in certain instances with our consciousness, in certain other instances without it,—all have a tendency periodically to repeat themselves. Life after all, both in Health and Disease, is a series of periodic repetitions, whether we regard it in the minor movements of the organs, or in the greater alternations, remarkable in the Unity of the Body. To most of us, the day of to-day is but a repetition of the day of yesterday—modified, it may be, by a little more repose or a little more stir; hope, fear, joy, and sorrow, alternating. Upon this subject I will touch more at large at an after period of the course. Meantime, as the symptoms of an uncomplicated *Ague*-fit stand out boldly in relief—and as in every other form of disease, however named or by whatever caused, these symptoms or shades of them may readily be traced, I take Ague for the *type* of the whole. But while with this explanation I assume every disease to be in the first instance an ague—do not suppose for a moment that I employ the term in any confined sense. Call the symptoms ague, fever, or what you please, CONSTITUTIONAL DISTURBANCE is the prelude to every disease—the *precursor* of every kind of local mischief not immediately produced by chemical or mechanical agency. In numerous cases, if not in all—more especially after *repeated* paroxysmal recurrence, superadded local phenomena appear, and these last, in some instances, may be of a kind so grave and important, as to throw the constitutional symptoms for a time altogether into shade. Some part of the system, in a word, may be so much more prominently implicated than another, as to become the chief feature of the case—FUNCTIONALLY, if the atomic movements only be altered—ORGANICALLY, if the part in question be threatened with a change in its structure tending in any way to its destruction or decay. Of the first, you have an example in the spasm or palsy of a muscle, or the suspension or too great flow of a secretion. Of the second, I can give you no better instances than that disorganising disease of the knee-joint termed "white-swelling," and that too common termination of chest disease in this country—*Phthisis* as it is termed by medical men—*Consumption* or *Decline* by the vulgar.

The propriety of adopting any remedial measure has, in every case, more or less relation to Time and Temperature. But the beneficial influence of the Peruvian BARK, and its preparation *Quinine*, would appear, more than any other agent, to depend upon the period in which we administer it. The proper period for its exhibition is during the remission. With the exception of Opium, it is more strictly a *preventive* than any other known agent. So generally, indeed, has it been found to answer this purpose in the treatment of Ague, that many teachers of medicine have vaunted it as a *Specific* for this distemper; but, as we stated to you in our former lecture, there is no such thing as a specific in nature for any disease whatever. For, did there exist a specific—did there exist a remedy that could *certainly* cure all cases of a given disease, man, so far as that disease is concerned, would be immortal! Had there been a specific for ague, do you think the court doctors would have permitted Oliver Cromwell to die of it? Whatever be the agency by which this or any other disease has been cured, you shall find, in the course of these lectures, ample evidence that its influence relates in every case to Change of Temperature. Major-General Sir R— A—, while serving in Portugal, became the subject of severe ague, which resisted a host of remedies prescribed for him by numerous medical friends—Bark among the number. One day when riding out, he was seized with a paroxysm. The inmate of a little shop where he dismounted till the fit should be over, suggested to him to try the barber-surgeon of his neighbourhood. Willing to be cured by any body or by anything, Sir R. at once agreed. The ambidexter man of medicine came, ordered him a large plaster to his back, and the ague was forthwith cured! Gentlemen, to what, but to the improvement of the Temperature of the spine must we attribute the success of that plaster? The general good effect of *Quinine* in keeping off the ague-fit, when it proceeds from viewless causes, is sufficiently well known to every member of the profession; but it is

not so generally understood that the same agent may be equally serviceable in cases produced by local injury. Of this, however, I will give you a proof. A gentleman, shortly after having had a bougie passed, was seized with ague of the most perfect kind; two days after, at the same hour, he had a return, and every alternate day it recurred, till he had experienced about twelve paroxysms; then, for the first time, he took quinine, and he had no repetition. He never had ague before that occasion, nor at any time afterwards, unless when compelled to use the bougie.

I do not know that I can better commence my proof of the intermittent nature of disease generally, than by entering into a short consideration of what are termed

Spasmodic Complaints.

Such complaints being unattended with any structural change, are termed by the profession FUNCTIONAL; a word, as we have seen, expressive of their simplicity. What is the meaning of the term *Spasm?* It means an irregular or unnatural contraction of some muscle of the body; and in the case of the voluntary muscles, you cannot by any effort of the will control or counteract it. By rubbing and *warming* the part, you may sometimes succeed, and there are a great many medicines by which, when taken internally, the same effect may be produced; but what will answer in one case may not answer in another. The disease is sometimes termed *Convulsion*, and *Cramp* also,—more especially if the spasm be painful. The difference of locality in which spasm takes place in different persons has afforded professors an excellent opportunity of mystifying the whole subject. When it happens in the membranous lining of the lachrymal duct, the tears accumulate at the inner angle of the eye, from the passage to the nose being closed up by the contracting spasm. This disease is called *Epiphora*, and sometimes, though not quite correctly, *Fistula Lachrymalis*. *Sneeze*, *Hiccough*, and *Yawn*, are also effects of spasmodic action. Occurring in the muscular apparatus of the windpipe, or its divisions, spasm is familiar to you all in the word *Asthma;* and it is also termed *Dyspnœa*, from the difficult breathing which it certainly occasions. When this spasmodic action affects the muscles about the jaws and throat, and the patient at the same time has convulsions of the face and limbs, there is usually loss of consciousness, with a sudden loss of power in all his members, which causes him to fall. This is the *Epilepsy* or "falling sickness." The subject of the disease termed *Jaundice*, in ninety-nine cases out of a hundred, owes the yellow colour of his skin to spasm—spasm of the gall-ducts—though any other obstruction of these passages—a gall-stone for example, may give rise to the same effect. Taking place in the ilium or small intestine, spasm is termed the *Iliac Passion;* in the colon or great intestine, *Colic;* in the urethra, *Spasmodic Stricture*. The *Lockjaw* affords yet another example of spasm. That all these various diseases are merely effects of the same action in different parts, is proved by each and all of them having been known to assume the most perfectly *periodic type* in individual cases, and by all being more or less amenable to the same class of remedies most generally influential in keeping off the ague-fit.

Like every other FORCE in nature, our Remedial Powers all act by causing Attraction or Repulsion; and, for a reason to be afterwards given, every remedy can act both ways in different individuals. All medicinal agencies have the power of producing inverse motion,—and, in this way, they *cure* or alleviate in one case, while in another they *cause* or aggravate disease. Opium, for example, will set one man to sleep, and keep another wakeful. Arsenic has cured the tremor, chill, and heat of ague, and produced them in a previously healthy person. The same results have followed the exhibition of Opium, Bark, and Copper. Moreover, to all four have I traced diseases with fits and remissions. A girl took a large dose of arsenic (sixty-four grains) for the purpose of suicide; her design was discovered in sufficient time to prevent her death; but a periodic epilepsy ushered in by chills and heats was the result. A man of the 30th Foot, after a course of hard drinking, became epileptic; his disease came on

every second day at the same hour. Quinine, silver, and calomel, were tried without success. I then gave him arsenic, after which he never had another fit. In these two cases, then, arsenic produced inverse motions, causing epilepsy in the first, and curing it in the second. When I come to treat particularly of the Passions, I shall show you that the same passion which has caused an ague or an epilepsy may cure either. In truth, I scarcely know a disease which the passions Rage and Fear have not cured and caused, according to their *attractive* or *repulsive* mode of action in particular cases.

I have said that ASTHMA is an intermittent disease. "The fits of convulsive Asthma," according to Darwin, "return at *periods*, and so far resemble the access of an *intermittent fever*." Had this physician's knowledge of the nature of Asthma been sufficiently complete, he would have told us that between ague and asthma there is something more than a resemblance—that the asthmatic patient, in fact, has an ague, with the further developement of spasm of some of the muscles of the windpipe. But call the disease what you please, I have generally cured it with one or other of the chrono-thermal remedies; and with two or more in combination, I can most truly say I have seldom been compelled to complain of ill-success in its treatment. In one case, however,—that of a gentleman who had the disease every second night,—I had the greatest difficulty in effecting a cure, for it was not till I had nearly exhausted all my best resources that I at last obtained success by applying a warm plaster all along his spine. Here you again see, in the most direct manner, the advantage of attention to temperature: the spine, in this case, was always chilly, but became warm and comfortable under the use of the plaster. The analogy which subsists betwixt *Spasm* and *Tremor*, has not been unnoticed by medical writers. Analyze "tremor," "shivering," "shaking," and you will find the motions so termed to be merely a rapid succession of incomplete spasms. In *St. Vitus's dance*, or as it is sometimes called, "the leaping AGUE," which is also a periodic disease, you may see every variety of spasmodic and tremulous action a muscle can exhibit. It is a frequent disease of children, and in most cases you may obtain success with minute doses of one or more of the chrono-thermal remedies; one remedy of course answering better in one case, another in another.

With the same agents, prescribed upon the same principle, I have been equally fortunate in the treatment of Urethral Stricture—a disease for which the bougie, in general practice, is far too indiscriminately employed. You all know the beneficial influence of the *warm* bath in this affection, and some of you may have heard of the same good result from the internal use of *Iron*. But the influence of *Quinine* over stricture is not so generally known. It is unnecessary for me to give any instance of my own in evidence of this, Sir Benjamin Brodie having published at length the case of a gentleman affected with spasmodic stricture of the tertian type—that is to say, a stricture which came on every alternate night about the same hour,—and which yielded, in the hands of that surgeon, to quinine. The marked *periodicity* of this case doubtless suggested the proper treatment; but in cases where this is less striking, you have only to ask the patient if there are times when he passes his water better than at others; and if he answers in the affirmative, you may be sure the stricture depends less on a permanent thickening of the mucous membrane of the urethra, than upon a remittent spasmodic action of its muscular apparatus. Such a patient, on coming out of a warm room into a *cold* one, will find himself, all in a moment, unable to pass a drop of water. See then the effect of *thermal* change—of change of *temperature*—in producing spasm,—and hence too the benefit to be derived from the warm bath in the treatment of spasm generally. In the great majority of stricture-cases, the surgeon may save himself the trouble, and his patient the torture, of passing the bougie at all, by treating the disease chrono-thermally;—that is, if he prefers the interest of the public to his own; but this mode of preventing the return of disease is obviously less lucrative than that which enables him to

give temporary relief at the expense of a long attendance.

We now come to that particular form of disease termed

PALSY OR PARALYSIS—

an affection in which, when complete, there is an absolute loss of muscular power. From the suddenness with which the patient is in most instances affected or "struck," this disease is known to every body under the name of "Paralytic Stroke;" or, more familiarly still, "a Stroke." It consists either in a partial or complete inability to use the affected muscles — for there are degrees of Palsy as of every other disease — an inability to excite their action in any manner whatever by the will. Now it is a common error of the schools to teach that such disorder is *always* dependent on some PRESSURE on the Brain or Spine. There is no doubt that pressure on these parts can cause palsy; but much more frequently this disease is the effect of a weakness of the Brain or Spine, produced by exhaustion, the causes of such exhaustion being various of course:—Paralytic disease has often been produced by a *purge*, and oftener still by *loss* of Blood. The recent case of Sir William Geary must be still fresh in every body's mind. That gentleman met with a sudden loss of blood from an accidental wound of the carotid artery; Palsy of the left side ensued. Weakly persons on suddenly rising from their chair, sometimes all at once lose the use of a leg or arm. Most cases of Paralytic disease, if properly sifted, will be found to be only the *termination* of previous constitutional disturbance; previous threatenings of such loss of power having been more or less frequently felt by the subjects of every case. Moreover, in a number of cases, palsy is an *intermittent* disease throughout its whole course, being preceded by chills and heats, and going off with a return of the proper temperature of the body. How can you reconcile the idea of permanent pressure with intermittent phenomena?

In one of the numbers of the *Dublin Journal*, I find a case of paralysis of some of the muscles necessary for the proper performance of the functions of speech—*Aphonia*, as it is called by professional men. This case will show you that Palsy, like every other form of disorder, may exhibit the most perfect periodic intermissions. It is taken from a foreign journal. [*Hecker's.*] "A peasant girl was attacked in the following manner:—Speechlessness came on every day at four o'clock, P.M., accompanied by a feeling of weight about the tongue, which remained a quarter of an hour. The patient, while it lasted, could not utter any sound, but occasionally made an indistinct hissing noise. Consciousness did not seem impaired during the fit. She ascribed her inability to speak to a feeling of weight in the tongue. The paroxysms went off with a large evacuation of watery urine, accompanied by *perspiration* and sleep. Ten such attacks had occurred, when Dr. Richter of Wiesbaden was called to see her; he ordered her considerable doses of sulphate of Quinine with immediate good effect from the first day. The attack returned, but in a mitigated form, and on the second day no trace of it was visible, except a certain degree of debility and fatigue felt at the usual hour of its coming on." The corporeal temperature is not stated by the reporter of this case, but the periodic manner in which it came on and went off, to say nothing of the mode of its cure, sufficiently illustrates its nature. Not long ago, I was consulted in a similar case, which was moreover complicated with palsy of one side. Sarah Warner, aged 25, married, had suffered periodically from loss of speech, and also from an inability to move the leg and arm of one side. Various remedies had been ineffectually prescribed by her medical attendants, who all looked upon her disease as APOPLECTIC—in other words, they supposed it to be caused by *pressure* on the brain. One of them, indeed, proposed to bleed her, but she would not consent. When she applied to me, I ordered her a combination of Quinine and Iron, after which she never had another fit.

I shall now give you the details of a case of palsy which I treated successfully after it had been long considered hopeless:—Mrs. Sargent,

aged 40, a married woman, and the mother of several children, had kept her bed for *eight* years, on account of paralysis of the lower extremities; during which period she had been under the treatment of eight or nine different physicians and surgeons of the Cheltenham dispensary, Dr. Cannon and Mr. C. T. Cooke among others. Such at least was the woman's own statement, confirmed to me by many people of respectability, who had visited her from the commencement of her illness. When I first saw her, she could not move either leg; her voice was an almost inaudible whisper; she was liable to frequent retchings, and she complained of spasms with much pain of the loins and limbs. Her last dispensary medicine, mercury, which she believed had been given her by mistake, had produced salivation, but with decided aggravation of her symptoms. In this case, I prescribed a combination of remedies, the principal of which were hydrocyanic acid and tincture of cantharides. Under this treatment, her voice returned in about a week; her recovery from every symptom was complete in six weeks, and she had no return in three years after she was under my care; nor, so far as I know, since that time.

Charles Overbury, aged 10, had been in a curious state for some months previous to my first visit. I found him lying upon a couch, every muscle of his face in such complete repose that his countenance seemed quite idiotic; his arms and legs were perfectly powerless, and if you held him up, his limbs doubled under him like those of a drunken person. Upon whichever side you placed his head, he was unable to remove it to the other. It was with difficulty he swallowed his food, but the heart and respiratory muscles performed their respective offices with tolerable correctness. The patient laboured under complete loss of speech the entire night, and nearly the whole day. About the same time daily—noon—he could utter the monosyllables *yes* and *no;* but this power remained with him for half-an-hour only. The remedies to which I resorted in this case were minute doses of calomel, quinine, and hydrocyanic acid,—all of which improved him, but the last proved the most effectual. In less than three weeks he was running about, well in every respect, and the change in his countenance, from apparent idiocy to intelligence, was as perfect a transformation as it is possible to imagine. You marked, I hope, the periodic, though imperfect, remissions which this case exhibited.

The case of the celebrated Madame Malibran may still be fresh in some of your minds. It was completely the converse of this boy's disease, for at particular times the muscles of that actress became stiff and rigid throughout the entire body. When taken together, these cases show the analogy which subsists between paralytic and spasmodic affections; indeed, in many cases, both affections co-exist at the same time in different muscles of the same person;—sometimes they are complicated with idiocy or insanity.

A young person was some time ago brought to me by her mother, at the request of the Rev. Edward Murray, brother of the bishop of Rochester. This girl had not only complete mental imbecility, or paralysis of the mental brain, but she had also lost the use of one side so as to be utterly helpless in every way. Every night also when she was put to bed she had an epileptic attack. In this case, I prescribed a combination of copper, silver, strychnia, and quinine. About six weeks afterwards, an intelligent-looking young person walked into my room with a letter, "from the Rev. Edward Murray." I could scarcely believe I saw before me the same girl; yet she it was speaking and walking as well as she had ever done in her life. Her epileptic fits had become faint, few, and far between, and she was then the monitor of her class! Now, this patient, Mr. Murray informed me, had been ill *four* years, and had been dismissed the Middlesex Hospital "incurable."

I was suddenly called to see Mrs. T——, of Clarges Street, whom I found with complete loss of the use of one side, and partial palsy of the muscles on the same side of the face. She had been nervous and ill for some time, and the night before she had been suffering from domestic affliction. The next morning, while entering her own door, she fell as if she had been shot. When I saw her, her face was

pallid, and her feet were cold. The people about her were urgent that she should be *bled*, but I ordered her warm brandy-and-water instead. A gentleman, who was formerly her medical attendant, was sent for, and agreed with me that she should not be bled. Under the use of quinine and strychnia, continued for about six weeks, with country air, she recovered the use of her side so far as to be able to walk without a stick; the use of her arm also returned. Had this lady been bled or leeched, she could not have survived many days.

I will now give you a case or two exemplifying the cure of palsy of a single limb.

Case 1.—Mary Boddy, 18 years old, from the age of eleven, had weakness of the back and loins, and she gradually lost the use of the right leg. In this state she remained for *three* years; sixteen months of this period she was an in-patient of the Gloucester Infirmary, in which establishment her mother held the situation of nurse. But cupping, bleeding, leeching, blistering, were all ineffectually tried. The same mode of treatment as in Mrs. Sargent's case, with the addition of a galbanum plaster to the loins, in which she complained of coldness, was adopted by me, and followed with like success. She had scarcely been a fortnight under my care, before she completely recovered the use of her paralytic limb; and she has had no relapse during the last four or five years.

Case 2.—Esther Turner, aged 30, when in the service of Mr. Ward, the master of a respectable boarding-school, at Painswick, fell down stairs, and from that moment, lost the use of her left leg. After a period of *eleven* years, during which she had been ineffectually under treatment in various hospitals and infirmaries, she came on crutches to my house. She explained that she was subject to severe shivering, with occasional convulsions. Her leg, she said, had more feeling on certain days than others. After trying her for some time with a combination of hydrocyanic acid and tincture of cantharides, without any improvement, I prescribed a pill, containing a combination of quinine, silver, and colchicum, night and morning. She progressed from that day; and in about six weeks, I had the satisfaction to see her in possession of the complete use of her limb; nay, she returned to her service at Mr. Ward's, which she only left to get married.

Case 3.—Miss M——, aged 25, had lost the use of both limbs for *seven* years; all that time she had been confined to her bed, and though she had had the advice of several professional persons of eminence, she never once could stand up during the whole of that period. She was brought up to town from Yorkshire, a distance of 260 miles, on a sofa-bed, to be placed under my care. I immediately put her on a course of chrono-thermal treatment, and we had not long to wait for improvement, for in five days this young lady could walk round the table with the partial support of her hands. At the end of two months, without any assistance whatever, without even the support of the balusters, she could run up and down stairs nearly as well as myself. Should this statement be considered to require better confirmation than my word, I am permitted to give Miss M——'s name and address to any party who may take an interest in the case, the particulars of which she will readily communicate. Miss M—— is the daughter of an accomplished English clergyman, and is the niece of one of the judges of the supreme court of Scotland, who, being in town all the time she was under my care, saw her the day after she arrived, and had the satisfaction to witness the whole progress of her cure.

I could here give you numerous other cases, all more or less explanatory of the manner in which Palsy of almost every muscle of the body may be developed and cured. For the present, I shall content myself with recording my experience of a disease, which until I explained its nature was never once imagined to depend on Paralysis, namely, the *Curved* or *Crooked Spine*.* By most authors, this dis-

* When I first published my view of the nature of Curved Spine, in 1836, its correctness was called in question. When Stromeyer and others on the continent, without noticing my labours, *afterwards* adopted my explanation as their own, it was admitted by the whole profession to be true. What a reward to the real cultivators of science,—first to have their dis-

order had been supposed to be, under all circumstances, an affection of the bones. Some indeed vaguely referred it to peculiarity of nervous action; while others hypothetically traced it to looseness of the ligaments. When the late Mr. Abernethy said it was owing to a "*rancour* in the muscles," he only used an unmeaning phrase to conceal his ignorance of the entire matter; for what meaning can there in reality be in the word "rancour," when applied to a subject like this? *Rancour*, is an old English word for malignity or ill-temper; but how can that apply to a state of perfect muscular *repose*,—to a palsy? Nevertheless, to Mr. Abernethy's surgical care, almost every case of spinal curvature, among the higher ranks, was at one time entrusted. What the disease really is, I shall now proceed to demonstrate.

The mast of a ship is kept erect by the *stays* and *shrouds;* if you divide or loosen these on one side, the mast falls more or less in an opposite direction. The human Spine is kept upright by a similar apparatus—the *muscles*. If any of these muscles from bad health become weakened or paralysed on any side, the spine, from the want of its usual supporting power, must necessarily, at that particular place, drop to the other side. But being composed of many small jointed bones—the *vertebræ*—the Spinal column cannot, like the mast, preserve its upright form, but when unsupported, must double more or less down in the shape of a curve or obtuse angle; and the degree and situation of this curvature will depend upon the number and particular locality of the muscles so weakened or paralysed. This disease or "deformity," (for Mr. Abernethy would not allow it to be anything else,) under all its uncomplicated variations of external, internal and lateral curvature, is the result of muscular weakness or palsy; which palsy, for the most part, is a feature or termination of long remittent febrile disorder. It is often a more or less rapid developement of the usual diseases of children, — Scarlet fever, Chicken-pox, Measles, and so forth; all of which, as I shall afterwards show you, are purely remittent fevers; but whether complicated with vertebral disease or not, Curved Spine is no more to be influenced by issues, setons, moxas, &c., except in so far as these horrible measures almost invariably confirm it by further deteriorating the general health of the patient.

In the commencement of most cases of this kind, the patient is taller one day than another,—a proof that the curvature then very much depends upon the state of health of the hour; and never do I remember to have had such a patient who did not confess to chills and heats or *vice versâ*. I will give you two cases in which these phenomena were observed.

Case 1.—A young lady, aged 16, had a *lateral* curvature of the vertebræ of the upper part of the back, (that is, a curvature to one side) causing the inferior angle of the shoulder-blade to protrude. I prescribed for her calomel and quinine, in small doses, and directed her to have her spine rubbed night and morning with soap liniment. In less than a month the patient had gained three inches in height, and in two months more, she was erect.

Case 2.—A lady, 45 years of age, the mother of children, had her spine so much curved at the lower part of the loins, that, to use the phrase, her "hip grew out." This case came on suddenly. I ordered a warm plaster to be applied to the spine, and prescribed hydrocyanic acid and quinine. In three weeks she stood erect. Four years afterwards she had a return, when the same means were again successfully put in practice. These two cases, Gentlemen, were cases of simple, uncomplicated palsy of the muscles of the back. There are yet other ways in which curved spine may take place—though these still depend on a loss of Health of the general system. The mere weight of the body will in some cases produce *waste*, or, professionally to speak, "interstitial absorption" of particular vertebræ or of their parts. A curve of course must follow; but Curvature of the Spine is not unfrequently the effect of a *consumptive* disease of the substance of the vertebræ—a process by which one or more of these small bones fall into a state of ulcerative decay. Still, even in these cases

coveries denied, then pilfered! The reader will find as he proceeds that this is not the only instance of plagiarism I have to complain of.

there is at the same time a greater or less loss of power in particular muscles—for the same general bad health that weakens the bones must weaken the muscles also.

I will give you two cases illustrative of this last complication.

Case 1.—Mrs. Craddock, aged 25, had, for upwards of eighteen months, great weakness in the upper third of the back, where a swelling made its appearance, gradually increasing in size. According to the statement of this woman, she had been an in-patient of the Gloucester Infirmary for seven months; during which she had been treated by issues and other local measures, but with no good effect. When I first saw her, she could not walk without assistance. Upon examination, I found a considerable *ex*-curvature, involving the third, fourth, and fifth vertebræ of the back,—which vertebræ were also painful and enlarged, and the skin which covered them was red and shining. The patient was extremely dispirited, shed tears on the most trifling occasion, and was subject to *tremblings* and spasms. She was generally chilly, and suffered much from coldness of feet. She also complained of *flushes*. Some days she thought the "swelling" in her back was not so great as upon others; and upon these particular days, she also remarked her spirits were not so low. I directed the issues to be discontinued, and ordered a combination of hydrocyanic acid and tincture of cantharides, to be taken three times a-day. These medicines she had scarcely continued a fortnight, when the improvement in her general appearance was most decided; the protuberant part of her spine had in that period considerably diminished—her health daily became better, and in less than a month, her cure was accomplished. A permanent curve, slight when compared with her former state, still remains.

Case 2.—A young gentleman, 9 years of age, had external curvature of the upper vertebræ of the back; one or more of which were in a diseased and even ulcerated state, as was obvious from the discharge which proceeded from an opening connected with the spine. His mother observed that he stood more erect some days than others. When I was first consulted he had an issue on each side of the spine: but these, as in the former case, having been productive of no good, I ordered to be discontinued. Keeping in view the remittent and constitutional nature of the disease, I prescribed small doses of calomel and quinine. The very next day the discharge was much diminished, and a cure was obtained in about six weeks. The ulcer in that time completely healed up, but a permanent *angular* curve, of course, remained—trifling, however, when compared with the state in which I first found him. I might give you many other such cases, but my object is to illustrate a principle, not to confuse you with too much detail. These two cases, Gentlemen, are sufficient to show you the nature and best mode of treating, what you may call, if you please, *Vertebral Consumption;* though I am not so sure the schools will agree with you in the designation. The one case was in its incipient state, the other fully developed.

It occasionally happens that the matter proceeding from a diseased vertebra, instead of making its way out by the back, proceeds down in front of the loin *internally*, till it reaches the groin, where it forms a tumour; this tumour is called by the profession *Lumbar*, or *Psoas*, abscess. With the exception of opening the tumour to allow the collection of purulent or other matter to escape, this disease, like the cases just detailed, should be treated almost entirely by *constitutional* measures—by such measures as tend to the improvement of the health generally. It has been for some time the fashion to confine patients with spinal disease to a horizontal posture; and a rich harvest makers of all sorts of beds and machines have derived from the practice. In the greater number of cases this treatment is erroneous from beginning to end. Constant confinement to one posture is sufficient of itself to keep the patient nervous and ill; while his own feelings and wishes are, for the most part, the best guide as to whether he should rise, walk, sit, or lie down. In this *he* has no theory—the doctor too often has nothing else.

Among the numerous causes of spinal disease named in books, much stress is generally laid on the improper use of *Stays*, and other

articles of female dress. To these, however, I attribute but a very small share in the production of such disorder. You meet with every kind of spinal disease in boys,—in girls, more frequently, it is true; but this greater frequency depends upon the artificial lives girls are compelled to lead,—their domestic occupations confining them more to the house and allowing them less freedom of general movement, and fewer opportunities of enjoying the exercises and invigorating sports of the open air.

Equally effective have I found the chrono-thermal principle of treatment in that particular palsy of one or more muscles of the eye-ball, which gives rise to *Squint*, or *Strasbismus*, as the Faculty phrase it. Parents, who have children thus affected, will tell you that the little patients some days scarcely squint at all. You see, then, that this affection, at the commencement at least, is in most instances an *intermittent* disease. Can the intermission here, like that of the ague, be prolonged to an indefinite period by bark, opium, &c.? Oh, I could give you half-a-hundred instances where I have prolonged it to a cure by these remedies! In a case lately under my care, the squint came on regularly every alternate day at the same hour, and lasted an hour. The subject of it, a boy of eleven, after taking a few minute doses of quinine, never squinted more. In another case, as nearly as possible the same, I ran through almost all the chrono-thermal medicines ineffectually; but succeeded at last with musk. I was lately consulted in the case of a young gentleman affected with squint, who had also a tendency to curved spine. A few doses of calomel and quinine cured him of both. The subject of all these cases had corporeal chills and heats, —showing clearly that the local affections were merely developements of remittent fever. Were medical men only to attend a little more to constitutional signs, they would not, I am sure, leech, blister, and cup away at localities, as they are in general too fond of doing. If properly treated at the commencement, Squint is very generally curable by internal remedies; but when, from long neglect or ill-treatment, it has become *permanent*, the position and appearance of the eye may be made all but natural by a surgical division of the opposite muscle. If the squint be *partial* only, a surgical operation will make the patient squint worse than ever—and even in the case of complete squint, should the paralytic muscle upon which it depends recover its power after the operation, a new squint would follow of course.

There is yet another paralytic affection of the Eye which I must explain to you. I allude to what is called *Amaurosis*, or Nervous Blindness. In this case, a non-medical person could not tell that the patient was blind at all, the eye being to all appearance as perfect as the healthy organ. Now, this affection, in the beginning, unless when caused by a sudden blow or shock, is almost always a remittent disease. Some patients are blind all day, and others all night only. Such cases, by the profession, are termed *Hemeralopia* and *Nyctalopia*, or day and night blindness. These, then, are examples of intermittent amaurosis; and they have been cured and caused, like the ague, by almost every thing you can name. You will find them frequent in long voyages, —not produced in that case by exhalations from the fens or marshes, as many of the profession still believe all intermittent diseases to be,—but by depraved and defective food, with exposure to wet, cold, and hard work, perhaps, besides. In the *Lancet*, [8th December, 1827,] you will find the case of a girl, twelve years of age, who had *intermittent* blindness of both eyes, palsy of the limbs, frenzy, and epilepsy; from all of which she recovered under the use of ammoniated *Copper*, a chrono-thermal remedy. This case fully establishes the relations which these various symptoms all maintain to each other; and their remittent character, together with the mode of cure, explains the still greater affinity they bear to ague.

The remedies which I have found most efficient in permanent nervous blindness have been the chrono-thermal, or ague medicines, occasionally combined with mercury, or creosote. I will give you a case which I treated successfully by an internal remedy. Charles Emms, aged 25, stated to me that he had

been completely blind of both eyes for upwards of *nine* years, four of which he passed in the Bristol Asylum, where, after having been under the care of the medical officer of that establishment, he was taught basket-making, as the only means of earning his subsistence. He had been previously an in-patient in the Worcester Infirmary, under Mr. Pierrepoint, but left it without any benefit. Some days he perceived flashes of light, but could not even then discern the shape or shade of external objects. Before he became completely blind, he saw better and worse upon particular days. When he first consulted me, his general appearance was very unhealthy, his face pale and emaciated, his tongue clouded, appetite defective and capricious; and he described himself as being very nervous, subject to heats and chills, palpitations and tremblings, with great depression of spirits. My first prescription, quinine, disagreed; my second, silver, was equally unsuccessful; with my third, *hydrocyanic acid*, he gradually regained his vision—being, after an attendance of four months, sufficiently restored to be able to read large print with facility. Such has been his state for upwards of two years. I need not say his general health has materially improved—his appetite, according to him, having become too good for his circumstances. In confirmation of the value of hydrocyanic acid in *nervous* blindness, I may mention, that Dr. Turnbull, in a recent work, has detailed some cures which he made in similar cases by applying the vapour of this acid to the Eye.

If patients, who are subject to Deafness, be asked whether they hear better upon some days than others, the great majority will reply in the affirmative;—so that deafness is also for the most part a remittent disease. That it is a feature or developement of general constitutional disorder is equally certain, from the chills and heats to which the great body of patients affected with it, acknowledge they are subject. Deafness from organic change of the ear, is infinitely less frequent than that which arises from nervous or functional disorder. Hence the improvement to be obtained in the great majority of diseases of this organ, by simply attending to the patient's general health. By keeping in view the chrono-thermal principle, I have been enabled to improve the hearing in hundreds of cases. One old gentleman, upwards of 70 years of age, after having been all but quite deaf for years, lately consulted me for his case; he recovered completely by a short course of hydrocyanic acid. The like good effects may also be obtained by chrono-thermal treatment in ringing of the ears, &c. Indeed, very few people get much out of health without suffering more or less from noise in the ears; sometimes so great as to cause partial deafness.

Cases of loss of the sense of Touch, and also those of partial or general numbness, will, in the greater number of instances, be found to exhibit remissions in their course. So also will almost every instance of that exalted degree of sensibility known by the various names of *Tic douloureux*, *Sciatica*, &c., according to the locality of the various nerves supposed to be its seat. Look at the history of these diseases. What have your surgical tricks done for their relief,—your moxas, your blisters, your division of nerves? The only measures to which these diseases have yielded, have been the chrono-thermal remedies, bark, arsenic, iron, strychnia, prussic acid, &c., the remedies, in a word, of acknowledged efficacy in ague. I shall here present you with a case from the *London Medical and Surgical Journal*, illustrative of the nature of *Tic* when involving the nerves of the face. The pain first supervened after a fright; it returned every day at two o'clock, commencing at the origin of the suborbital nerve, extending along its course, and lasted from half an hour to an hour. Two grains of sulphate of quinine given every two hours for three days produced in so short a period a complete cure. The same prompt and favourable effects were observed in another case of frontal tic, that appeared without any known cause. Now, this *frontal tic* is commonly known by the name of brow-*ague*. Why then mystify us with *neuropathy*, *neuralgia*, and a host of other jaw-breaking terms, that, so far from enlightening the student upon the subject of medicine, do nothing but lead him into darkness and confusion?

All these are mere varieties of Ague; the place of pain making the only difference.

Loss of the sense of TASTE is an occasional effect of constitutional disturbance, and so is Depraved Appetite. An example of what is called *Bulimia* or Excessive Appetite, occurs in the lectures of Mr. Abernethy: "There was a woman in this hospital, who was eternally eating; they gave her food enough, you would have thought, to have disgusted anybody, but she crammed it all down; she never ceased but when her jaws were fatigued. She found out that when she put her feet into *cold water*, she ceased to be hungry." What could be this woman's inducement to put her feet in cold water in the first instance? What, but their high temperature—the Fever under which she laboured? A gentleman, who was fond of play, told me, that when he lost much money he was always sure to become *ravenously hungry;* but that when he won, this did not happen. The condition of his body, as well as his brain, must have been different at these different times.

To the state of corporeal temperature, we must also refer the various degrees of THIRST, from which so many invalids suffer. This, like HUNGER, when extreme, is a depraved sensation. If we have intermittent fever, so also must we have intermittent hunger and thirst among the number of morbid phenomena. Colonel Shaw, in his *Personal Memoirs and Correspondence*, has this remark: "I had learned, from my walking experience, that to *thirsty* men, drinking water only gives a momentary relief; but if the *legs* be wetted, the relief, though not at first apparent, positively destroys the pain of thirst."

As yet, Gentlemen, we have confined ourselves, as much as possible, to simple or "functional" diseases,—those forms of disorder in which there does not appear any tendency to local disorganisation or decay. In our next Lecture, we shall enter into a consideration of those disorders which manifest more or less *change of structure* in their course. Such diseases are termed "organic," by medical writers, and to a certain extent they are more complicated than those we have just left. To a certain extent, too, they admit modification of treatment. In most cases of this kind, though not in all, it is my custom to prescribe one or more powers, having a general chrono-thermal influence, with one or more having a special local bearing. I have necessarily, on occasion, combined remedies which may partially decompose each other. In continuing still to do so I am justified by SUCCESSFUL RESULTS, the only test of medical truth—the ultimate end and aim of all medical treatment. A charge of unchemical knowledge has been occasionally urged against me for this, by chemists and drug compounders. But what says Mr. Locke?—"Were it my business to understand physic, would not the surer way be to consult nature itself in the history of diseases and their cures, than to espouse the principles of the dogmatists, methodists, or *Chemists?*" This charge, then, I am willing to share, with numerous medical men, whom the world has already recognised as eminent in their art. By such, the answer has been often given, that the human stomach is not a chemist's alembic, but a living organ, capable of modifying the action of every substance submitted to it. And here I may mention, that the late Sir Astley Cooper, when I sent him my work, "The Unity of Disease," with that candour and gentleman-like feeling by which he was not less distinguished, than by his high eminence as a surgeon, wrote to me as follows:—

"Dear Sir, I thank you most sincerely for your valuable work. I have not the least objection to being *unchemical*, if I can be *useful;* and I agree with you, that the living stomach is not a Wedgewood mortar. Yours truly,

"ASTLEY COOPER."

Dr. DICKSON.

LECTURE III.

HEREDITARY PREDISPOSITION — APOPLEXY — HÆMORRHAGES—HEART DISEASE—PULMONARY CONSUMPTION—GLANDULAR COMPLAINTS—CONSUMPTIVE DISEASES OF JOINTS.

GENTLEMEN,

We have hitherto derived our illustrations of the unity and intermittent

nature of disease, almost entirely from such forms of disorder, as, by the profession of the present day, are termed FUNCTIONAL; that is to say, such as are uncomplicated with organic decomposition or any marked tendency thereto. Now, in the commencement, all complaints are simply functional. I do not of course include those organic diseases that have been the immediate effect of mechanical or other direct injury. I speak of disease in the *medical* acceptation of that term—disease in which one or more constitutional paroxysms occur before organic change becomes developed. Inquire the consequences of those agues for which the usual medical treatment may have proved unavailing. Do not these comprise every structural change to which nosologists have given a name?—hæmorrhage, or rupture of blood-vessels wherever situated, —diseased lungs by whatever termed; with all the various visceral alterations which have obtained designations more or less expressive of the localities in which they become known to us—the enlarged, softened, or otherwise disorganised heart, liver, spleen, and joint—the indurations and other changes which take place in the several glands of the body, whether called scrofulous or consumptive, cancerous or scirrhous. When patients thus afflicted complain of the *ague-fits*, from which they suffer, their medical attendants too often point to the local disease as the cause, when, in reality, such local disease has been a mere feature or effect of repeated paroxysms of this kind. Even John Hunter, with all his acuteness, fell into this error, when he said, "We have ague, too, *from* many diseases of parts, more especially of the liver, as also the spleen, and *from* induration of the mesenteric glands." It is only of late years that the better informed members of the profession have begun to suspect that these structural alterations, instead of being the causes of the "constitutional disturbance," are the results. But this phrase, in most instances, they use without any very definite idea of its meaning—and when questioned in regard to it, they either confuse the matter with the mixed-up jargon of incompatible theories, or frankly confess that they entertain notions which they feel themselves unable by any form of speech to impart to others. Gentlemen, "constitutional disturbance," when analysed, will be found to be neither more nor less then a morbid *excess* or *diminution* of the body's temperature, with corresponding errors in the various functional powers and periods—amounting where the disease is *recent* (or "acute") to the bolder features of INTERMITTENT FEVER—and in cases of longer standing (or "chronic") coming at last to the more subdued symptoms of that universal disease. Betwixt these two extremes you have every kind of intermediate shade,—which shade sometimes depends upon duration, sometimes upon individual constitution.

Every child of Adam comes into the world with some weak point, and this weak point necessarily gives the subject of it a *predisposition* to disease of one locality or tissue of the frame rather than another; but many persons, from accidental causes, have also their weak points. Of this kind are such parts of the body, as after having been externally injured, get so well, that while you continue in health, you suffer no inconvenience; but as old age steals upon you, or when your general health gives way, you are reminded by certain feelings of weakness in the parts injured, of the accidents that have formerly happened to you, and that to keep the affected parts in tolerable strength, you must not play tricks with your constitution. Individuals so situated can predict every change of weather; they are living barometers, and can tell you what kind of a day it shall be, before they rise in the morning. They obtain their knowledge of this from the experience of their feelings in their old wounds and fractures. Now, Gentlemen, this is what you ought to be prepared to expect;—the atoms of *repaired* parts must always have a weaker attraction to each other, than the atoms of the other parts of the frame —and they must, therefore, in the very nature of things, be more liable to be influenced by external agency—by every thing, in a word, that has the power to put the matter of the body in *motion*. Whatever, under ordinary circumstances, shall slightly shake or affect the whole body, must, under the same circumstances, be a subject of serious import to its

weaker parts; and this argument also applies with equal force to the atoms of those parts of individual bodies, which, by hereditary predisposition, manifest a similar weakness in the attractive power of their atoms to each other. As the child is but an extension of the living principle of the parents, its frame must naturally, to a certain degree, partake of the firmness and faults which characterised its progenitors, whether mental or corporeal—resembling them, not only in external features, but copying them even in their inward configuration. Such similitude we see extending to the minutest parts, whether such parts be fully developed, or defectively, or even *superfluously* constructed. As instances of these last, I may mention, that I have known particular families, where the frequent repetition of six fingers to the hand has taken place in successive generations, and others, where the same members have been as hereditarily reduced beneath the correct human standard. Then in regard to hereditary *mental* resemblances, you may see children, whose father died before they were born, manifesting the same facility or stubbornness of temper, the same disposition to moroseness or jocularity, which characterised the author of their being. Friends and relatives will sometimes hold up their hands with astonishment at this mental likeness of children to their parents; "he is just his old father over again," is a common and correct remark of the least observant. In the doctrine of *hereditary predisposition*, then, the profession and the public, I believe, are equally united in opinion;—but whether they be so or not, is of very little import while you have eyes to look around you, and can judge for yourselves. I must, however, tell you, that in cases of hereditary predisposition, much will depend upon circumstances, whether or not such predisposition be actually and visibly developed in the individual members composing a given family. A person, for example, in whose family the heart or lungs is the weak point, by guarding himself against too rapid changes of temperature, and availing himself of a fortunate position in society as to pecuniary and other means, may so control numerous exciting elements of disease, as to pass through life happy, and comparatively healthy;—while his less fortunate brother, worn down by an accumulated weight of domestic and other trouble, shall not only suffer in his general health, but shall as surely have the weak point of his family's constitution brought out in his individual person. We are all, then, more or less, the "sport of circumstances."

Among the various diseases, which, from their frequency, we justly recognise as the most prominent and important that affect the inhabitants of these islands, I may mention, Spitting of Blood, Consumption, and Glandular disorders. The rapid transitions of temperature, so characteristic of this climate, certainly excite these complaints;—for while in the warmer countries of the East, Dysentery and Abscess of the Liver carry off the greater number of the various races that compose the population,—the natives of India who have died on our shores, have generally fallen victims to Glandular and Chest Disease. Even the monkey acknowledges the baneful effects of such rapid thermal transitions on his respiratory organs. More than one-half of this class of animals that come to England, die of consumption of the lungs. Diseases of the chest and glands certainly become hereditary; but under that head, you may include a great many others,—epilepsy, apoplexy, palsy, mania, —and, perhaps, every purely constitutional complaint which has obtained a name. Could the breeding of mankind be as closely watched and as easily controlled as the breeding of our domestic animals, incalculable advantages, moral, as well as physical, might be the effect of judiciously crossing particular races with each other. The tendency to the particular passions and diseases, which characterise nations and families, might, in this manner, be as certainly diminished, as the beauty of the face and form might be exalted in its standard;—for both depend greatly upon hereditary configuration, or upon that particular atomic association of certain parts of the body, which you find prevailing in families—other external modifying circumstances being, at the same time, kept in view,—such as climate, temperature, social and political relation

ship, &c. But be this as it may, whatever will agitate the whole frame of an individual—whatever will in any manner touch the stability and strength of his corporeal *Totality*, must to a certainty with much more severity affect the weakest point of his body, whatever that point be. This doctrine I mean to apply to

Apoplexy.

The great System termed the Human Economy is made up of numerous lesser systems, each having a fabric or material peculiar to itself. By anatomists, these various fabrics are termed the Tissues. Thus we have the Osseous or Bony tissue of the skeleton; the Cartilaginous and Ligamentous tissues of the joints; the Glandular tissue, different in different systems of glands, but without which there could be no *secretion*—no saliva—no bile—no perspiration, and the like;—the Muscular and Tendinous tissues, so necessary to locomotion;—the Nervous tissue,—of two kinds,—one to convey impressions *from* the Brain to all parts of the body, the other to convey impressions back *to* the Brain. Besides these there are certain nerves which influence growth termed the ganglionic or organic nerves. Then there is the Vascular tissue, partly muscular in its nature, comprising the heart and its infinity of blood-vessels;—to say nothing of the Cellular tissue, which, like a web or net, invests and insinuates itself into the whole tissues of the body. The tissue of the lungs and that of the intestinal tube are principally compounded of the others; so, also, are the lining membranes of the various cavities and canals that convey the secretions—"*mucous* membranes," as they are termed—for the membranes that line shut cavities, such as the cavities of the chest and abdomen, are distinguished by the term "*serous*." The Cutaneous, or Skin-tissue, performs the part of an outward envelope to all. Now, as there is nowhere to be found a man or woman, whose body is so perfectly made in its outward form as to stand the scrutiny of a sculptor or painter in all its parts,—so, in the internal configuration of all bodies, will there be parts, as we have already seen, inferior to other parts in strength and so forth. Some tissue, or portion of a tissue, may be at fault. Well, then, suppose the fabric of the *Blood-vessels* of a part to be the least strongly constructed tissue of a given individual, can you doubt that anything which might injure that individual's health generally, would, among other phenomena, develope such original weakness in that part of his Vascular tissue, even where it had not been before suspected? Suppose you were to starve a person slowly, or to bleed him day by day, would you not in that case be sure to break down his whole health? Would you not also weaken the coats of the blood-vessels generally by what so palpably weakened every tissue of the frame? Now, suppose one or more vessels of the Brain to be the least strongly constructed parts of an individual body, would not such starvation or such blood-letting be sure to produce so great a weakness of the coats of these vessels as to give them a tendency to rupture, the consequence of which would be effusion of blood upon the Brain,—in other words, Apoplexy? I think you must even in theory come to that conclusion. But, Gentlemen, I will give you a fact, or rather a host of facts, which you will be glad to take in change for a thousand theories. The inmates of the Penitentiary Prison, by very gross mismanagement, were put upon a diet from which animal food was almost entirely excluded—they were all but starved—"An ox's head weighing eight pounds was made into soup for one hundred people, which allows one ounce and a quarter of meat to each person. After they had been living on this food for some time, they lost their colour, flesh, and strength, and could not do as much work as formerly." "The affections which came on during this faded, wasted, weakened state of body, were headache, vertigo, delirium, convulsions, Apoplexy." Remember, Gentlemen, this is not my statement—no distortion or corruption of words made by me as a party advocate. It is a quotation *literatim et verbatim* from the official report of Dr. Latham, the physician who was deputed by Government to inquire into the cause of the great mortality in the Penitentiary. If you place any confi-

dence in the accuracy of that report,—if you believe Dr. Latham to be an honest man, there is only one conclusion you can come to, which is this, that the universal practice of starving and bleeding to prevent or cure Apoplexy is the most certain mode of producing this disease in persons predisposed to it, and of confirming it in such as have already shown the Apoplectic symptoms. Gentlemen, you seem startled at this, and no wonder—for some of you have doubtless lost friends or relatives by the practice. How then, you demand, must apoplexy be treated? That apoplexy, like every other disease, is a developement of general constitutional disturbance,—that it is in the first instance a remittent disease, and in many instances curable by the remedies so generally influential in the treatment of intermittent fever, according to the various stages of that complaint, I could prove to you by a multitude of evidence. But there is a case in the *Medical Gazette*, which bears so strongly on this very point, that I will give it to you at length. It is from the pen of Dr. Graves of Dublin, and the subject of it was a gentleman living in the neighbourhood of Donnybrook. This gentleman, Dr. Graves tells us, "had slept well till four o'clock in the morning, when he was awakened by a general feeling of malaise, shortly after which he complained of *chilliness*, some nausea, and headache. [Here then was the cold stage.] After these symptoms had continued about an hour, his skin became extremely *hot*, the pain of the head intense, and drowsiness was complained of, which soon ended in perfect coma, with deep snoring and insensibility;—in fact, he appeared to be labouring under a violent apoplectic fit. He *seemed* to derive much advantage from bleeding and other remedies, and to my surprise was perfectly well when I visited him in the evening. The day but one after, at the very *same hour*, the very same symptoms returned and were removed by the very same remedies. [So at least the doctor thought.] I must confess," he continues, "that I could not explain in a satisfactory manner the perfect freedom from all cerebral and paralytic symptoms after two such violent attacks of Apoplexy. But when a *third* attack came on, I then saw it was a case of the Tertiana Soporosa [mere jargon!] of nosologists, and I *prevented the return* of the fit by the exhibition of *Quinine*." The quinine, you see, proved at once an efficient preventive of the returning fits, while repeated blood-letting, whatever might have been its effect in shortening them, had not the slightest influence in that more salutary respect. But when Dr. Graves supposed that his bleedings did actually shorten the duration of the fits, may he not have been deceived by the approaching intermission,—may he not have mistaken this natural phenomenon of all disorder for the effect of his remedies? However that be, this much I may be permitted to say for myself, that since I gave up the practice of bleeding in apoplexy, I have found that disease in the young as generally curable as any other, and in the old much less fatal than when treated by the lancet. Mr. Smith of Cheshunt lately informed me that he had cured several cases of apoplexy simply by dashing cold water over the patient's head, without drawing a drop of blood. Mr. Walter, a surgeon of Dover, has successfully treated apoplexy by the same practice. "The application of your theory," he writes to me, "has lately saved me from bleeding in *two* cases of apoplexy, both of which did well without it." Now apoplexy, as it happens, is the great stumbling-block of the vulgar. How mad Dr. Dickson must be not to bleed in apoplexy!—that is the language of every blockhead who, knowing nothing of the subject but what he has picked up "in conversation or in his schools," very wisely fancies himself an oracle. But what say the oracles of the schools?—what say the men who for years and years have been preaching up blood-letting as an infallible remedy for all diseases? Dr. Clutterbuck, as you all know, throughout a long life, has advocated that kind of practice;—what does Dr. Clutterbuck say of its success in cases of apoplexy? I almost fear you will not believe I quote him rightly;—but the word "Clutterbuck" assuredly stands at the foot of the article Apoplexy in the *Cyclopædia of Medicine*, from which I quote—and this is what we there find under that head and upon that subject:—"As mere matter of experience

there is reason to believe that blood-letting does much less good, and the omission of it less injury than is generally supposed." Only imagine the delight I felt when, in the course of my desultory reading, I first stumbled upon this passage. Such a confession from such a quarter! Gentlemen, I laughed most heartily, and made an extract on the instant, keeping to the exact words which I have now given you for your edification.

That you may cure the disposition to

RUPTURED BLOOD-VESSEL OR HÆMORRHAGE

in other parts of the body, as well as in the brain, by cold affusion, I could give you an infinity of proofs. What is the old woman's practice in bleeding from the nose? To put a cold key down your back, and thus by the suddenness of the shock change in a moment the whole corporeal temperature. The principle is the same in both cases, and the good effects of that measure ought long ago to have suggested to medical practitioners a better practice in apoplexy and other hæmorrhages than is at present the fashion with fashionable doctors. COLD WATER, Gentlemen, HAS MANY VIRTUES, BUT A GREAT DEAL DEPENDS ON THE MODE OF ITS APPLICATION.* The suddenness of the dash, is the chief thing to be attended to in cases of hæmorrhage disease. So much then for the proper treatment of the patient during the fit of bleeding; but what is to be done to prevent its return? English practitioners almost to a man starve, bleed, and purge you. The following case may open their eyes; and as it is not taken from my own experience, but from a German medical journal of repute, it may perhaps carry more weight with it on that account. "A strong man, aged 27, suffered on alternate days from very violent bleeding at the nose, which continued from four to six hours, and could neither be stopped nor diminished by the usual styptics, nor by any of the other means commonly employed in similar cases. Taking into account the remarkable *periodicity* of the bleeding, the treatment was changed for a large dose of sulphate of QUININE with sulphuric acid. During the twenty-one days following, the bleeding recurred but twice, and was then readily stopped. The patient subsequently continued quite well."—[*Med. Zeitung, No.* 33, 1836.]

In the case of a young lady afflicted with periodical *Vomiting* of blood, for which she had been repeatedly bled without the smallest advantage,—or rather to the great injury of her general health,—I effected a rapid cure with a combination of Quinine and Alum. The same disease I have again and again cured by Arsenic, Opium, and Prussic Acid. A captain of the royal navy, whom I lately attended along with Mr. Henry Smith of Cheshunt for vomiting of blood, got well by small doses of copper and the application of wet cloths to his stomach.

You will now, I have no doubt, be prepared to question the propriety of the usual murderous treatment adopted for spitting of blood—Pulmonary Apoplexy, as it has been called. Is not the lancet in almost every such case, the first thing in requisition, and death the almost as inevitable result of the measure? What say the older authors upon this matter? —Listen to Heberden, a physician, who, for upwards of thirty years, had the highest and most extensive practice in London: "It seems probable," writes this veteran in medicine, "from all the experience I have had of such cases, that where the hæmorrhage proceeds from the breach of some *large* vein or artery, there the opening of a vein will *not* stop the efflux of blood, and it will stop *without the help of the lancet*, when it proceeds from a small one. In the former case, bleeding does no good; and in the latter, by an unnecessary waste of the patient's strength, it will *do harm*. But if the opening of a vein be intended to stop a hæmorrhage, by deprivation or revulsion, may it not be questioned whether this

* When the words I have placed in capitals in the text were first printed, Hydropathy, or the cold-water cure, was not even known by name in England. Practised on a right principle, Hydropathy is only a fragmental part of Chrono-Thermal means. But while Priestnitz and his followers reject all remedies that God has given us but cold water; I, on the contrary, avail myself of every good thing in nature, cold water included. Fertility, not paucity, of resource should be the aim of the enlightened practitioner.

doctrine be so clearly established, as to remove all fears of hurting a person who has already lost too much blood, by a practice attended by the certain loss of more?" With which reasoning, I hope you are all, by this time, prepared to agree. But men who know nothing of the economy of the human system, will sometimes dispute this matter with you, by saying, that their patients make blood so fast, that they must periodically bleed them, to keep down the disposition to hæmorrhage. Gentlemen, these practitioners deceive themselves; they are deluded into this false and fatal practice by the returning *febrile* fit—a fit that will recur and re-recur at more or less regular periods, while there are blood and life in the body; and the more frequent the bleedings practised in the case, the more frequently will this febrile fit come on, and with it, the very hæmorrhage which it is the object of their solicitude to prevent. Does it not stand to reason, that the more you debilitate the *whole body*, the more must you, at the same time, weaken the already too WEAK TISSUE of the VASCULAR COATS,—that tissue whose original weakness constitutes the tendency to hæmorrhage! Instead of being the consequence of any constitutional plenitude of the blood itself, Spitting of Blood is only a natural effect of real weakness in the coats of the containing vessels of the lungs; so that not only is the theory of making too much blood absolute nonsense, but the measures which medical men have for centuries been putting in force, for the cure of hæmorrhagic diseases generally, have been one and all as fatal in their tendency, as the theory that led to them was in principle false. Look at the pale and exsanguined countenances of the unfortunate individuals, who, whether for spitting of blood, apoplexy, or other hæmorrhages, have been subjected to such cruel discipline, and tell me, if these poor creatures make too much blood?—Too much blood!—only place your finger on the artery of the wrist, and you may feel it jerking, and compressible, like that of a female who has suffered from repeated floodings. Even during the febrile paroxysm, you may see by the circumscribed flush of the face, that the patient is actually dying of hectic or inanition. What fatal mistakes have not originated in this notion of making too much blood?—To bleed in the case of a ruptured blood-vessel, then, is positive madness. If you open a vein in the arm of any man, whether healthy or the reverse, and let blood, will the opening of another vein stop the flow of blood from the vein first opened? So far from that, both veins will go on bleeding till the patient either faint or die! Should not this fact have long ago opened the eyes of the profession to the fallacy of their practice? Gentlemen, how can you doubt, that the coats of the blood-vessels, like every other tissue of the body, must be implicated in the general debility produced by whatever abstracts *from*, or prevents the entrance *of*, the material necessary to the healthy organisation of every part of the human frame? To bleed or starve a person having a hereditary predisposition to spitting of blood or apoplexy, is the most certain method to develope these diseases in their worst forms!—Yet this is the daily practice of the most eminent physicians! one among many proofs, that in the medical profession, eminence is less frequently attained by *successful results* in practice, than by the dexterous employment of all those arts and intrigues with which mediocre but unscrupulous minds too often beat men of genius in the race. So far as practice is concerned, the eminent physician generally confines himself to the fashion of the day—the more especially, if that fashion be profitable to the apothecary; for in such case he is sure to become the fortunate *puppet* of those whose bread depends, not so much upon the cures they shall effect, as the quantity of physic they shall manage to sell! What a happy nation of fools must that be, which supposes that any class of mankind will put the interests of the public in competition with their own! Benighted and misguided people! you call upon men to relieve you from your sufferings, while you hold out to them the most powerful of temptations to keep you on your sick beds! You pay for time, what you deny to talent—for a *long illness*, what you refuse to a speedy recovery! Do you think medical men angels, that you thus tamper with their integrity? Your very

mode of remunerating them almost forces them to be corrupt—and that too, at a moment when their numbers are so great, it is utterly impossible for one-half of them to live honestly on their mere professional gains. Hear Mr. Abernethy on this subject :—"There has been a great increase of medical men, it is true, of late years; but, upon my life, *diseases have increased in proportion*." He might have added, "And they are longer of being cured!"

To return to the subject of Ruptured Blood-vessel. You will find that in every case, except where it has been produced by mechanical or other local agency, this disease is the effect or developement of general intermittent fever; the symptoms of which fever vary in their degree of severity with every case,—in one being bold and well marked; in another, so softened and subdued, as almost to escape the patient's own observation;—curable, too, like the simplest ague, by the cold dash or an emetic given during the hot fit;—and to be prevented from recurring by chrono-thermal treatment during the interval of remission. One case will yield to opium or arsenic, another to copper, quinine, or prussic acid, and some few will trouble you to cure them at all —for what will agree with one constitution, may, as we have too often seen, disagree with another. I could give dozens of cases of every kind of constitutional hæmorrhage cured in this manner; but the details of one would be the details of all. Yes, Gentlemen, I repeat, by the early use of emetics, the proper application of heat and cold in the different morbid conditions of the body constituting the *febrile fit*, and by the judicious exhibition of the chrono-thermal medicines during its remission, I have successfully treated every kind of hæmorrhagic disease. The same system of treatment has enabled me effectually to cure many cases of Enlarged Veins—Varicose Veins, as they are termed—and the mention of this recalls to my recollection the case of an aged female who had a painful *varicose* ulcer—that is, a sore with blood-vessels opening into it—for which I prescribed the internal use of arsenic, with almost immediate relief to her pain, and the subsequent cure of her ulcer. From the happy result of that and other similar cases, the surgical mechanic may learn that there are other and better modes of treating "varicose veins," than by bandages and laced stockings. Well, then, I have said all I mean to say upon the subject of Hæmorrhage, and I have anticipated something of what naturally belongs to the treatment of Diseases of the Chest. Of these I must now speak at some length.

It has ever been the policy of teachers and professors to affect to penetrate farther into a millstone than their pupils; and, seeing that for the most part such professors know as little of their particular subject as those they pretend to enlighten upon it, so far as their own reputation is concerned, they are doubtless right! The great medical millstone of the present day is the Chest,—and Laennec's bauble, the divining rod by which our modern sages pretend to have obtained their knowledge of it. If you believe them, a hollow piece of stick they have nicknamed "the *Stethoscope*," is the greatest invention of these times! By means of it you may discover every motion and change of motion that ever took place in the organs within the cavity of the chest, and some that never could take place in them at all. What an invaluable instrument must it be, that stethoscope! The enchanter's wand was nothing to it! But, seriously speaking, just observe how gravely your hospital tyros hood-wink and hocus each other with the phrases "hypertrophy" here, and "atrophy" there; "caverns" in this place, and "congestions" in that—to say nothing of "rhoncus" and "râle," "egophony" and "sybilus"—and heaven knows what other sounds and signs besides—sounds and signs which, in the greater number of cases, have as much of truth and reality as the roar of the sea with which the child deludes his fancy when holding a shell to his ear!

Let me first speak to you of

Diseases of the Heart.

Do not the subjects of every kind of Heart-affection tell you they are one day better, another worse? How shall we speak of diseases

of this organ?—of palpitation and temporary cessation or remission of its action?—disorders constantly misunderstood, and as constantly maltreated. Complain but of flutter or uneasiness in any part of the Chest, the stethoscope—the oracular stethoscope—is instantly produced. Astonished—in many instances terrified—the patient draws his breath convulsively—his heart beats rapidly—and the indications obtained by means of this instrument, at such a moment of doubt, anxiety, and fear, are registered and recognised as infallible. "Have we not had too much talk of Heart-Disease since the stethoscope has come so generally into vogue?" That was a question asked some years ago by the late Dr. Uwins. Let Dr. James Johnson answer it. For reasons which I shall by-and-bye make you acquainted with, I prefer his evidence here to that of any other physician. In one of the numbers of the *Lancet*, he is stated to have said at a Medical Society:—"It was a common error in young practitioners to consider the heart as organically diseased when its functions only were much interfered with, and this error has become *more general*, he was sorry to say, *since the* STETHOSCOPE *has come into use.*" Dr. Johnson confines his observation to *young* practitioners—himself not coming under that head—but I have seen men as old as he make the same mistake, and those, too, enjoying a great reputation for stethoscopic sagacity.

Patient after patient,—medical as well as non-medical,—have come to me with the *fatal scroll* of the stethoscopist—their hearts palpitating, their limbs trembling, as they gazed in my face, expecting to read there nothing short of a confirmation of their death-warrants;—yet of these patients, many are now living and well, and laugh, as I hope to make you laugh, at both the instrument and its responses. How little must that man know of his duty as a physician, who would deprive a fellow-creature in distress of the balm of hope—how little can he appreciate the influence of the depressing passions on the bodily sufferings of the sick! Yet with these eyes have I seen, in the hands of the patient, the written announcement of his doom, an announcement which afterwards turned out to be utterly unprophetic and false. How unwarrantable in any case to intrust the patient with such a document!

Let the practitioner withdraw his eye, for a time, from a mere symptom; let him observe how other muscles of his patient palpitate at times, like the heart, and act, like that, convulsively: finding these symptoms to be remittent in every case, and complicated with others, all equally remittent, would he still persist in his small bleedings, his repeated leeches, his purges—measures of themselves sufficient for the production of any and every degree of organic change he already fancies he has detected! Would he not rather reflect with horror on his past treatment, and endeavour, by another and a better practice, to enable his patient to escape the sudden death to which, in his imagination, he had devoted him? How many a physician, by such a prognostic has obtained unmerited credit for foresight and sagacity, while he only taught the patient's friends to be prepared for an event, *he himself was materially contributing to hasten!* Truly, in this case at least, prophecies do tend to verify themselves!

Gentlemen, I have seen two stethoscopists examine a patient with supposed Heart-disease, and come to the most opposite conclusions,—one declaring the organ to be enlarged, the other assuming with equal confidence that it was the reverse! The utter absurdity of attempting to distinguish, during life, one form of Heart affection from another by any particular sign or symptom, is sufficiently proved by this one fact, that mere functional variation of its motions may produce every symptom of a real change in the structure of the organ itself. But even could such a distinction be effected to the nicety of a hair, the knowledge of it would *not* be worth a rush for any *practical purpose;*—inasmuch as the remedies for every kind of chest-disease come at last to the same agency, whether that agency be directly applied to the surface of the body in the shape of cold or heat; or be externally or internally administered in the form of medicines that electrically influence the corporeal motions through the medium of the brain and nerves. By the chrono-thermal system of practice, I

have successfully treated every kind of Heart-disease which ever came, or could come, under the notice of the physician—setting aside, of course, original malformation of the organ. I will give you some cases in illustration :—

A gentleman, age 30, had been ill for a long time, particularly complaining of his heart, the action of which organ was generally below the healthy standard, and it also palpitated occasionally. So great was his mental depression, that the smallest trifle produced tears. The temperature of his body generally was below that of health, and he suffered much from coldness of feet;—remissions he of course had, being better at particular times. As he did not improve in the country, he thought he would try a London doctor; so he came to town and consulted the late Dr. Hope, author of a work on "Diseases of the Heart." The stethoscope in this case was as usual applied to the chest; its annunciation was sepulchral. HOPE here told no "flattering tale," for not only was the heart pronounced to be enlarged, but a fatal result was prophetically expressed. The treatment prescribed was not ill calculated to verify the prediction—carscarilla and ammonia,—with aperients! and a *bleeding* every month, or six weeks!! The patient's health, as you may readily suppose, got worse and worse daily;—he became much emaciated in his person, and completely prostrate in mind. To sum up all, he had a tendency to fainting fits; in which state, by the advice of Dr. Selwyn of Ledbury, he came to me. You already guess the practice I adopted—chrono-thermal, of course. Yes, Gentlemen, I ordered him first a combination of prussic acid and creosote, which I afterwards followed up by arsenic and quinine. I also prescribed a generous diet, with wine. Well, what was the effect of this? —Why, notwithstanding the depletion to which he had been subjected, he improved daily, and in about six weeks had become so well as to be able to resume his profession—the law, which he had been obliged to leave off. Indeed a letter I afterwards received from Dr. Selwyn, gave me the news of his marriage. Yet this patient, according to the stethoscope, should have been dead and buried long ago!

Gentlemen, in confirmation of the value of Arsenic in disease of the heart, the details of a case from Darwin, who wrote, be it remembered, in the last century, may not be deemed unimportant:—"A gentleman, 65 years of age, had for about ten years been subject to an intermittent pulse, and to frequent palpitations of his heart. Lately the palpitations seemed to observe irregular periods, but the intermission of every third or fourth pulsation was almost perpetual. On giving him four drops of a saturated solution of *Arsenic* about every four hours, not only the palpitation did not return, but the intermission ceased entirely, and did not return so long as he took the medicine."

The cases I shall now give you are three of many such which have occurred in my own practice:—

Case 1.—A young lady was afflicted with palpitation of the heart, occasional cough, and so great a difficulty of breathing as to be unable to sleep, except when supported with pillows. She had frequent shivering fits; her abdomen and legs were much swelled, and her symptoms altogether so distressing, as to leave her friends with scarcely a ray of hope. Nevertheless, by the employment of silver, quinine, and prussic acid, she did eventually recover, to the surprise of all who knew her. Remissions were well marked in this case.

Case 2.—A young gentleman, aged 16, had violent palpitation of the heart, headache, craving appetite, and some thirst, with great depression of spirits. He was much emaciated, and had a tendency to eruption of the skin. His hands and feet, which were generally cold by day, became during the night so hot, as frequently to keep him from sleeping. By a course of cold-plunge baths, alternated with the shower bath, and by the use at the same time of quinine and iron in combination, this young gentleman was completely restored to health—every one of the above symptoms having disappeared in a few weeks. He is now serving with his regiment in India, having reached the rank of lieutenant.

Case 3.—Major M'P——'s heart palpitated so violently at times, that you could see the motions in a distant part of the room. This was the case when I was asked to see him. I

ordered him prussic acid and musk, which stopped the palpitation in about two minutes after he took it. In the middle of the night he had a threatening of the complaint, but it was at once arrested by the same medicines. A continuation of them for about six weeks cured him completely.

Before dismissing affections of the Heart, I must tell you that the greater number of these complaints depend less on any defect in that organ than upon a weakness or want of power in the Brain to *control* the motions of the heart —and of this you may easily convince yourselves by putting the question to the patient—How do you feel when anything disturbs your *mind?* The answer will almost invariably be, "Oh, it brings on the palpitation at once," or the pain, as the case may be. Gentlemen, strengthen the brain, and in few instances, will you have any trouble about the heart. The Brain is the great controller of every function—it is the true key to all good treatment.

We now come to consider

Pulmonary Consumption, or Decline.

When you see a person harassed with cough, and losing his flesh, and if, at the same time, he complain of shortness of breath and pain of chest, and begin to expectorate a muco-purulent-looking matter, you may certainly set down that man's disease as *Consumptive;* for not only is the general health in that case manifestly wrong, but the lungs are more or less implicated,—and what does it signify in which of their tissues? what does it signify whether it be their mucous membrane, their glands, or their interstitial substance? Should the patient's general health improve under your treatment, he will naturally live as long as it continues to do so,—if not, and if it as progressively continue to get worse, he must die! Any further discussion of the matter, *quoad hoc*, resolves itself into the interminable question of Tweedle-*dum* and Tweedle-*dee!*

"Can Consumption be cured?" asked Mr. Abernethy, adding in his own sarcastic manner, "Odd bless me! that's a question which a man who has lived in a dissecting-room would laugh at. How many people do you examine who have lungs tubercular which are otherwise sound. What is Consumption?—It is *tubercle* of the lungs—then if those tubercles were healed, and the lungs otherwise sound, the patient *must get better;* but if the inquirer shift his ground and say, 'It was the case I meant of tubercles over the whole lungs,' why then, he shifts his ground to no purpose, for there is no case of any disease which, when it has proceeded to a certain extent, can be cured."

The next question is, what *are* Tubercles? I take this to be the true answer:—For the requisite lubrication of the mucous membrane of the cells, and other air-passages of the lungs, there must be a certain amount of secretion. To supply this secretion, I need not tell you, there must be a glandular apparatus. A number of minute and almost imperceptible *Glands*, accordingly, do intersperse the entire tissue of the lungs—the pulmonary tissue, as it is called—and abound more particularly in the *upper portion* of it—that identical portion in which pathologists imagine they have detected the *commencement* of Consumption. But what they call the commencement is nothing more than an EFFECT or developement of general constitutional disorder. If it be the beginning, it is the beginning of the end—the end of previous repeated febrile paroxysms of greater or less intensity. During such constitutional disorder, and particularly during the course of severe fevers—such as a long remittent fever, the fevers termed small-pox, measles, and the like,—these minute *pulmonary glands* become diseased, there being a previous *predisposition* of course; in other words, these glands being the original weak point of individuals having the consumptive tendency. Tubercles, then, are diseased pulmonary glands. How many people have traced the consumption of their children to the small-pox or measles;—but would any man in his senses say the consumption was the cause of these fevers? Here it must have been the effect, and so also it may be the effect of any other kind of Fever, and in no case can it be the cause of such fever—though,

as in the giving way of any other part of the body, the local disease may in the course of time aggravate and keep up the febrile state. The affected gland is in this instance at first almost microscopically minute; but as the disease advances, it swells and becomes of a reddish grey colour, or it may at once take on a suppurative action—it may become an *abscess* varying from the size of a pea or less to that of a walnut or more; or it may go on enlarging to any extent without suppuration or becoming an abscess at all,—the function of the affected lung in this case being, nevertheless, as completely disturbed as if it did take on the suppurative state; but in most cases of consumptive disease both kinds of disorganisation go on at the same time, one gland or cluster of glands suppurating, and sooner or later bursting and discharging their contents into the air-passages, rendering the lungs at the same time more or less cavernous and hollow;—another gland or cluster of glands swelling and coalescing so as to fill up and solidify the air-cells of the part they occupy. These at least are among the principal changes to be found in the lungs of persons who die of consumption; and they are all, as I have already said, more or less gradually produced in the course of repeated *paroxysms* of general remittent disorder. The matter expectorated by the patient consists of the contents of the tuberculous abscess, and more or less mucus, sometimes mixed with blood; while the cough may be either produced by a lodgment of matter in the air-passages, or be a spasmodic effect of the cold air coming in contact with the ulcerated surface of the diseased lungs;—almost every patient, however, has it *periodically* more or less severe. To understand this subject in all its bearings, you have only to observe the more palpable changes which take place in the glands of the *Neck* of certain patients. These glands, in the *healthy* living subject, can neither be seen nor felt; but apply any general influence that shall excite *Fever* in an individual predisposed to glandular disorder,—such as starvation, exposure to cold, or the abuse of mercury, and what do you find? Why, these very glands gradually enlarge and form tumours; which tumours, as in the case of tubercles of the lungs, are sometimes of a solid kind, and when examined after death have the same reddish grey appearance, but more frequently like them terminate in abscesses, the contents of which, so far as mere likeness is concerned, are the identical contents of pulmonary tubercles, or "Vomicæ," as these tubercles are sometimes called. In the one case, the patient is said to have the "Evil" or Scrofula, in the other Phthisis or Consumption;—the difference of place, and the degree of importance of this in the animal economy, making the only difference between them. In still farther proof of the correctness of this explanation, I may mention, that Louis and others have detected tuberculous matter in various other *Glandular* parts of the bodies of patients who have died consumptive. If it be objected that they have also detected it in the *Bones*, I answer, the bones, like every other part, have a glandular apparatus; and this more particularly in the neighbourhood of their cartilaginous or secretive surfaces—the joints. In the joints, accordingly, we often find tuberculous matter developed. The shafts of bones, having fewer glands, are seldom affected with tuberculous disease.

We now come to the question of Cure; and from what we have already said, you must be aware, that however curable Pulmonary Consumption may be in the commencement,—in the later stages—that is, where a very considerable portion of the lungs is destroyed—it cannot possibly be cured, though even in this case, the disease, by proper management, may sometimes be arrested. But here, instead of confusing you with fine-spun differences and distinctions, the delight of the schoolmen, I shall try to explain my meaning to you by *similitudes;* for similitudes, in the words of Fuller, are indeed "the windows that give the *best light*."—Some of you doubtless have had a certain portion of a tooth slowly *consumed* by disease, which disease, [tooth-*consumption?*] by some change in your manner of living, or otherwise, has all of a sudden stopped, and the remaining sound portion of that identical tooth has continued to be useful to you for years! Such arrest of the consumption of

a tooth, I have often myself obtained by Quinine internally administered; and Dr. Irving of Cheltenham, some time ago, detailed to me two cases in which he succeeded with that remedy. Well, then, with medicines of this class, and sometimes even without any medicine at all, the same thing may take place in the lungs; and I have known persons reach a good old age, who had portions of their lungs destroyed, but who, by proper medicine, and attention to the temperature of their chambers, preserved the sound parts from going into further decay. Such persons, at greater or less intervals of time, may even be free from the graver symptoms of consumption, and only commence to expectorate during some change of weather,—when they have slight febrile attacks; but these will leave them again on the return of warm weather.

But Consumption, in many instances, *is* curable—curable in stages even considerably advanced. The reparative power inherent in a living body is so great, that if you break the bone of your leg or arm, nature, without any physic at all, will reunite the broken parts—provided the system be kept free from fever. Cure the consumptive fever, and nature will repair the broken lung as surely as it will cure the broken leg. Oh! but, say the men who decide this question in the negative—how can that be, seeing the lungs are always in motion? —that of itself would prevent such a desirable end. That of itself, Gentlemen, would do no such thing. Many and many persons have had a small sword or a pistol-ball passed through their breast, so that it has come out again at the back, and have yet perfectly recovered. Perhaps the lung in such cases was not wounded? So I have heard people say; but my answer was ready. The patient spit blood immediately on the receipt of his wound! That, I fancy, you will call pretty conclusive evidence of the lungs being wounded. Well, then, people so wounded have recovered, though all the time their lungs were in motion. Cure the consumptive fever, I repeat, and the lungs will cure themselves as certainly as any other injured parts of the body. Those who deny the curability of consumption are generally ignorant, conceited creatures, who know nothing but what they have picked up in books or in the dissecting-room — they argue of the beginning from what they have seen of the end—of the living from their dissections of the dead.

The same power that may set a ship on the right course, improperly applied will set it on the wrong. This is exactly the case with medicine; the same power that has cured a disease in one person, may cause or aggravate it, according to circumstances, in another. How frightful, then, that such powers should be daily wielded by men who have not the smallest idea of the principle upon which their remedies act! No wonder we have such contrary estimates of the value of remedies in pulmonary consumption. A case of this disease, which *was cured*, I will now read; it is from the pen of the patient, himself a physician,—the late Dr. Currie, of Liverpool, who wrote the Life of Burns,—and it is given by Dr. Darwin in his Zoonomia. "J. C. aged 27, with black hair, and a ruddy complexion, was subject to cough from the age of puberty, and occasionally to spitting of blood; his maternal grandfather died of consumption under thirty years of age, and his mother fell a victim to this disease, with which she had been long threatened, in her 43d year, and immediately after she had ceased to have children. In the severe winter of 1773-4, he was much afflicted with cough, and being exposed to intense cold in the month of February, he was seized with *Peripneumony*, [inflammation of the lungs, now called Pneumonia]. The disease was violent and dangerous, and after repeated bleedings, as well as blisterings, which he supported with difficulty, in about six weeks he was able to leave his bed. At this time the cough was severe, and the expectoration difficult; a fixed pain remained in the left side, where an issue was inserted. Regular hectic [*habitual* or *wasting* fever] came on every day, about an hour after noon, and every night heat and restlessness took place, succeeded towards morning by general perspiration. The patient, having formerly been subject to Ague, was struck with the resemblance of the *febrile paroxysms*, to what he had experienced *under that disease*, and

was willing to flatter himself, it might be of the same nature; therefore he took Bark in the interval of the fever, but with an increase of his cough." This patient eventually recovered by change of air and horse-exercise,—the last, a remedy held in high repute by Sydenham. What first induced Sydenham to prescribe horse-exercise for pulmonary consumption? Was it any knowledge he had obtained in the dissecting-room? No such thing;—it was the same kind of experience that first taught the Peruvian peasant the value of Bark as a remedy for ague—the observation of its good effects upon the living. You might dissect dead bodies all your life, without ever once guessing that either the one agency or the other could beneficially influence any kind of disorder. See, then, the difference betwixt watching the action of external influences on living bodies and dissecting and hair-splitting the broken-down organs of dead ones! "Whatever philosopher or projector," says Dean Swift in his *Tale of a Tub*, "can find out an art to solder and patch up the flaws and imperfections of nature, will deserve much better of mankind, and teach us a more useful science than that so much in present esteem, of widening and exposing them,—like him who held Anatomy to be the ultimate *end of physic*." Persons of this stamp, we have seen, are not yet extinct.

The relationship existing between Consumption and Ague is not only established by the remissions and exacerbations of the above case, but also by the remedies that proved successful in its treatment,—horse-exercise and change of air having cured agues, which had resisted every kind of internal treatment, Bark among the number;—so that Bark is no more a specific for ague, than for any other disease. Were you to judge solely from the experience of the case I have just read, in which the Bark not only failed, but actually aggravated the symptoms, you might be led to conclude, that it ought never to be exhibited in consumption; but you will please to remember that the same is every day the effect of its employment in ague,—in which latter disease we therefore dismiss it for arsenic, opium, iron, or some other chrono-thermal agent, which may better answer the peculiar habit of the patient, and which we cannot know till we try. Never, like weak-minded persons, take your estimation of any medicine or system of medicine from its success or failure in one or two cases.

In the 13th volume of the *Medical Gazette*, you will find the detailed case of a man labouring under Consumption; for whom Mr. Maclure, the gentleman who narrates it, prescribed generous diet and quinine. Dr. Marshall Hall examined the patient with the stethoscope, and pronounced an unfavourable prognostic. Even after commencing the quinine, and when a considerable improvement had taken place in the appearance of the patient, Dr. Hall still held that the case would be fatal;—"again the stethoscope was consulted—again it uttered the same sepulchral responses; and according to it, the poor patient ought by this to have been moribund, his pulse, good looks, muscular firmness, appetite, and his high spirits notwithstanding. I need hardly add," says the narrator of this case, "that our judicious friend the doctor was much surprised, as well as gratified, to witness his appearance"—alluding to the change after the cure had taken place. Justice to Dr. Marshall Hall compels us to say, that he was anything but gratified with this result; for in another number of the same journal, not only does he speak daggers at Mr. Maclure for publishing the case; but he goes into a very learned discussion as to whether the cessation of symptoms were not a Suspension rather than a Cure. For our present purpose, it is quite enough that he admits *suspension;* and if this suspension continued for a series of years, it is scarcely worth while inquiring whether the patient was cured or not. In fact, the matter would resolve itself into a mere dispute about words.

By Emetics frequently repeated, and alternated with chrono-thermal medicines, I am satisfied I have cured or arrested many cases of consumption,—some of them, too, in apparently very advanced stages. The stethoscopists will, of course, question this, and ask how I could know, without using their instrument. I shall, therefore, give you a case of

this kind in which it was employed, not by myself, but by men who have the reputation at least of being wonderfully quick in the use of it:—A pianoforte maker, aged 36, came to me much emaciated: he complained of shiverings, chills, and heats, night sweats, cough, and expectoration of matter, tinged with blood occasionally; he informed me that he had been a patient at a provincial dispensary, from which, after having for some months taken much medicine, and been repeatedly blistered, he was discharged as incurable. The stethoscope, he informed me, had been consulted in his case by Drs. M. and A. both of whom told his wife he was in the last stage of Consumption, and there was no hope. I prescribed hydrocyanic acid three times a-day, and ordered him to take a pill, containing a combination of opium and quinine, at that period of the day when he should find himself most free from the symptoms of his disease. From that day he began to recover his flesh and spirits; his pulse, which was 120, gradually fell to 80; his appetite improved daily; his expectoration diminished in proportion; and in about three months he returned to his work, without any complaint whatever. I must not omit to add, that I ordered him to apply a galbanum plaster to his spine, in which he had suffered from chills, and these it effectually stopped. A year afterwards I saw him again; when, in the presence of Dr. Selwyn, of Ledbury, he told me he was quite well, and was still at his work, and he expressed to me his gratitude for my successful efforts in his favour. Now, some will say this case was Consumption, and some not,—for when the patient dies, nobody disputes it; but when he gets well, every body does;—some again may say that the disease might break out again at some future period, say five or six years after, —which I am ready to grant; and what is more, to admit, may happen after a cure in any disease whatever: and so may a fractured bone that has united and been cured in the best possible manner, become in the course of years and constitutional change, disunited again—as you may find, if you will read the account of the diseases of the sailors who accompanied Lord Anson in his voyages.

A maid-servant, 25 years of age, the subject of Consumption, had been an out-patient at the same dispensary for several months, during which she had been bled, leeched, and blistered, but as she found herself daily getting worse, she came to me; she was then spitting blood and muco-purulent matter; her pulse was quick and small; she had chills and heats, and night sweats, with severe cough. I prescribed hydrocyanic acid, as in the above case, with opium and quinine during the remission; with this treatment she recovered completely, and though several years have now elapsed, she has had no return of her disease.

When I first entered into private practice in this country, I was much abused for giving prussic acid, and that too by individuals who afterwards ordered it in their own prescriptions! "We old practitioners," I have been told by some of these very enlightened persons, "don't like your iodine,—your prussic acid,—your creosote,—and your new medicines. We have known injury to follow their use."—And what remedy in the world in the hands of blockheads may not do the same? Iodine, prussic acid, and the new medicines, are only valuable in the hands of those who know the principle of their application;—like fire or hot water, they are not to be left at the mercy of fools or children; inasmuch as, like either of these agents, they may *warm* you in one degree, and destroy you in another. Moreover, they will not agree with all patients in any dose; but who they are to agree with, you cannot of course know till you try; and, therefore, you will suit your patient's constitution as best you can—for, in the words of Lord Bacon, "a wise physician doth not continue still the same medicine to a patient, but he will vary if the first medicine doth not apparently succeed—for of those remedies that are good for the jaundice, stone, agues, &c. *that* will do good in one body which will *not* do good in another—*according to the correspondence the medicine hath to the individual body* Is not this matter of every day's experience? How can we tell before we try, whether opium will set a person to sleep, or keep him awake all night? or that prussic acid will aggravate consumption in one case and cure or

ameliorate it in another? Gentlemen, I shall afterwards prove that the reason of the difference of effect of all remedies, is the difference in the electric condition of the brain of different patients. But whatever be the true explanation of the facts, they show, at least, the utter impossibility of foretelling, in numerous cases, by what remedial agency you can accomplish a given object—and they must also demonstrate to all who have even the very least pretension to common sense, the imposture daily practised by the charlatan, when he puffs his nostrum as a universal and infallible remedy. But so far as regards prussic acid, its good effects in numerous cases of consumption are unquestionable. On the Continent, Magendie, among others, "asserts and maintains," that with this acid he has cured individuals "having all the symptoms of incipient phthisis (consumption,) and even those in a more advanced stage." Dr. Frisch, of Nyborg, in Denmark, has also employed the remedy successfully in Consumption. But prussic acid is equally influential as a remedy for Ague, and I have administered it with the most perfect success in cases of that disease, after they had resisted quinine and arsenic. Dr. Brown Langrish, too, with laurel-water (the virtues of which depend upon the prussic acid it contains,) cured many cases of obstinate ague. The principle upon which this acid acts in both diseases, I need not say, is one and the same—namely, by its power Electrically to influence the motion and temperature of certain parts of the body, through the medium of the brain and nerves. People who have accidentally taken an over-dose, will tell you how they felt as if they had had an *electric shock*. Whatever produces a sudden impression upon the whole frame causes such shock. Whatever acts upon it more slowly does the same *in effect* as galvanism or electricity slowly and gradually applied. How otherwise can you influence the body in disease

> ————With drugs or minerals
> That *waken motion!*—SHAKSPEARE.

The action of such substances, I need not tell you, is anything but *mechanical*. What, then, can it be but *electrical* or *galvanic?* To call it chemical or magnetic is only an admission of my position, for these have been proved by Mr. Faraday to be mere modifications of the same great principle. We can now understand how galvanism and electricity may be directly and advantageously employed in every disease which has obtained a name, ague and consumption among the number.

But there is another mode of influencing consumption, which it would be well for the patient were it more frequently resorted to—namely, the employment of *cold*-shower and plunge baths. In the case of a gentleman whom I saw some time ago, with Dr. Watson of the Middlesex Hospital, I stopped the shivering fits at once by the employment of the *cold*-shower bath, after a hot bath and a warm plaster to the spine had been tried in vain. The gentleman who was the subject of it was otherwise much improved. His friends, however, persuaded him he could not live the winter in England, so he went to Madeira and died. But in another case, which I also saw with Dr. Watson, and which I shall now detail to you, a perfect cure was obtained. Mr. L—, an artist of eminence, aged 60, was suddenly taken with a very malignant FEVER, in the course of which every organ of his body was more or less painfully affected;—he had a fearful cough, with severe pain in the chest, side, and back, and he expectorated (with much difficulty) a tough mucus, which every moment threatened to suffocate him. His pulse was very quick, and sometimes remitted, and his skin became jaundiced all over; his urine at the same time being almost black. For some days he was in the most imminent danger; but by Chrono-Thermal treatment, and without the loss of a drop of blood, the severer symptoms began to give way, the fever diminished in intensity, and the pulse came down to 80. The hopes of his friends were now high, when suddenly one morning he expectorated muco-purulent matter, having exactly the appearance of what consumptive people cough up. His fever now returned—his pulse rose to 140—he was harassed by cough, and every day from that time he expectorated at least half a pint of muco-purulent matter. had now little hope of saving this gentleman's

life. However, by steady perseverance—and in the right course what will not perseverance do?—by steadily persevering, I say, in the use of quinine, copaiba, and other medicines which I prescribed for him, together with the cold shower-bath, and (when he could bear to be removed) with country air and horse exercise, in somewhere about six months his health gradually became re-established—the cough and expectoration at the same time kept diminishing until it finally ceased altogether. For the last two years and more, I am happy to say, this patient has not had a single consumptive symptom—his general health also is now as good as it ever was in his life.

Before I quit the subject of consumption, I may mention that, in many cases of the disease, I have derived great benefit from arsenic and silver, and also from sub-carbonate of potass. In four or five cases which resisted many remedies, a combination of stramonium and belladonna arrested for a time, though it did not ultimately cure, the complaint. In many cases about which we are consulted, the disease may have proceeded so far as to make cure impossible—in other cases, which might seem to admit of this desirable end, circumstances, over which we have no control, will prevent it. Do you think it possible to cure a person of any grave disease if he were everlastingly on the eve of bankruptcy,—or who lived in an atmosphere which disagreed with his health generally,—or who had a wife continually scolding him and making him miserable? In such cases, need I say, it will be difficult to give even temporary benefit to a consumptive patient.

There is a phrase at present so much in fashion, that were I all at once to tell you it was absolute and indisputable nonsense, you would, in all probability, stare with astonishment. Gentlemen, did any of you ever hear of *Brain*-cough—or *Ear*-cough—or *Eye*-cough? —No!—But you have, of course, heard two doctors discussing with the greatest gravity imaginable, whether a particular complaint was incipient consumption or "*Stomach*-cough;" as if people in these days coughed with their stomachs instead of their lungs! Only let a fashionable physician give currency to this kind of false coin, and it will pass for genuine, till some suspicious character like myself shall submit it to analysis at the mint of Common Sense,—and then—what then?—Why people will scarcely even then believe the evidence of the whole of their five senses put together,—for, as some one says, when the gullible public once get hold of a *lie*, they become so enamoured of it, that nothing but death will make them part with it. Who first introduced the phrase "stomach-cough," I do not know; but Dr. Wilson Philip, at all events, insists that "indigestion or dyspepsia" is the remote *Cause* of a variety of Consumption; and in proof of this he tells us he has cured it with minute doses of mercury. Now, if that were any proof of the *Origin* of a disease, every disease in existence might be termed a "stomach affection;" for I know very few chronic complaints, however grave, which I have not myself cured by the same medicine;—ay, and have seen aggravated by it too. In the latter case, of course, the complaint could not be a "stomach disease." Direct your attention, says Dr. Philip, to the digestive organs, and you will improve the subject of "*dyspeptic* phthisis." And so you may, if you direct your attention to any other part of the body of a consumptive patient,—for what part of the body of such a patient performs its functions correctly? In this disease the feet and hands feel cold and hot by turns, the skin one moment harsh and dry, is at another bedewed by a cold and clammy sweat. Are these *causes* or *coincidences?* May you not as well say, Cure the consumption, and the digestive powers will improve, as, Cure the indigestion, and you will stop the consumption? Medical men constantly talk of indigestion as an essence or entity having features separate and distinct from all other disorders. Can any person, I ask, be the subject of any disease without his digestion being more or less implicated? What becomes of your digestion in FEVER?—or when you get bad news just as you are about to eat your dinner? Though you were as hungry as a hawk a moment before, your appetite would leave you then. Gentlemen, have we a *Brain*, or have we not? Give a man a blow on that, and see what becomes of his digestion! How

much the workings of this organ have to do with the functions of the stomach, we have a lesson in the play of Henry VIII. Mark what the fiery monarch says to Cardinal Wolsey when surprising him with the proofs of his treachery—

> ——— Read o'er this,
> And after, this; and then to breakfast
> With what *appetite* you have.

Do you doubt that the *breathing* of a man thus suddenly and unceremoniously surprised would be as much affected at such a moment as his appetite? See then the absurdity of placing naturally *coincident* circumstances in the light of cause and effect! Shakspeare knew the influence of a passion upon the *totality* of the body better than half the faculty, and I am not sure that he could not have prescribed to better purpose than them all put together. Do you think in cases of this kind he would have troubled his head about the digestive organs, or that he would have said, like many of the great doctors of the day, "we must put the stomach and bowels to rights!" Certainly not; he would have made the Brain his first care;—he would have first tried to soothe and comfort that, and then he would have expected the appetite to return. Now, that is what ought to be done in all complaints, indigestion and consumption included. Every organ of the body is of importance in our economy,—but the Brain is *so* important an organ that people cannot live a moment without it; and whatever affects it, for good or for evil, equally, for good or for evil, affects every other part of the body,—the lungs as much as the stomach. Through the medium of the Brain and nerves only, can mercury or any other medicine influence the diseases of these two last-mentioned organs, whether advantageously or the reverse; and, as I have already told you, mercury can do *both*,—according to the correspondence and *fitness* it hath for individual bodies, and the *scale* or *degree* in which it may be administered. But upon the subject of appetite the greatest nonsense prevails, even in the profession. You hear that such a one is ill—very ill,—but, thank Heaven! his appetite still keeps "good." How, then, is it that the patient continues day by day to waste and become skeleton-like? It is because that man's appetite, so far from being "good—nay excellent," is *morbidly voracious* and craving, having as much resemblance to the appetite of health as the diabetic flow of urine has to a useful—that is, a moderate—secretion from the kidneys. No man can possibly be the subject of disease of any kind without his digestive organs partaking in the general *totality* of derangement. Whatever can improve the general health in one case may do the same in the other. Now though the chrono-thermal remedies, judiciously administered *during the remission*, may of themselves singly cure almost every kind of disease,—yet it is my custom to combine and alternate them, as I have already said, with such medicines as experience proves have more or less affinity to the particular parts of the body most implicated in a given case,—mercury, iodine, and emetics, for example, inasmuch as the cure may thereby, in many instances, be at least accelerated. The well-ascertained influence of mercury and iodine on the glandular and assimilative nerves, naturally points to those two medicines as being the most proper for consumption; and I feel it my duty to state to you that I have often availed myself of their beneficial influence in that disease. That they can produce it in cases where they prove constitutionally injurious, you will scarcely doubt, when you consider that whatever may injure the health of persons predisposed to chest-disease, may as certainly bring out that weak point of their frame. Instances produced by both, more particularly mercury, I have too often been compelled to witness.

Medical practitioners, when detailing the most strikingly remittent phenomena, in general manage so to word them that you cannot distinguish whether they be remittent or not. The more intelligent non-medical writer will often convey in his unsophisticated English the precise bearings of a case. Take an instance from Captain Hall's narration of the illness of the Countess Purgstall:—"Our venerable friend," he says, "though she seemed to rally, and was certainly in as cheerful spirits as ever, had gotten a severe shake; her nights were passed in coughing, high *fever*, and sharp

rheumatic pains,—but in the *day-time she appeared so well*, that it was scarcely possible to believe her dying, in spite of her constant assertion to that effect." [*Schloss Hainfield.*] Now, in such a case as this, would not the responses of the stethoscope differ materially according to the time they were taken? The indications obtained through its medium could not possibly be the same by night as by day.

When I first published my sketch of the Chrono-Thermal System of Medicine, I had the misfortune among other things to find myself at issue with certain medical critics on this very subject of the stethoscope. My undisguised contempt for their wooden idol fired two of them, at least, with a common indignation; for while Dr. Forbes, in his *Review*, made this a reason for pointing out to me "the advantages of common sense over the want of it," I found myself charged, on the same score, in the pages of Dr. James Johnson, with "profound ignorance and inveterate prejudice." To the strictures of both reviewers I replied in the *Lancet*. The utter inutility of the instrument in diseases of the Heart having, as you have seen, been since acknowledged by Dr. James Johnson himself, I will only now detain you with a few remarks as to its value in Pulmonary Consumption.

Permit me, I said to my very polite critics, to ask you a very plain question.—Since the stethoscope first came into fashion, have you or any other physician been able to bring this or any other disease of the chest to a more favourable termination than formerly? Hitherto, I never could obtain but one answer to this question, and that answer was always a negative. But softly, you will say—Has it not taught us to discriminate and distinguish one disease from another? Admitting for the present, that such is the fact, (which, however, I shall shortly disprove,) of what use, I again ask, is such discrimination, such change of one kind of verbiage for another, if it lead to no difference or improvement in practice—if our remedial measures, for all shades and variations of pectoral disorder, come at last to the same agency? What is it but a vain waste of time in splitting straws to attempt to distinguish by some nice *auricular* sign, severe disease of *one* tissue of the pulmonary substance from another, if the proper treatment of every kind of lung disorder be the same? If you reply, It is a satisfaction to know whether the disease be CURABLE or not, I give you for rejoinder the fact, that where the symptoms are so grave as to be with difficulty distinguished from true tuberculous consumption, the disease, in that case, may either, like such consumption, under certain circumstances, admit of cure, or, like the same disorder in its very advanced stages, as certainly terminate in death.

"Rush, Portal, and the most judicious physicians," says Dr. Hancock, "have constantly regarded Consumption to be a disease of the constitution, *not consisting merely of ulceration* or loss of substance in the lungs—of course not to be disposed of by stethoscopes or any oracular mummery. Hence too, we see the reason that consumption formerly, in the times of Morton, Sydenham, Bennet, and others, was not regarded as an incurable disease." Let us, however, for argument's sake allow that a knowledge of the exact amount of lung-decomposition could be turned to some useful or practical account; are my critics so certain that the stethoscope is adequate to the detection of this? Andral, an authority to whom "pathologists" on all occasions implicitly bow, candidly admits its deficiency. "*Without other signs*," he says, "the stethoscope does NOT reveal with certainty consumption and inflammations of the heart." And Dr. Latham, who has taken no small pains to advocate its employment, admits that the best Auscultators even—the technical term for those who use it—have been led to a wrong prognostic by it. "To MOST patients," he adds, "I fear it is a TROUBLE and DISTRESS." Now this is just the reason why I repudiate its assistance;—whatever TROUBLES and DISTRESSES the patient must not only alter all the movements of his heart and lungs, so as to neutralise the whole indications presented by them; but must actually aggravate the state of his system throughout; and, by consequence, instead of tending to the relief of the part most implicated, must further increase its diseased state.

Well then, as the information obtained from the stethoscope must from the nature of things, be as hollow and empty as the toy through which it proceeds—and as the discovery of the degree of organic change, even could it be known to a nicety, can, in *no instance*, lead to practical improvement, I am content to judge of it from the patient's general appearance, the number of his respirations, and the sounds emitted when he speaks, breathes, and coughs, as appreciable by the naked ear. From an instrument whose employment TROUBLES and DISTRESSES the MAJORITY of patients, I look for no superior information; for, I repeat, whatever troubles and distresses people's brains, will assuredly trouble and distress their bodies, particularly the weaker parts of them.

Gentlemen, we are all liable to trust too much to our ears. In Diseases of the Chest, as on most other occasions, we should do well to examine things with our eyes. When consulted about disorders of that cavity, our business is to watch well the countenance of the patient, to mark whether his breathing be hurried, or the reverse, whether he has lost flesh, or begins to gain it; and from whatever part of the lungs the matter expectorated may proceed, we can be at no loss for the proper principle of treatment;—our eyes will soon tell us whether he gets better or worse, and whether a particular medicine should be continued or changed for another. In the case of any very material change in the lungs, such as an abscess, cavern, or solidification of a part of their substance, if *large*, such local disease will get smaller as the general health improves,—if *small*, it will grow larger should that get worse. More than this,

> ——— There need no words, nor terms precise—
> The paltry jargon of the *Schools*,
> Where Pedantry gulls Folly;—we have EYES!

With these, then, let us recur to Nature, and we shall have no need to ask of professors and other great persons whether consumption and other chest-affections, be remittent disorders or not. When once satisfied of that, you, Gentlemen, may be sure that quinine, opium, and the other Curono-Thermal medicines, will be of infinitely more avail for their cure than all the discussion and discrimination of all the doctors that ever mystified disease by their vain nosologies! What cares the patient about the alphabetical combination, by which you baptize his disease, if you cannot make him better; and if you succeed in curing him, what does it signify, whether you call it one name or another? But the name, it may be said, has to do with the prognostic. To that I reply,—Even when despairing of success, you will do well to guard yourselves against a too decided prognostic in any case. How often have I heard patients, who had formerly suffered from chest-disease, boast that they had *lived* to cheat their doctor of the *death* to which he had theoretically doomed them,—ay, and that doctor a stethoscopist!

It is truly amusing to find men playing the critic, without the smallest pretension to the knowledge requisite for such an office. So ignorant was my *Medico-Chirurgical* Reviewer, Dr. James Johnson, of one of the most universal laws, both of Health and Disorder, as to accuse me of a limited grasp of my profession, for making Fever,—"not Fever in the large sense of the word, but only *Remittent* fever,"—my primitive type of all diseases. He chuckled that he could confront me with the school-boy term, "*Continued* Fever," "Fever in the LARGE sense of the word;" but according to a living professor, Dr. A. T. Thompson, in *Continued* Fever, in almost every case, there is an *Exacerbation* towards mid-day, and the *Remission* towards morning. Another contemporary, Dr. Shearman, says, "an *Intermittent* is the most perfect form of fever, having the most complete periods of accession and intermission. The *Continued* Fever, *as it is called*, differs from this only in its periods being less perfect and the stages of its curriculum less obvious."—Cullen long ago said the same thing in nearly the same words; and almost every other writer on fever since his time has noticed it. But so great a blunder, in the eyes of Dr. Johnson, was my preference of the *perfect* rather than the *im*perfect form of fever, for my type of all disease, that he not only condemned my doctrine *in toto*, as a *Pyrexy-Mania*, or fever-

madness, but he assured his readers my madness had a method in it. Gentlemen, whether or not Dr. James Johnson's own practice does better deserve to come under the head of madness,—savouring too of a rather sanguinary and homicidal type of it—I shall by-and-by have an opportunity of showing you. Meantime I may observe, that—

——Though I hope not hence unscathed to go,
Who conquers me shall find a stubborn foe!
The time hath been when no harsh sounds would fall
From lips that now would seem imbued with gall,
Nor fools, nor follies tempt me to despise
The meanest thing that crawls beneath mine eyes;
But *now* so callous grown, so changed since youth,
I 've learned to *think*, and sternly *speak* the Truth,—
Learned to deride the CRITIC'S starch decree,
And break him on the wheel he meant for me;
To spurn the rod a scribbler bids me kiss,
Nor care if courts or crowds applaud or hiss.—BYRON.

Having already adverted to

GLANDULAR DISEASE,

I will just shortly observe, that complaints of this kind, whether involving some large gland such as the Liver, Pancreas, or *Spleen*,—if the last mentioned viscus be indeed a gland—or taking place in the glandular apparatus of canals, the lachrymal and biliary ducts, the eustachian, salivary, and urinary passages, for example,—such disorders may all be advantageously treated by the various Chrono-Thermal medicines, and more certainly so, if combined with minute doses of Iodine, Mercury, and other remedies which have a well-known glandular affinity. Disorders of the smaller glands, whether situated in the neck, arm-pit, or groin, or in the course of the mesentery, are for the most part termed "scrofula," and by some practitioners presumed to be incurable,—than which nothing can be more erroneous, unless it be the system which renders them so;—namely, the application of leeches to the tumours, and the purgatives so unsparingly employed by many in their treatment. All these various diseases are features or effects of Remittent Fever;—by controlling which with the chrono-thermal agents, they may all, in the earlier stages, be at once arrested; and some, even of a chronic character, perfectly cured by a combination of these remedies with mercury or iodine. I could give cases innumerable in proof of this, but as I have so well established the principle in structural disease, and have still further to illustrate it in the disorders we are about to enter upon, I shall not detain you further on this matter.

CONSUMPTIVE DISEASES OF JOINTS.

Very much akin to Consumption of the Lungs are various diseases which, from their external manifestations, have been too long left under the exclusive dominion of the Surgeons; namely, those destructive affections of the Joints, which so often bring the subjects of them to the amputating table. I forget the particular operative eminent who thanked God he knew nothing of physic! Such a confession was very proper for a butcher—for the barber-surgeons of former ages;—but the medical man who, by well-directed remedies, prefers the honest consciousness of saving his patient from prolonged suffering and mutilation, to the spurious brilliancy of a name for "Operations," will blush for the individual whose only title to renown was the bliss of his boasted ignorance, and a mechanical dexterity of hand unenviably obtained by an equally unjustifiable waste of human blood. It is truly atrocious in the legislature of this country to permit the present hospital system,—a system that only encourages ignorance, presumption, and heartless cruelty. No man in his senses would put himself under the care of an "Hospital Surgeon," if he knew that scarcely one of those self-conceited creatures is in the very least acquainted with physic. What would some of these supercilious mechanics say to the following cases?

Case 1.—Harriet Buckle, seven months old, had what is called a scrofulous elbow. The joint was much enlarged, red, painful, and pervious to the probe, with discharge. The patient was the subject of *diurnal fever*. Notwithstanding the assurances of the mother that amputation had been held out as the only resource by two "hospital surgeons," under

whose care the child had previously been, I confidently calculated on success. A powder containing calomel, quinine, and rhubarb, in minute doses, was directed to be taken every third hour. The case was completely cured in a fortnight, without any external application.

Case 2.—A young gentleman, aged 11 years, had enlarged knee, with great pain and heat, which came on in paroxysms. Leeches, blisters, and purgatives had all been ineffectually tried by his "hospital surgeon," who then proposed amputation; the boy's mother hesitated, and I was called in. I prescribed minute doses of calomel and quinine. From that time the knee gradually got better, but stiff joint was the result,—*anchylosis* or adhesions having taken place before I was consulted.

Case 3.—Another young gentleman, aged *seven* years, son of Lord C—, was brought to me from Brighton, with his knee as large as a young child's head; abscesses had formed about the joint, and were still discharging when I first saw him. I prescribed chronothermal treatment; and notwithstanding that his limb had been condemned to the knife by his Brighton "hospital surgeon," I obtained a complete cure—a partial anchylosis only remaining. He had also been a patient of Sir B. Brodie before I was consulted.

Case 4.—A boy, aged six, began to lose flesh, to walk lame, and to complain of pain of *knee*, stooping occasionally to place his hand upon it when he walked. There was some *alteration in the appearance of the hip* of the same side, when I was requested to see him. I adopted a similar treatment as in the above case, and the child rapidly recovered his health, with the complete use of his limb. He had been previously seen by a surgeon, who, though the *knee* was the painful part, rightly pronounced the case to be one of *Hip*-disease. To the knee, as you know, instead of the hip, the little patient constantly refers his complaint, a circumstance which occasionally deceives the attending practitioner as to the nature and locality of this destructive disease.

Case 5.—A girl, aged 12, had enlarged ankle, with an open ulcer leading into the joint. Amputation, according to the mother, was looked upon as the inevitable termination of the case by two "Hospital" surgeons, under whose care the patient had been for twelve months previously to my seeing her. With small doses of quinine and calomel, the girl regained her health, and the ankle got well in six weeks.

The curious in Nosology (or the art of *naming* diseases) might demand the technical terms for these various affections. Will they be content with the simplicity of JOINT CONSUMPTION? Truly in surgical authors they may find verbiage enough to distinguish them all, such as "Scrofula," "White-swelling," "*Morbus Coxarius*," "the Evil," &c., but whether or not these words be explanations, I leave to more learned heads than mine to decide.

There is not a disease, Gentlemen, however named or by whatever caused, of which the most perfectly periodic examples might not be given; and the only difference between diseases in this type, and their more apparently continued forms, is, that the periods of the latter are less perfect, and the stages of their curriculum less marked than in the former. No physician will doubt that a purely periodic disease, whatever be its nosological name, partakes of the nature, and is more or less amenable to the treatment successfully followed in ague. Why, then, deny that the same disease, when less obviously periodic, partakes of that variety of ague misnamed "Continued" Fever, since all disorders like it have remissions and exacerbations, more or less perfect in character, throughout their whole course? What are such diseases but varieties of the more purely intermittent type? And what the remedies found to be most beneficial in their treatment, but the remedies of most acknowledged efficacy in simple ague?

Remission and Paroxysm are equally the law of what are termed *local* diseases, as of the more general symptoms which are supposed to be the exclusive province of the physician. John Hunter seems to be the only surgeon who has remarked this:—"Exacerbations," he says, "are common to all constitutional diseases, and would often appear to belong to many local complaints." Gentlemen, they belong to all. You may observe them even in the case of disease from local injury: and here I may give you an instance in illustration of

this, contained in a letter to me from Mr. Radley, of Newton Abbot, Devon, a gentleman well known for his improved method of treating fractures. Mr. Radley writes thus:—"Many thanks to you for the 'Unity of Disease,' which contains in it more of the true philosophy of medicine than any book I have ever yet seen. There are some passages that threw me into an ecstacy of delight on reading them. On the other side I send you a case strikingly illustrative of the truth of your new doctrine, and one that was presented to me in my own favourite class of subjects. It was not elicited by inquiry, but thrust most unexpectedly upon my notice; and had not your work prepared me for such a fact, I will be so candid as to say the fact would have been lost upon me:—G. Manning, aged 42, fractured the tibia on the 2nd instant. It was a simple fracture, with much contusion. To soothe the pain, he had a solution of morphia after the limb had been laid on a pillow. When three days had elapsed, he still complained of pain, and on my inquiring when he suffered most, 'Why, zur, 'tis very curious to me, for the pain comes every twelve hours *quite regular*, about midnight, when it lasts one hour and a half or two hours, and again in the middle of the day.' The patient is now doing well under *Bark*."

Every surgeon of experience is aware of the severe and occasionally fatal operations resorted to for the purpose of obtaining a reunion of fractured bones in particular constitutions—of the setons which have been passed between their ends, and of the knives and saws by which they have been scraped and pared,—those horrible local means for constitutional effects. Dr. Colles of Dublin, indeed, introduced a constitutional mode of treating such cases; but it was confined to one medicine, mercury, and that failing in other hands, it has not been generally followed. Several years ago, while in medical charge of Her Majesty's 30th Foot, in the East Indies, it was my fortune to obtain the most satisfactory result, in the case of a soldier of that regiment, by the exhibition of Quinine. The man had remittent fever,—the true constitutional reason why fractured bones refuse to unite under ordinary means.

Inquire of the subject of Goitre or other tumour; question the unfortunate persons who ask your advice in cases of cancer; such as suffer from abscess or ulcer; or those even who consult you for the true aneurismal tumour of an artery,—and each and all will admit that they are one day better, another worse; that their *swellings at intervals decrease;* that their ulcers become periodically more or less painful; that the size of both varies with the variations of heat and cold, damp or moisture of the weather; that their diseases are often materially influenced by a passion, or by good or bad news; that in the commencement, at least, there are days, nay hours of the same day, when they have a certain respite from their pain and suffering; and that they all experience in their bodies the thermal variations which we call fever,—some referring these last to the head or back, while others associate them with the chest, loins, arms, or feet. Gentlemen, can you doubt the advantage of pursuing a chrono-thermal system of practice in such cases?

For the present we must pause. Our next business shall be to explain the meaning of the word Inflammation, and to expose the terrible errors daily committed in the treatment of cases so called.

LECTURE IV.

INFLAMMATION—BLOOD-LETTING—ABSTINENCE.

GENTLEMEN,

When medical men hear that I am in the habit of treating all kinds of disease *without* Blood-letting, they generally open their eyes with a stare, and ask me what I do in INFLAMMATION. Inflammation!—who ever saw any part of the body *on fire*, or in FLAMES? for the word, if it means anything at all, must have something like that signification. To be sure, we have all heard of "spontaneous combustion," but I confess I never saw it, nor what is more, anybody that ever did! What, then, is this inflammation—this term which our great modern doctors so

dogmatically assure us is the head and front of every corporeal disorder? It is a metaphor merely—a theoretical expression, which, torture it how you please, can only mean a quicker motion and a higher temperature in the moving atoms of a given structure, than are compatible with the healthy organisation of that structure. When you find a considerable degree of heat and swelling, with pain and redness in any part, that part, in medical language, is "inflamed." Now, what are these phenomena but the signs of approaching structural *decomposition?* During the slighter corporeal changes, the coincident variation of temperature is not always very sensibly perceptible; but whenever there is the least tendency to decomposition, this thermal change is sure to be one of the most prominent features. The phenomena termed inflammation, then, very closely resemble the chemical phenomena which take place preceding and during the decomposition of inorganic substances. Now, when this kind of action proceeds unchecked, the result in most cases is a tumour, containing *purulent matter;* which matter being a new fluid product, differs entirely in its appearance and consistence from the original solid tissue, in which it chanced to become developed. This tumour we call *Abscess.* And how is it to be cured? In most instances, the matter, after working its way to the surface, escapes by an ulcerated opening of the integument; while in others, an artificial opening must first be made by the knife of the surgeon. In either case, the part in which the abscess was situated, generally recovers its healthy state by the reparative powers of nature. But there is yet another mode in which a cure may be effected, namely, by *Absorption;* that is to say, the matter of the abscess may be again taken up into the system, and by the inscrutable chemistry of life, become once more part and parcel of the *healthy* fabric of the body!—being thus again reduced to the elements out of which it was originally formed. How analogous all this to the operations of the chemist, who, by means of the galvanic wire, having first reduced *water* into its elemental gases, again, by electrical means, converts them into the water from whose decomposition they proceeded! Such, and many more chemical operations, Nature daily performs in the animal body; and that she does all this through the vito-electric medium of the BRAIN and NERVES, cannot possibly admit of dispute, when you come to consider that under the influence of a Passion (the most unquestionable of *cerebral* actions) abscesses of considerable size, and even solid tumours, have often completely disappeared in a single night. Gentlemen, there is not a passion,—Grief, Rage, Terror, or Joy,—which has not as effectually cured abscesses and other tumours, as the most powerful agents in the materia medica. The writings of the older authors abound in instances of this. But there are yet other terminations to the inflammatory process. For example, after having proceeded, to a certain extent, in the way of change, but still falling short of actual purulent decomposition, the atoms of the inflamed part, by the renewal of a healthy condition of the body generally, or by the direct application of cold or other agency, may again, with more or less quickness, subside into the degree of motion and temperature characteristic of their natural revolutions. This termination is called *Resolution.* When the inflammatory action is more than usually rapid, the result may be the complete death of the part implicated,—a black inorganic mass being left in the place of the tissue which it originally composed. This last we term *Mortification* or *Gangrene.*

But, Gentlemen, medical men extend the term inflammation to some other morbid processes, which, under the various names of Gout, Rheumatism, and Erysipelas, we shall, in another lecture, have the honour to explain to you. A great many books have been written upon this subject of Inflammation, but I must own I never found myself one whit the wiser, after reading any of them. Their writers, in almost every instance, use language which they do not themselves seem to have understood, otherwise they would have confined themselves to one sense, instead of including under the same term states the most opposite. Were I to tell you that the word "Inflammation" is used by many writers when

a part is more than usually *cold*, you would think I was laughing at you; yet there is nothing more true, and I will give you an instance.—A carpenter had his thumb severely bitten by a rattlesnake; and the effects of the venom are thus described by Mr. Samuel Cooper, in his lectures, published in the *Medical Gazette*:—"The consequence was, that in ten or eleven hours, the whole limb, axilla, and shoulder became very *cold* and enormously swollen up to the neck; in fact, the surface of the whole body was *much below* the natural temperature. The swelling, you know, is produced by that kind of INFLAMMATION which is called diffuse *inflammation* of the cellular tissue." Gentlemen, was there ever such an abuse of words—such an abandonment of common sense as this? The arm was "*very cold*"—"much *below* the natural temperature,"—yet it was INFLAMED—ON FIRE!

Restricted to the sense in which I have already spoken of the term,—namely, heat, redness, swelling and pain,—"Inflammation," like "Fever," or any other abstract word, may be used as a "counter to reckon by;" and, like almost every other phenomenon of disease, it is a developement of previous constitutional disturbance. I do not speak of immediate local inflammation produced by a chemical or mechanical injury—leaving that to the surgeons to elucidate or mystify, according to their particular inclinations; I talk of inflammation from a general or constitutional cause. Has an individual, for example, exposed himself to a cold draught, or to any other widely injurious influence, he shivers, fevers, and complains of pain, throbbing, and heat in the head, chest, or abdomen, —phenomena gradually developed according to the patient's predisposition to organic change in this or that locality. Phrenitis, Pneumonia, Peritonitis, (technical terms for inflammation of the *Brain*, *Lungs*, and *membraneous covering* of the Bowels,) are consequences or features, not *causes* of the constitutional disorder. But do the symptoms of inflammation in such parts become as perfectly intermittent as the diseases of which we have already treated? Listen to Lallemand:—"In inflammation of the brain," he tells you, "you have spasmodic symptoms, slow and progressive paralysis, the course of the disorder being *intermittent*." Dr. Conolly, in his Cyclopædia of Medicine, says, "Diurnal *remissions* are distinguished in EVERY attack of inflammation." Now, if you prefer the evidence of another man's eyes to your own, this statement ought to be more than convincing, for it comes from the enemy's camp. It is the language of a gentleman who was formerly one of the editors of the *British and Foreign Medical Review*, a publication that first opposed my doctrines, and afterwards attempted to give the credit of them to another.

Whether the particular condition called Inflammation be termed erysipeloid, gouty, rheumatic, scrofulous, it is still *remittent*; and if you question the patient, he will in almost every case admit that it was preceded or accompanied by cold or hot fits, or both. May not inflammation, then, yield to Bark—to Quinine? The late Dr. Wallace of Dublin, maintained the affirmative, dwelling more particularly on its good effects in that disorganising inflammation of the Eye, termed *Iritis*, in which disease he preferred it to all the routine measures which, on the strength of a theory, medical men have from time to time recommended as "antiphlogistic." During an attack of Ague, he tells us, *Iritis* with inflammatory affection of other parts of the eye, occurred in the person of a patient under his care. "For the former complaint, namely, the Intermittent Fever, he administered Bark; by the exhibition of which, he was surprised at seeing the *inflammatory affection* of the Eye, as well as the fever, *disappear*." This was the case which first led him to suspect the fallacy of the blood-letting system in inflammation of the Eye. Now I shall tell you what first led me to entertain similar doubts of its efficacy. A medical officer of one of her Majesty's regiments serving in India, couched a woman for cataract. The next day, the eye having become inflamed, according to received practice he bled the patient; but scarcely had he bound up her arm, when she fell as if she had been shot, and lay to all appearance dead. With the greatest difficulty, he succeeded in recovering her from this state; but it was not till

four long hours had passed, that he felt he could safely leave her with ordinary attendants; for during the greater part of that time, when he ceased to chafe her temples or otherwise call up the attention of the brain by the application of stimulants to the nose, mouth, &c., she relapsed into a death-like swoon. More than once he was even obliged to inflate her lungs to keep her from dying. But, in this case, Gentlemen, the blood-letting did NOT cure the inflammation; for the next day the eye was more painful and inflamed than ever, and the poor woman, after all the blood she had lost—and who will say that she was not bled enough?—did not recover her sight. It is now many years since that case came under my observation, and it made an impression on my mind I shall never forget. Had that woman died, would not everybody have said that the gentleman who bled her had killed her? and very justly too; though he, good man, only conscientiously put in practice what he had been taught to consider his duty. You see, then, that blood-letting, *even to the point of death*, is *no cure* for inflammation: that it is equally powerless in preventing the developement of inflammation, I shall furnish you with ample evidence before I finish this lecture. Meantime, I will tell you what can do both—Bark and Opium. These are the remedies to give before an operation, and they are also the remedies best adapted for the relief of inflammation after it has come on;—and their beneficial influence will be more generally certain in the latter case, if you first premise an emetic, and wait till its action has ceased before you administer them.

"The Peruvian bark," says Heberden, "has been more objected to, than any of these medicines (Bitters) in cases of considerable inflammation, or where a free expectoration is of importance; for it is supposed to have, beyond any other stomach-medicine, such a strong bracing quality, as to *tighten the fibres* (!) still more, which were already too much upon the stretch in inflammation; and its astringency has been judged to be the likely means of checking or putting a stop to expectoration." All this appeared *much more plausible when taught in the* SCHOOLS OF PHYSIC, than probable, when I attended to fact and experience. The unquestionable safety and acknowledged use of the Bark, in the *worst stage* of inflammation, when it is tending to a MORTIFICATION, affords a sufficient answer to the first of these objections; and I have several times seen it given plentifully in the confluent small-pox, without lessening in any degree the expectoration."

Some time ago, I was called to see a young gentleman, who had a swelling under the armpit, extending to the side. The skin was red and hot, and the tumour so painful as to have deprived him of all rest for the three previous nights. Though suppuration appeared to me to have commenced, I at once ordered Quinine, and begged him to poultice the tumour. By these means, he was perfectly cured in three days, the swelling having, in that period, completely disappeared. The subject of this case was, in the first instance, attacked with shivering and fever, which had repeatedly recurred, but disappeared under the use of the quinine. Matter, I have no doubt, was absorbed in this instance, but so far from this absorption producing shiverings,—which according to the doctrine of the schools, it ought to have done,—the very reverse took place.

I shall now give you one of many instances of indubitable and palpable inflammation—if the word have a meaning at all—as a proof of the value of Opium in the treatment of this affection. An old officer, Major F., 89th foot, who had previously lost one eye by acute Ophthalmia, notwithstanding a vigorous "anti-phlogistic" discipline, had the other attacked in a similar manner with great pain, redness, and throbbing. I found him leaning his head over a chair-back, his face indicative of intense agony. For ten nights, he assured me, he had been unable to tolerate any other position, and it was only towards morning, when overcome by suffering, that he could, at last, obtain anything like repose. The pain came on at bed-time in an aggravated degree, and remitted principally in the afternoon. Three grains of opium, which I directed him to take half-an-hour *before* the recurrence of the expected paroxysm, procured him a whole night of pro-

found sleep, and his eye, in the morning, to his astonishment, was free from pain, and only slightly vascular. He had been repeatedly bled, leeched, purged, and blistered, without even temporary benefit—indeed, the gentleman who attended him, in the first place, plumed himself upon the activity of his treatment.

But how, you may ask me, can PLEURISY and PNEUMONIA be cured without Blood-letting? What are Pleurisy and Pneumonia?—Any rapid tendency to change in the substance of the lungs, from the real pain and presumed increase of temperature at the same time developed, is termed Pneumonia—*vulgo* Inflammation of the lungs. A similar tendency to change in the substance of the membrane (*pleura*) which covers the outer surface of the lungs or of that portion of it which is continued over the inner surface of the chest, is called the Pleurisy. Now, authors have thought it a fine thing to be able to tell pleurisy from pneumonia, but the thing is impossible; and what is more, if it were possible, so far as the treatment is concerned, it would not be worth the time you should spend in doing it. Such distinctions only lead to interminable disputes, without in the least tending to improvement in practice. This much, however, I do know,—both diseases are developements of intermittent fever, and both may often co-exist at one and the same time. And in the *Medical Gazette* there is an excellent case of the kind, which, as it in a great measure illustrates the chrono-thermal doctrine and treatment in both, I shall give to you in the words of its narrator.—"The patient's symptoms were difficult respiration, dry cough with stringy expectoration, pulse full. The disease commenced with an intense *fit of shivering*, followed by *heat* and a severe cough. Every day at noon there was an *exacerbation* of all the symptoms, commencing with very great shivering, cough, and intolerable pain in the chest, a fit of suffocation, and finally a *perspiration*;—at the end of an hour the paroxysm terminated. Ammoniacal mixture was first given, then two grains of *Quinine* every two hours. The very next day the fit was scarcely perceptible; the day after, there was no fit at all. An observation worthy of remark is, that the symptoms of PLEURO-PNEUMÓNIA,—which continued throughout in a very slight degree, it is true, in the intervals of the paroxysms—disappeared completely, and in a very short time, by the effect of the sulphate of quinine."

Who are the persons most subject to inflammatory disease of the chest? Medical theorists answer, "strong healthy labourers, and people much exposed to the air." How these gentlemen deceive themselves! If I know anything at all upon any subject, I know that the fact in this case is just the reverse. The subjects of chest-disease in my experience have been almost all persons of a delicate habit, many of them confined to badly-ventilated rooms, and the greater number broken down by starvation, blood-letting, or previous disease. Some of you may have heard of M. Louis of Paris, a physician who for many years has made chest-disease his study. Speaking of his consumptive patients, who became the subjects of *inflammatory* disease, he has this observation:—"As we have already remarked in speaking of *Pneumonia*, the invasion of *Pleurisy* coincides in a large proportion of our patients with *the period of extreme weakness and emaciation*."—[Dr. Cowan's translation of Louis.]

Now, what is the usual treatment of Pleurisy and Pneumonia? Does it not almost entirely consist in blood-letting, starving, and purging—with blisters and mercury sometimes? But what are the results?—relapse or repetition of the paroxysm from time to time,—long illness,—weakness ever after, and death too often. Even in these cases of extreme emaciation, M. Louis applies leeches! Contrast the case I have just given you from the *Medical Gazette*, with the case and treatment of an individual, whose omnipotent power of setting a theatre in a roar may be still fresh in the recollection of many of you—the celebrated Joe Grimaldi. The very name excites your smile!—but upon the occasion to which I refer, the poor clown, instead of being in a vein to move your laughter, very much wanted your sympathy. "Monday, the 9th of October," says Mr. Charles Dickens, "was the day fixed for his benefit, but on the preceding Saturday, he was suddenly seized with

severe illness, originating in a most distressing impediment in his breathing. Medical assistance was immediately called in, and he was bled until nigh FAINTING. This slightly relieved him, but shortly after he had a relapse, [return of the paroxysm?] and four weeks passed before he recovered sufficiently to leave the house. There is no doubt (continues Mr. Dickens) but that some radical change had occurred in his constitution; for previously he had never been visited with a single day's illness, while, after its occurrence, he never had a single day of perfect health." If you reflect that medical relief was *immediately* called in, you may be inclined, like myself, to ascribe poor Grimaldi's damaged constitution, not so much to the effect of the original disorder, as to the sanguinary treatment adopted in his case. Whether or not he had the additional medical *advantage* of being starved at the same time, I do not know; but lest it might be inferred that his continued illness was owing to the neglect of this very excellent part of *antiphlogistic* practice, I may just hint that there have been such things as inflammation of the lungs *brought on* by starvation. Witness the verdict of a coroner's jury, in the case of a pauper, who died not long ago in the Whitechapel Workhouse. "That the deceased died from *inflammation* of the lungs, produced by exposure and *want*." The verdict in question was only in accordance with the evidence of the surgeon of the workhouse.

In acute disease of the chest—whether involving the *pleura* simply, the interstitial substance of the lungs, or the *mucous* or *muscular* apparatus of their air-tubes, your first duty is to premise an emetic. So far from acting exclusively on the stomach, medicines of this class have an influence primarily *cerebral*, and they therefore act powerfully upon every member and matter of the body. By emetics you may change the existing relations of the whole corporeal atoms more rapidly and effectually than by any other agency of equal safety in the Materia Medica. Every kind of chest-disease being a mere feature or developement of fever, whatever will relieve the latter will equally relieve the former. The value of emetics in the simpler forms of fever, few will be sufficiently bold to deny; and the quickness with which the same medicines can alter the state of an inflamed part may be actually *seen* by their effects on the eye, in the inflammatory affections of that organ. You have only to *try* them in chest-disease to be satisfied of their inestimable value in cases of this kind. Instead, therefore, of talking of the temporary good you have occasionally seen done by the lancet in inflammations of the chest, call to mind the many deaths you have witnessed where it had been most freely used,—to say nothing of the long illnesses which have been the lot of such as have escaped the united bad effects of chest-disease and loss of blood. Whatever salutary influence, as a *present means of relief*, blood-letting may produce, it is infinitely inferior to what you may obtain by emetics—a class of remedies which possess the additional advantage of giving that relief, without depriving the patient of the material of healthy constitutional power. Their influence, moreover, as a *preventive* against return of the paroxysm is very considerable;* while blood-letting, so far as my experience goes, has only, on the contrary, appeared to render the patient more liable to a recurrence.

Lord Bacon tells us in his Works, that if disciples only knew their own strength, they would soon find out the weakness of their masters. What led him to this conclusion? What but the fact that, with all his ability, even he, Lord Bacon, had been duped by his teachers?—and why did Des Cartes say, that no man could possibly pretend to the name of philosopher who had not at least once in his life doubted all he had been previously *taught?* He too had been hood-winked by his pretended masters in philosophy. But *you*, perhaps, will say all this took place in old times—the world is quite changed since then; professors are now the most enlightened and respectable men alive; they go to church, where they are examples of piety; they never were *found out* in a lie; are not subject to the

* This statement, when I first published it, was denied by physicians, but it has been since confirmed by Dr. Seymour of St. George's Hospital, who recently made some remarks upon the power of Emetics in "altering the *Periodicity* of Disease."

passions of other men; have no motives of interest or ambition,—in fact, they are all but angels. Now, I only wish you knew the manner in which most of these very respectable persons get their chairs—the tricks, the party-work, the subserviency, meanness, and hypocrisy practised by them for that and other ends—and you would not so tamely submit your judgment to their theoretic dreams and delusions. Young men, *be* MEN,—and instead of taking for gospel the incoherent and inconsistent doctrines of the fallible puppets whom interest or intrigue has stuck up in Academic Halls,—use your own eyes, and exercise your own reason! Here, then, I give you a test by which you may know the best practice in inflammatory diseases of the chest—a test that cannot possibly deceive you. Take a certain number of pleuritic and pneumonic patients—bleed, blister, and physic these after the most orthodox fashion; so that you shall not be able to tell, whether the continued disease be the effect of the primary cause, or the heroic measures by which your patients have been worried during their illness. Take another equal number similarly afflicted, and treat them chrono-thermally,—that is to say, premise an emetic, and when, by means of this, you have obtained a remission of the symptoms, endeavour to prolong such period of immunity, by quinine, opium, or hydrocyanic acid; and then compare the results of both modes of practice. If you do not find an immense saving of suffering and mortality by the latter mode of treatment, I will consent to be stigmatised by you as an impostor and deceiver—a cheat—a quack—a person, in a word, who would rather teach error than vindicate truth. Remember, however, before you begin, that the Chrono-Thermal System professes, as its chief feature of superiority over every other, to make *short work* with disease,—a circumstance not likely to recommend it to those whose emolument, from the manner in which things are now ordered, arises principally from long sickness and much physic!

I am often asked how I treat *Enteritis*,—Inflammation of the Bowels,—without the lancet? Before I give my answer, I generally ask—Can medical men boast of any particular success from depletion in this disease? If so, why have they been always so solicitous to get the system under the influence of calomel,—or why do they prescribe Turpentine in its treatment? Is it not because the nature of the relief afforded by the lancet has either been temporary or delusive; or, what I have myself found it to be, absolutely hurtful in the majority of cases? "The symptoms of Enteritis," says Dr. Parr, "are a *shivering*, with an uneasiness in the bowels, soon increasing to a violent pain,—occasionally at first *remitting*, but soon becoming continual. Generally, the whole abdomen is affected at the same time with spasmodic pains, which extend to the loins, apparently owing to flatulency. The pulse is small, frequent, generally soft, but sometimes hard, and at last irregular and intermittent—the extremities are cold—the strength sinks rapidly." "Perhaps," he adds, "bleeding is *more seldom necessary* in this disease than in any other inflammation; for it rapidly tends to mortification, and should it not at once relieve, it soon proves fatal." In a letter which I received from Staff-Surgeon Hume, he says: "I am satisfied that Pneumonia and *Enteritis*, diseases which are at present the bugbears of the faculty, are indebted for their chief existence to the remedies employed in ordinary ailments, namely, bleeding and unnecessary purging. I never saw a case of either, (and I have seen many) of which the subject had not been the inmate of an hospital previously, where he had undergone the usual 'antiphlogistic regimen,' — or had been otherwise debilitated, as in the case of long residence in a warm climate." Now, Gentlemen, this is the language of an experienced Medical Officer of the Army, one who, having no interested end to serve, and who would not take private practice if offered to him, is at least as worthy of belief as those whose daily bread depends upon the extent and *duration* of disease around them. My own practice in Enteritis I will illustrate by a case. I was one evening requested to see a person very ill: I found him with severe pain of abdomen, which would not brook the touch, furred tongue, hard pulse, and hot skin; he told me he had shivered repeatedly, that the

pain was at first *intermittent*, but at last constant. He had been seen in the morning by a gentleman, who had ordered him Turpenti e and Calomel—a proof that he also considered the case as one of inflammation of the bowels. The patient having obtained no relief, I was called in. I gave him an emetic, and in about twenty minutes I again saw him. The vomit had acted powerfully, and with such relief that he could then turn himself in bed with ease, which he could not before do. I then prescribed prussic acid and quinine. In a few days he was as well as ever. Instead of bringing theoretic objections to this method of treating inflammation of the bowels, let practitioners only *put it to the proof*. Is it possible that they can be less successful with the new practice than with the old, under which, when they save a patient in this disease, they are fain to boast of it as a wonder!

I shall now enter at some length upon the subject of

Blood-Letting.

While with one class of practitioners, Medicine is reduced to the mere art of purgation, with another class it consists in the systematic abstraction of blood; every means being resorted to in the mode of doing this, from venesection, arteriotomy, and cupping, to the basest application of the leech. In the remarks, Gentlemen, which I am now about to make on the subject, instead of discussing the preferable mode of taking blood away, I shall bring before you some facts and arguments that may convince you of the perfect possibility of dispensing with the practice altogether.

"The imputation of novelty," says Locke, "is a terrible charge amongst those who judge of men's heads as they do of their perukes, by *the fashion*—and can allow none to be right but the received doctrine." Yet, in the words of the same acute writer:—"An error is not the better for being common, nor truth the worse for having lain neglected; and if it were put to the vote anywhere in the world, I doubt as things are managed, whether Truth would have the majority; at least while the authority of men, and not the examination of things must be its measure." In the same spirit, Lord Byron asks:

> "What from this barren being do we reap?
> Our senses narrow, and our reason frail,
> Life short, and TRUTH a gem that loves the deep,
> And all things weighed in *Custom's* falsest scale.
> *Opinion* an omnipotence—whose veil
> Mantles the earth with darkness—until right
> And wrong are accidents—and men grow pale
> Lest their own judgments should become too bright,
> And their free thoughts be crimes, and earth have too much light!"

The operation of Blood-letting is so associated, in the minds of most men, with the practice of physic, that when a very sensible German physician, some time ago, petitioned the King of Prussia to make the employment of the lancet *penal*, he was laughed at from one end of Europe to the other. This you will not wonder at if you consider that the multitude always think "whatever *is* is right;" but a little reflection will teach you that there must have been a period in the world's history when the lancet was unknown as a remedy;—and that many centuries necessarily elapsed before it could even be imagined that loss of blood might alleviate or cure disease. Nations, nevertheless, grew and prospered. To what daring innovator the practice of physic owes the *Curse* of the lancet, the annals of the art leave us in ignorance; but this we know, that its introduction could only have been during the infancy of Medicine, when remedial means were yet few, and the mode of action of remedies totally unknown. It was the invention of an unenlightened,—possibly, a sanguinary age; and its continued use says but little for the after-discoveries of ages, or for the boasted progress of medical science.

It was once a question whether or not the blood be *alive*. That question is now definitely settled. John Hunter, to the conviction of everybody, proved that the Blood lives;—and every drop that artificially leaves the system is admitted, even by those who take it away, to be a drop of life. He who loses a pint of blood loses a pint of his life. Of what is the body composed? Is it not of Blood, and Blood only? What fills up the excavation of an ulcer or an abscess? What reproduces the

bone of the leg or thigh, after it has been thrown off dead, in nearly all its length? what but the living BLOOD, under the vito-electrical influence of the Brain and Nerves! How does the slaughtered animal die? Of loss of blood solely. Is not the blood, then, in the impressive language of Scripture, "the life of the flesh?" How remarkable, that while the value of the blood to the animal economy should be thus so distinctly and emphatically acknowledged, Blood-letting is not even once alluded to, among the various modes of *Cure* mentioned in the sacred volume. We have "balms," "balsams," "baths," "charms," "physic,"—"poultices," even,—but loss of blood, never! Had it been practised by the Jews, why this omission? Will the men who now so lavishly pour out the Blood, dispute its importance in the animal economy?—will they deny that it forms the basis of the solids?—that when the body has been wasted by long disease, it is by the Blood only it can recover its healthy volume and appearance? Has not nature done every thing to preserve to animals of every kind,

"The electric Blood with which their arteries run?"
BYRON.

She has provided it with strong resilient vessels—vessels which slip from the touch, and never permit their contents to escape, except where their coats have been injured by accident or disease. Misguided by theory, man, presumptuous man, has dared to divide what God, as a part of creation, united;—to open what the Eternal, in the wisdom of his omniscience, made entire! See, then, what an *extreme* measure this is! It is on the very face of it a most unnatural proceeding. Yet what proceeding so common, or what so readily submitted to, under the influence of authority and custom? If, in the language of the Chemist Liebig, the blood be indeed "the SUM of ALL THE ORGANS that are being formed," how can you withdraw it from one organ without depriving every other of the material of its *healthy* state? Yet enter the crowded hospitals of England—of Europe—and see how mercilessly the lancet, the leech, and the cupping-glass, are employed in the diseases of the poor. Look at the pale and ghastly faces of the inmates. What a contrast to the eager pupils and attendants thronging around their beds—those attendants with bandage and basin, ready at a moment's notice to take from the poor creatures whatever quantity of *life-blood*, solemn Pedantry may prescribe as the infallible means of relieving their sufferings! Do that, I say, and refrain, if you can, from exclaiming with Bulwer, "when Poverty is sick, the doctors mangle it!" What are the causes of the disorders of this class of people? In the majority of cases, defective food, and impure air. By these has their blood been deteriorated—and for what does the (so termed) man of science abstract it? To make room for better? No!—goaded on by the twin-goblins, "congestion" and "inflammation," to deteriorate it still further by starvation and confinement. Gentlemen, these terms play in physic much the same thing as others, equally senselessly misused, play in the common affairs of the world—

Religion, Freedom, Vengeance, what you will,
A word's enough to raise mankind to *kill*,—
Some *party*-phrase by *cunning* caught and spread,
That GUILT may reign, and WOLVES and worms be fed!
BYRON.

The first resource of the surgeon is the lancet—the first thing he thinks of when called to an accident is how he can most quickly open the flood-gates of the heart, to pour out the stream of an *already enfeebled* existence. Does a man fall from his horse or a height, is he not instantly bled?—has he been stunned by a blow, is not the lancet in requisition?—Nay, has an individual fainted from over-exertion or exhaustion, is it not a case of FIT—and what so proper as venesection!

You cannot have forgotten the fate of Malibran—the inimitable Malibran—she who so often, by her varied and admirable performances, moved you to tears and smiles by turns. She was playing her part upon the stage—she entered into it with her whole soul, riveting the audience to the spot by the very intensity of her acting. Just as she had taxed the powers of her too delicate frame to the uttermost—at the very moment she was about to be rewarded with a simultaneous burst of

acclamation, she fainted and fell—fell from very weakness. Instantly a medical man leapt upon the stage,—to administer a cordial? No —to bleed her!—to bleed a weak, worn, and exhausted woman! And the result?—she never rallied from that unfortunate hour. But, Gentlemen, Malibran was not the only intellectual person of the thousands and tens of thousands who have prematurely perished by the lancet.—Byron and Scott—those master-spirits of their age—those great men who, like Ariosto and Shakspeare, not only excited the admiration of cotemporary millions, but whose genius must continue, for generations yet unborn, to delight the land that produced them—they, too, fell victims to the lancet—they, too, were destroyed by hands which, however friendly and well-intentioned, most undoubtedly dealt them their death-blows. Is not this a subject for deep reflection? To the cases of these great men we shall recur in the course of this lecture; but for the present, we must turn to other matters—to events that have just passed before our eyes. The affair of Newport, in Wales, is still the topic of the hour. You must therefore remember it to its minutest detail—the attack by the rioters upon the town—the gallant and successful stand made by Captain Gray and his little detachment of the 45th regiment—the prisoners captured, and the investigation which afterwards took place. In the course of that inquiry, a prisoner, when under examination, *fainted*.—What was done with him?—he was carried out of court and immediately BLED! On his return, the newspapers tell us, an extraordinary change had come over his countenance. From being a man of robust appearance, he had become so wan and haggard, so altered in every lineament, the spectators could scarcely recognise him as the same prisoner. Yet, strange to say, not one of the many journals that reported this case, introduced a single word in condemnation of the utterly uncalled-for measure, which brought the man to such a state;—so much has *Custom* blunted the sense of the public to this the most dangerous of all medical appliances!

Gentlemen, a coroner's inquest was held upon a person who died suddenly. I shall read to you what followed from the Times newspaper of the 20th December, 1839, suppressing, for obvious reasons, the name of the witness. "Mr. ———, surgeon, stated that he was called upon to attend deceased, and found him *at the point of death*. He attempted to BLEED him, but ineffectually, and in less than a minute from witness's arrival, deceased expired. Witness not being able to give *any opinion* as to the cause of death from the symptoms that *then* exhibited themselves, he afterwards, with the assistance of Dr. Ridge, 37, Cavendish Square, made a *post-mortem* examination, and found that a large cavity attached to the large vessel of the heart, containing blood, had burst, and that that was the cause of death." So that while the man was actually dying of *inanition* from internal bleeding, the surgeon, utterly ignorant, according to his own confession, of the nature of the symptoms, deliberately proceeded to open a vein! How happens it that the lancet should be so invariably the first resort of IGNORANCE?

In every case of *stun* or *faint*, the employment of this instrument must be a superadded injury;—in all, there is a positive enfeeblement of the whole frame, evidenced by the cold surface and weak or imperceptible pulse; there is an exhaustion, which loss of blood, so far from relieving, too often converts into a state of utter and hopeless prostration. True, men recover though treated in this manner; but these are not *Cures*,—they are *Escapes!*

How few the diseases which loss of blood may not of itself produce! If it cannot cause the eruptions of small-pox, nor the glandular swellings of plague, it has given rise to disorders more frequently and more immediately fatal than either. What think you of cholera asphyxia—Asiatic cholera? Gentlemen, the symptoms of that disease are the identical symptoms of a person bleeding *slowly* away from life! The vomiting, the cramps, the sighing, the long gasp for breath—the leaden and livid countenance which the painter gives to the dying in his battle-pieces—these are equally the symptoms of cholera and loss of blood! Among the numerous diseases which it can produce, Darwin says—"a paroxysm of *gout* is liable to recur on bleeding."—John

Hunter mentions "lock-jaw and dropsy," among its injurious effects,—Travers, "blindness," and "palsy,"—Marshall Hall, "mania," —Blundell, "dysentery,"—Broussais, "FEVER and convulsions!" "When an animal loses a considerable quantity of blood," says John Hunter, "the heart increases in its frequency of strokes, as also in its *violence*." Yet these are the indications for which professors tell you to bleed! You must bleed in every inflammation, they tell you. Yet is not inflammation a *daily effect* of loss of blood? Magendie mentions "*pneumonia*" as having been produced by it,—completely confirming the evidence of Dr. Hume upon that point. He further tells us that he has witnessed among its effects "the entire train of what people are pleased to call *inflammatory* phenomena; and mark," he says, "the extraordinary fact, that this inflammation will have been produced by the very agent which is daily used to combat it!" What a long dream of false security have mankind been dreaming!—they have laid themselves down on the laps of their medical mentors,—they have slept a long sleep;—while these, like the fabled vampire of the poets, taking advantage of a dark night of barbarism and ignorance, have thought it no sin to rob them of their life's blood during the profoundness of their slumber!

Gentlemen, the long shiver of the severest ague, the burning fever, the *fatal* lock-jaw, the vomiting, cramps, and asphyxia of cholera, the spasm of asthma and epilepsy, the pains of rheumatism, the palpitating and tumultuous heart, the most settled melancholy and madness, dysentery, consumption, every species of palsy, the *faint* that became *death*, these—all these—have *I* traced to loss of blood! Could arsenic, could prussic acid, in their deadliest and most concentrated doses, do more? Yet I have heard men object to use the minutest portions of these agents, medicinally,—men who would open a vein, and let the life-blood flow until the patient fell like an ox for the slaughter, death-like, and all but dead, upon the floor! Do these practitioners know the nature of the terrible power they thus fearlessly call to their aid? Can they explain its manner of action, even in those cases where they have supposed it to be beneficial? The only information I have been able to extract from them upon this point, has been utterly vague and valueless. Their reasoning, if it could be called reasoning, has been based on a dread of "inflammation" or "congestion." From the manner in which they discuss the subject, you might believe there was no remedy for either but the lancet. Ask them why they bleed in ague—in syncope —in exhaustion or collapse?—they tell you it is to relieve congestion. After a stun or fall? it is to prevent inflammation. Bleeding, in all my experience, I have already stated to you, never either relieved the one, or prevented the other! Gentlemen, did you never see inflammation of a vein AFTER bleeding—inflammation caused by the very act? I have known such inflammation end *fatally*. Did you never know the wounds made by leech-bites become inflamed, AFTER these reptiles had exhausted the blood of the part to which they were applied? And how came that about? Simply because, however perfectly you exhaust any part of its blood, you do not thereby prevent that part from being again filled with it—or rather, you make it more liable to be so, by *weakening the coats of the containing vessels!* Hundreds, thousands have recovered from every kind of disease, who never were bled in any manner; and many, too many have died, for whom the operation, in all its modes, had been most scientifically practised! Have I not proved that every remedial agent possesses but one kind of influence,—namely, the power of changing Temperature? Let the schoolman show me that the lancet possesses any superiority in this respect—any specific influence more advantageous than other less questionable measures; and I shall be the last to repudiate its aid in the practice of my profession. The beneficial influence of blood-letting, where it has been beneficial in disease, relates solely to Temperature. To this complexion it comes at last, and to nothing more—the equalisation and moderation of Temperature. In the congestive and non-congestive stages of fever—the cold —the hot—the sweating—the lancet has had its advocates. Blood-letting, under each of

these circumstances, has changed the existing Temperature. Why, then, object to its use? For this best of reasons, that we have remedies without number, possessing each an influence equally rapid, and an agency equally curative, without being, like blood-letting, attended with the insuperable disadvantage of abstracting the material of healthy organisation. I deny not its power as a remedy, in certain cases; but I question its claim to precedence, even in these. Out of upwards of TWELVE THOUSAND CASES of disease that have, within the last few years, been under my treatment, I have not been compelled to use it once. Resorted to, under the most favourable circumstances, its success is anything but sure, and its failure involves consequences which the untoward administration of other means may not so certainly produce. Have we not seen that all diseases have remissions, and exacerbations—that mania, asthma, apoplexy, and inflammation, are all remittent disorders! From the agony or intensity of each of these developements of fever, you may obtain a temporary relief by the use of the lancet; but what has it availed in averting the recurrence of the paroxysm? How often do you find the patient you have bled in the morning, ere night with every symptom in aggravation! Again you resort to bleeding, but the relief is as transitory as before. True, you may repeat the operation, and re-repeat it, until you bleed both the blood and the life away. Venesection, then, in some cases, may be a temporary, though too often a delusive, relief. The *general result* is depression of vital energy, with diminution of corporeal force!

Dr. Southwood Smith, physician to the London Fever Hospital, published a book purposely to show the advantages of bleeding in Fever. One of his cases is so curiously ILLUSTRATIVE of his position, I shall take the liberty of transcribing it from the *Medical Gazette*, with a running commentary by the Editor of that periodical:—"The case of Dr. Dill demands our most serious attention, and deserves that of our readers. It is adduced as an example of severe cerebral affection, in which cases, Dr. S. affirms, 'the bleeding must be large and early as it is copious.' 'I saw him,' says Dr. Smith, '*before* there was any pain in the head, or even in the back, while *he was yet only feeble and chilly*. The aspect of his countenance, the state of his pulse, which was slow and labouring, and the answer he returned to two or three questions, satisfied me of the inordinate, I may say, the ferocious attack that was at hand.—p. 398.'

"Whatever may be the opinion of our readers, as to the above signs indicating a ferocious cerebral attack, they will one and all agree with us, that the ferocious attack was met with a ferocious treatment; for an emetic was given without delay, and 'blood was taken from the arm, to the extent of *twenty ounces*.' This blood was *not* inflamed. Severe pains in the limbs and loins, and intense pain in the head, came on during the night—and early in the morning, *blood was again drawn* to the extent of *sixteen ounces*, 'with great diminution, but not entire removal of the pain.' Towards the afternoon, he was *again bled* to sixteen ounces. 'The pain was now quite gone—the blood from both these bleedings intensely *inflamed*.' [*Inflamed*, according to Dr. Smith's notions—but mark, in his own words—the *first* blood drawn was 'NOT inflamed.' Were the lancet a preventive of inflammation, how came the blood to be inflamed AFTER so many bleedings?]

"During the night the pain returned, and in the morning, notwithstanding the eyes were dull, and beginning to be suffused, the face blanched, (no wonder!) and the pulse slow and intermittent, and weak, *twelve leeches* were applied to the temples—and as these did not entirely remove the pain, more blood, to the extent of *sixteen* ounces, was taken by cupping. The operation afforded great relief—but the following morning, the pain *returned*, and again was blood abstracted to *sixteen* ounces. 'Immediate relief followed this second operation; but, *unfortunately*, the pain returned with great violence, towards evening; and it was now impossible to carry the bleeding any further.' Typhoid symptoms now began to show themselves: 'the fur on the tongue was becoming brown, and there was already slight tremor in the hands.' What was to be done? Ice, and evaporating lotions

were of no avail;—but happily for Dr. Dill, the affusion of cold water on the head, 'the cold dash,' was thought of and employed—and this being effectually applied, the relief was 'instantaneous and most complete.' So that this case, announced as a severe cerebral affection, and treated, in anticipation, by copious blood-letting, BEFORE *there was any pain in the head, while the patient was yet only feeble and chilly,* which grew worse and worse as the blood-letting was repeated, until, after the abstraction of *ninety ounces* of blood, the patient had become in a 'state of intense suffering,' and 'imminent danger,' and was relieved at last by the cold dash—this case, we say, is brought forward as a specimen of the extent to which copious blood-letting may sometimes be REQUIRED!! Most sincerely do we congratulate Dr. Dill on his escape, not from a dangerous disease, but from a DANGEROUS REMEDY."—*Medical Gazette.*

What could more completely exemplify the utter inefficiency of blood-letting, in almost all its forms, either as a certain remedy, or a preventive of Fever?—Yet such is the force of custom, prejudice, education, that this case,—and I have no doubt, thousands like it,—so far from opening the eyes of the physician to the London Fever Hospital, only served to confirm him in his error. He had his *methodus medendi,* and he pursued it; and notwithstanding the total failure of his vaunted remedy, he gives the case at length, as a perfect specimen of the most perfect practice—Mark the result of that practice!—but for the "cold dash," the patient must have perished. It is even now a question whether he ever recovered from those repeated blood-lettings,—for he died not many months after. Happy would it have been for mankind, that we had never heard of a "Pathological School,"—happier for Dr. Dill; for to that school and its pervading error of imputing effect for cause,—of arguing from the end as if it were the beginning,—may we fairly attribute all this sanguinary practice.

Lord Byron called medicine "the DESTRUCTIVE art of healing." How truly it proved to be so in his own person, you shall see, when I give you the details of his last illness:—"Of all his prejudices," says Mr. Moore, "he declared the strongest was that against Bleeding. His mother had obtained from him a promise, never to consent to be bled; and, whatever argument might be produced, his aversion, he said, was stronger than reason. 'Besides, is it not,' he asked, 'asserted by Dr. Reid, in his Essays, that less slaughter is effected by the lance, than the *lancet*—that minute instrument of mighty mischief!' On Mr. Millengen observing that this remark related to the treatment of nervous, but not of inflammatory complaints, he rejoined, in an angry tone, 'Who is nervous if I am not?—and do not those other words of his, (Dr. Reid's) apply to my case, where he says, that drawing blood from a nervous patient, is like loosening the cords of a musical instrument, whose tones already fail for want of sufficient tension! Even before this illness, you yourself know how weak and irritable I had become; and bleeding, by increasing this state, will inevitably kill me. Do with me what else you like, but bleed me you shall *not.* I have had several inflammatory fevers in my life, and at an age when more robust and plethoric; yet *I got through them without bleeding.* This time, also, will I take my chance.'" After much reasoning, and repeated entreaties, Mr. Millengen at length succeeded in obtaining from him a promise, that should he feel his fever increase at night, he would allow Dr. Bruno to bleed him. "On revisiting the patient early next morning, Mr. Millengen learned from him, that having passed, as he thought, on the whole, a better night, he had not considered it necessary to ask Dr. Bruno to bleed him. What followed, I shall, in justice to Mr. Millengen, give in his own words:—"I thought it my duty now to put aside all consideration of his feelings, and to declare solemnly to him how deeply I lamented to see him trifle thus with his life, and show so little resolution. His pertinacious refusal had already, I said, caused much precious time to be lost;—but few hours of hope now remained, and, unless he submitted immediately to be bled, we could not answer for the consequences. It was true, he cared not for life, but who could assure him, that unless he changed his resolution, the uncontrolled

disease might not operate such disorganisation in his system, as utterly and for ever to deprive him of reason! I had now hit at last on the sensible chord; and partly annoyed by our importunities, partly persuaded, he cast at us both the fiercest glance of vexation, and throwing out his arm, said, in the angriest tone, 'There you are, I see, a d—d set of butchers,—take away as much blood as you like, but have done with it!' We seized the moment, (adds Mr. Millengen,) and drew about twenty ounces. On coagulation, the blood presented a strong buffy coat; yet the relief obtained did *not* correspond to the hopes we had formed; and during the night the fever became STRONGER THAN IT HAD BEEN HITHERTO, the restlessness and agitation increased, and the patient spoke several times in an incoherent manner.'" Surely this was sufficient to convince the most school-bound of the worse than inoperative nature of the measure. Far from it. "On the following morning, the 17th April, the bleeding was repeated *twice*, and it was thought right also to apply blisters to the soles of his feet!" Well might Mr. Moore exclaim, "It is painful to dwell on such details." For our present purpose, it will be sufficient to state, that although the "rheumatic symptoms had been completely removed," it was at the expence of the patient's life; his death took place upon the 19th, that is, *three* days after he was *first* bled.—[*Moore's Life of Byron.*] Now I ask you, what might have been the termination of this case, had an emetic been substituted for the lancet, and had the remission been prolonged by quinine, opium, or arsenic! I solemnly believe Lord Byron would be alive at this moment; nay, not only is it possible, but probable, that a successful result might have ensued, without any treatment at all. When describing the effects of a former fever, Lord Byron himself says: "After a week of half delirium, burning skin, thirst, hot headache, horrible pulsation, and no sleep, by the blessings of barley-water, and *refusing to see my physician*, I recovered." Facts like these are indeed stubborn things!

I have preferred to give these two instances of what I conceive to be decided malpractice, to any of the numerous cases which have come under my own observation, as the first-named gentleman was well known to many of the medical profession, while the death-scene of the noble poet will arrest the attention of all who take an interest in his genius.

In the generality of cases of disease, Gentlemen, it matters little what may have been the primary *Cause*. The disease or effect, under every circumstance, not only involves change of temperature, but produces more or less interruption to the two vital processes, *Digestion* and *Respiration*. In other words, it impedes SANGUIFICATION, or the necessary reproduction of that *living* fluid, which throughout all the changes of life is constantly maintaining expenditure. This being in the nature of things one of the first effects of disorder, let us beware how we employ a remedy, which, *if it succeed not in restoring healthy temperature*, must inevitably hasten the fatal catastrophe—or, in default of that, produce those low chronic fevers, which, under the names of dyspepsia, hypochondria, hysteria, mania, &c. the best devised means too often fail to alleviate, far less to cure. With the free admission, then, that the lancet is capable of giving *temporary* relief to local fulness of blood, and to some of the attendant symptoms, I reject it generally, upon this simple and rational ground, that it cannot prevent such fulness from returning—while it requires no ghost from the grave to tell us that its influence upon the general constitution must, in every such case, be prejudicial. If the source of a man's income is suddenly cut off, and he still continue to spend as before, surely his capital must, as a matter of course, diminish.—Beware then, how, under the exact same circumstances of body, you allow a doctor to take away the little capital of blood you possess when disease comes upon you,—remember there is then no income —all is expenditure. And I care not whether you take inflammation of any considerable internal organ,—the Brain, Liver, or Heart, for example,—or of any external part, such as the knee or ankle-joint—with the lancet, you can seldom ever do more than give a delusive relief, at the expense of the powers of the constitution. The man of routine, who has not heard my previous lectures, giving up Fever, perhaps,

and a few other disorders, which the occasional obstinacy of a refractory patient, contrary to "received doctrine," has taught him may yield to other means than blood-letting—will ask me what I should do without the lancet in Apoplexy? Here the patient having no will of his own, and the prejudices of his friends being all in favour of blood-letting, the school-bound member of the profession has seldom an opportunity of opening his eyes. Mine were opened by observing *the want of success* attending the sanguinary treatment; in other words, the number of deaths that took place, either in consequence, or in spite of it. Was not that a reason for change of practice? Having in my Military Hospital no prejudice to combat; and observing the flushed and hot state of the patient's forehead and face, I determined to try the cold dash. The result was beyond my best expectations. The first patient was laid out all his length, and cold water poured on his head, from a height. After a few ablutions, he staggered to his feet, stared wildly round him, then walked to the hospital, where an aperient completed his cure. While in the army, I had a sufficiently extensive field for my experiments; and I seldom afterwards lost an apoplectic patient.

But, Gentlemen, since I embarked in private practice, I have improved upon my Army plan. With the aperient given after the cold dash, I have generally combined quinine or arsenic—and I have also, upon some occasions, at once prescribed hydrocyanic acid without any aperient at all. This practice I have found highly successful. That *Quinine* may prevent the apoplectic fit, I have proved to you, by the case given by Dr. Graves. The value of *Arsenic* in Apoplexy has also been acknowledged, by members of the profession; but whether they have been acquainted with the true principle of its mode of action, in such cases, is another thing. Dr. A. T. Thomson recommends it "in threatened apoplexy, after *Cuppings and Purgings*, when the *strength is diminished* and the complexion pale;"—that is, you must first break down the whole frame by depletion—you must still further weaken the already weak vessels of the brain, before you take measures to give their coats the degree of strength and stability necessary to their healthy containing power! Upon what principle would *you*, Gentlemen, prescribe arsenic in threatened Apoplexy? Surely upon the same principle that you would prescribe it during the remission in ague—to prolong the period of immunity—to avert the paroxysm. Long after the Peruvian Bark came into fashion for the cure of Ague, practitioners still continued to treat that distemper, in the first instance, by depletion, till the complexion became pale. Do they treat it so now?—No!—Why, then, do they go on from day to day, bleeding in threatened Apoplexy? In the case given by Dr. Graves, depletion,—repeated depletion, did not prevent the recurrence of the apoplectic fit—but Quinine was at once successful. Sir Walter Scott had a series of fits of Apoplexy. What did the bleeding and starving system avail in his case? It gave him, perhaps, a temporary relief, to leave him at last in a state of irrecoverable prostration. Mr. Lockhart, his biographer, tells us how weak the bleeding always made him. But how could it be otherwise, seeing that I have proved to all but mathematical demonstration, that whatever debilitates the whole body, must still further confirm the original weakly condition of the coats of the blood-vessels, which constitutes the tendency to apoplexy? Had the cold dash been resorted to during the fit, and had quinine, arsenic, or hydrocyanic acid been given during the period of immunity, who knows but the Author of Waverley might still be delighting the world with the wonderful productions of his pen!

Shall I be told there are cases of Apoplexy, where the face is pale, and the temperature cold? My answer is—these are not Apoplexy, but *Faint*;—cases which, with the cold dash or a cordial, might recover, but which the lancet, in too many instances, has perpetuated to fatality! If the practitioner tells me that the cold dash by no possibility can cure an Apoplexy, where a vessel is ruptured with much *effusion* of blood on the brain; my reply is, that in such a case he may bleed all the blood from the body, with the same unsuccessful result! In the case of effusion of blood in an *external* part, from a bruise for

instance, could any repetition of venesection make the effused blood re-enter the vessel from which it had escaped? No more could it do so in the Brain, or any other part. Why, then, resort to it in this case?—If it be said, to stop the bleeding, I answer, that it has no such power. Who will doubt that *Cold* has? Surely, if the mere application of a cold key to the back very often stops bleeding from the nose, you can be at no loss to conceive how the far greater shock of the cold dash may stop a bleeding in the brain? When, on the contrary, there is no vascular rupture, but only a tendency to it, the cold dash will not only contract and strengthen the vascular coats so as to prevent them from giving way; but will moreover rouse the patient from his stupor, by the simple shock of its application. But from theory and hypothesis, I appeal to indubitable and demonstrative fact.*

Let the older members of the profession seriously reflect upon the ultimate injury which may accrue to their own interests, by opposing their school-follies and school-prejudices to palpable and demonstrative truth. So long as colleges and schools could mystify Disease and its nature, any treatment that these proposed —no matter how cruel or atrocious—would be submitted to in silence; but when people find out that every kind of disorder, inflammation included, may be conquered, not only by external, but by *internal* means, they will pause before they allow themselves to be depleted to death, or all but death, by the lancet of either surgeon or physician. The world will not now be deluded by the opposition of men who stick to their opinion not so much because they have long supported it, as that it supports them—men who, in the words of Lord Bacon, would dispute with you whether *two* and *two* make four, if they found the admission to interfere with their interests.

Will any practitioner be so bold as to tell me that inflammation of any organ in the body is beyond the control of internal remedies? For what, then, I ask, do we prescribe mercury for inflammation of the liver and bowels? Why do we give colchicum for the inflamed joints termed gout and rheumatism? Do not these remedies, in numerous instances, lessen the temperature, pain, and morbid volume of these inflammations, more surely and safely than the application of leech or lancet? If, for such inflammation, then, we have influential internal remedies, why may we not have medicines equally available for diseases of the lungs? Have I not shown you the value of prussic acid in such cases? But I shall be told of the danger of such a remedy in any but skilful hands. In the hands of the ignorant and injudicious, what remedial means, let me ask, have not proved, not only dangerous, but deadly?—Has not mercury done so?—Are purgatives guiltless? How many have fallen victims to the lancet! With prussic acid properly diluted and combined, I have saved the infant at the breast from the threatened suffocation of croup; and I have known it in the briefest space of time relieve so-called inflammation of the lungs, where the previous pain and difficulty of breathing were hourly expected to terminate in death. True, like every other remedy, it may fail—but have we no other means or combination of means for such cases? With emetics and quinine I have seldom been at a loss; and with mercury and turpentine I have cured pneumonia.

But will the inflamed heart yield to anything but blood-letting? Fearlessly I answer Yes! and with much more certainty. With emetics, prussic acid, mercury, colchicum, silver, &c., I have conquered cases that were theoretically called inflammations of the heart, and which the abstraction of half the blood in the body could not have cured. So also has

* Mr. Copeman, in 1845, gives the Statistics of the bleeding and non-bleeding practice in Apoplexy. In 1836, when I first repudiated the Lancet in this disease, the Statistics were all on one side, the only cases of the *non*-bleeding side of the Argument being my own. The following is from Mr. Copeman's table:—

Number bled . .	129	Cured 51	Died 78
Number *not* bled	26	Cured 18	Died 8

showing that in the cases where bleeding was practised nearly two out of three died; whereas in the cases treated without Blood-letting, more than two out of three recovered! What is the worth of general assertions in the face of such evidence?

Dr. Fosbroke, physician to the Ross Dispensary, a gentleman who had the felicity to be associated with Dr. Jenner in his labours, and one in whose success and fortunes that illustrious man took the warmest interest. [See *Baron's Life of Jenner.*] In some of the numbers of the *Lancet*, Dr. Fosbroke has given several cases of Heart-Disease, which he treated successfully without blood-letting; and with a rare candour he admits that a lecture of mine on the heart and circulation had no small influence in leading him to dismiss blood-letting in the treatment of them.

The human mind does not easily turn from errors with which, by early education, it has been long imbued: and men, grey with years and practice, seldom question a custom that, fortunately for them at least, has fallen in with the prejudices of their times. For myself, it was only step by step, and that slowly, that I came to abandon the lancet altogether in the treatment of disease. My principal substitutes have been the various remedies which, from time to time, I have had occasion to mention; but in a future lecture I shall again enter more fully into their manner of action. That none of them are without danger in the hands of the unskilful, I admit;—nay, that some of them, mercury and purgatives, for example, have, from their abuse, sent many more to the grave than they ever saved from it, is allowed by every candid and sensible practitioner. But that was not the fault of the medicines, but of the men, who, having prescribed them without properly understanding the principles of their action, in the language of Dr. Johnson, "put bodies of which they knew little, into bodies of which they knew less!"

Gentlemen, I have not always had this horror of blood-letting. In many instances have I formerly used the lancet, where a cure, in my present state of knowledge, could have been effected without: but this was in my noviciate, influenced by others, and without sufficient or correct data to think for myself. In the Army Hospitals, I had an opportunity of studying disease, both at home and abroad. There I saw the fine tall soldier, on his first admission, bled to relief of a symptom, or to fainting. And what is *fainting?* A loss of every organic perception—a death-like state, which only differs from *death*, by the possibility of recall.—Prolong it to permanency, and it *is* death. Primary symptoms were, of course, got over by such measures—but once having entered the hospital walls, I found that soldier's face become familiar to me. Seldom did his pale countenance recover its former healthy character. He became the victim of consumption, dysentery, or dropsy; his constitution was broken by the first depletory measures to which he had been subjected.

Such instances, too numerous to escape my observation, naturally led me to ask—Can this be the proper practice? It was assuredly the practice of others—of all. Could all be wrong? Reflection taught me that men seldom act for themselves; but take, for the most part, a tone or bias from some individual master.

> By education most have been misled;
> So they believe because they were so bred.

Gentlemen, I had the resolution to think for myself—ay, and to act, and my conviction, gained from much and extensive experience, is, that ALL diseases may not only be successfully treated without loss of blood; but that blood-letting, however put in practice, even where it gives a temporary relief, almost invariably injures the general health of the patient. Englishmen! you have traversed seas, and dared the most dangerous climes to put down the traffic in blood;—are you sure, that in your own homes there is no such traffic carried on—no GUINEA TRADE?

In connexion with Blood-letting in the treatment of inflammation, we generally find

ABSTINENCE OR STARVATION

recommended. Beware of carrying this too far!—for "Abstinence engenders maladies." So Shakspeare said, and so nature will tell you, in the teeth of all the doctors in Europe! Abstinence, Gentlemen, may produce almost every form of disease which has entered into the consideration of the physician; another proof of the unity of morbid action, whatever be its cause. You remember what I told you

of the prisoners of the Penitentiary; but I may as well re-state the facts at this lecture. In the words of Dr. Latham, then, "An ox's head, which weighed eight pounds, was made into soup for one hundred people; which allows one ounce and a quarter of meat to each person. After they had been living on this food for some time, they lost their colour, flesh, and strength, and could not do as much work as formerly. At length, this simple debility of constitution was succeeded by various forms of disease. They had scurvy, diarrhœa, low FEVER, and lastly, diseases of the brain and nervous system.

"The affections," Dr. Latham continues, "which came on during this faded, wasted, weakened state of body, were headache, vertigo, delirium, convulsions, APOPLEXY, and even mania. When blood-letting was tried [why was it tried?] the patients fainted, after losing five, four, or even fewer ounces of blood. On examination, after death, there was found *increased vascularity* of the brain, and sometimes fluid between its membranes and its ventricles." Is not this a proof of what I stated to you in my last lecture, that the tendency to hæmorrhagic developement does not so much depend upon fulness of blood, as upon *weakness of the coats of the containing vessels?*—starvation, you see, actually producing this disease—in the *Brain* at least.

In all the higher animals, man included, the substances composing the food are converted into blood in precisely the same manner. Crushing and comminuting it with their teeth, they reduce it by the aid of their saliva to a pulp, and by the action of their tongue and other muscles, convey it in that state to the gullet,—the *Epiglottis*, or valve of the windpipe, shutting simultaneously, so as to prevent all intrusion in that quarter—though some of you, when attempting to speak and eat at the same time, may have had the misfortune to let a particle enter the "wrong throat:"—I need say nothing of the misery of that. When the food reaches the stomach, into which it is pushed by the muscular apparatus of the gullet, a new action commences. Pooh, pooh! I hear you say, all this we know already—but, Gentlemen, what *you* know may be news to somebody, and as I see strangers listening with apparent attention, I will proceed as I have begun. Well, then, to continue. Once in the stomach, the food becomes mixed with the gastric juice, a fluid peculiar to that organ and this fluid works so great an alteration upon it, that it is no more the same thing. It is now what medical men term "Chyme"—but this is not the only change it has to undergo; for scarcely has the chyme left that great receptacle of gluttony, and entered the small intestines, when it receives a supply of another fluid from a gland called the Pancreas—and yet another from the ducts of the Liver, a still larger gland; and this, under the mysterious name of *Bile*, some of you may possibly have heard of before! By this last fluid it is turned to a *white* colour, and from Chyme its name is now changed to "Chyle,"—Why, upon my word, I do not know, both words signifying precisely the same thing—"juice!" But as nothing in nature will go on constantly the same without change, the "Chyle" must needs separate into two parts—one *nutritious*, the other the reverse—one portion enters into the formation of every part of the body—the other is excrementitious, and must be expelled from it. For the nutritious portion a million of mouths are ready. These belong to a system of vessels, called, from the milky appearance of their contents, the *Lacteals*—and they pervade the entire alimentary canal. A great viaduct termed the *Thoracic duct* receives them all, and this again, under a new name, (the *receptaculum Chyli*) passing upwards along the front of the spinal column, drops its contents—namely, the nutritious portion of the Chyle, into the left subclavian VEIN, a large blood-vessel leading under the left collarbone to the Heart. Here the chyle is no longer chyle—meeting and mixing with the blood, it becomes BLOOD in fact, to be sent first by the right chamber of the heart through the lungs, and then by the left chamber circulated to all parts of the body. In that now *living* state it successively takes the shape of every organ and atom of the body; again, in the shape of the excrementitious secretions, to pass in due time to the earth from which its elements were first derived.

The food of animals supports them only in so far as it offers elements for *assimilation* to the matters of the various organs and tissues composing their frames. While a single secretion still continues to be given *off* from the body—while the kidneys or bowels, for example, continue to perform their office, however imperfectly,—it must be manifest to you, that, without some corresponding dietetic *increment*, the elemental atoms of the animal organism must sooner or later be so far *expended* as to leave it in a state incompatible with life. How, then, let me ask, can you reconcile *Healthy* organisation with *Starvation*-practice? How can you expect to find even the appearance of Health after having practised the still more barbarous and unnatural proceeding of withdrawing by blood-letting a certain portion of the *sum* of all the organs that are being formed? The *quantity* of food which animals take, diminishes or increases in the same proportion as it contains more or less of the substance which chemists term *azote* or *nitrogen*. This, as you well know, is most abundant in animal food, but all vegetables possess more or less of it. Rice perhaps contains less than any other grain, and that is the reason why the Asiatics can devour such quantities of it at a time, as they are in the habit of doing. You would be quite surprised to see the natives of India at meal-time. Sitting cross-legged on their mats, a great basin of rice before them, with mouth open and head thrown back, they cram down handful after handful, till you wonder how their stomachs can possibly contain the quantity they make disappear so quickly.

The most cursory examination of the human teeth, stripped of every other consideration, should convince any body with the least pretension to brains, that the food of man was never intended to be restricted to vegetables exclusively. True, he can subsist upon bread and water, for a time, without dying, as the records of our prisons and penitentiaries can testify; but that he can maintain a state of health under such circumstances, is as utterly and physically impossible as that the lion and the panther should subsist on the restricted vegetable diet of the elephant. The dental organisation of man partakes of the nature of the teeth of both graminivorous and carnivorous animals;—his food should, therefore, be a mixture of the elements of the food of both; and with this mixed nourishment, the experience of centuries tells us, he supports life longest. How wretched, on the contrary, is the person doomed, however briefly, to an exclusive diet! Sir Walter Scott thus describes the effect of what he terms "a severe vegetable diet," upon himself. "I was affected," he says, "while under its influence, with a *nervousness* which I never felt before or since —a disposition to start upon slight alarms; a want of decision in feeling and acting, which has not usually been my failing; an acute sensibility to trifling inconveniences, and an unnecessary apprehension of contingent misfortunes rise to my memory as connected with vegetable diet." How can a dietetic system which so shakes the entire frame, by any possibility give strength and stability to the weaker parts of the body,—those parts whose atomic attractions are so feeble, that every breath that blows upon the whole organism shakes them to pieces? Must it not, in the very nature of things, make the man predisposed to consumption more certainly consumptive,—and so on, throughout the whole catalogue of hereditary disease?

> Observe the various operations
> Of food and drink in several nations.
> Was ever Tartar fierce or cruel
> Upon the strength of water-gruel
> But who shall stand his rage and force
> If first he rides, then eats his horse?
> Salads, and eggs, and lighter fare,
> Tune the Italian's gay guitar;
> And if I take Dan Congreve right,
> Pudding and beef make Britons fight!
>
> PRIOR.

That abstinence is proper, in the commencement of most *acute* disorders, nobody will doubt. The fact is proved by the inability of the patient to take his accustomed meal; his stomach then is as unfit to digest or assimilate nutriment, as his limbs are inadequate to locomotion. Both equally require rest. But to starve a patient who is able and willing to eat is downright madness. No animal in

existence can preserve its health if fed on one kind of food exclusively. The dog, when restricted to sugar alone, seldom survives the sixth week,—and the horse, if kept entirely upon potatoes, would waste away day by day, though you were to give him as much of that particular diet as he could devour;—he would die of a slow starvation. How many persons, even in the upper walks of life, are every day starved to death! The doctor has only with a mysterious shrug to whisper the word "inflammation," and it is quite astonishing to what miserable fare people of all conditions will submit. Instead of an exclusive vegetable diet being a cure for all complaints, as your medical wiseacres assure you, I know no complaint, except small-pox and the other contagious diseases, that it has not of itself produced. The only thing it is good for, in my view of the matter, is to keep the patient to his chamber, and the doctor's carriage at the door. You see what a *profitable* practice it must be for the apothecary,—and I 'll bet you my life, the physician who first brought it into fashion made his fortune by it. Not a nurse or nostrum-vender in the kingdom, but would be sure to cry him up to the skies! Not an apothecary, from Gretna Green to Land's-End, but could tell you of some miracle worked by him; and the world, hearing the same thing eternally rung in its ears, how could it possibly doubt the greatness of "Diana of the Ephesians!"

I am every day asked by my patients what diet they should take. I generally answer by the question, "How old are you?" Suppose they say, *Forty*—"Forty!" I rejoin—"you who have had forty years' experience of what agrees and disagrees with you—how can you ask me, who have no experience of the kind in your case whatever?" Surely, Gentlemen, a patient's experience of what agrees and disagrees with his own particular constitution, is far better than any theory of yours or mine. Why, bless my life! in many chronic diseases the diet which a man can take to-day would be rejected with disgust to-morrow; under such circumstances, would you still, according to common medical practice, tell a sick person to go on taking what he himself found worried him to death? Gentlemen, I hope better things of you.

The only general caution you need give your patients on the subject of diet, is *moderation;* moderation in using the things which they find agree with themselves best. You may direct them to take their food in small quantities at a time, at short PERIODIC intervals, intervals of two or three hours, for example; and tell them to take the trouble to masticate it properly before they swallow it, so as not to give a weak stomach the *double* work of mastication and digestion, — these processes being, even in health, essentially distinct. Unless properly comminuted and mixed with the saliva, how can you expect the food to be anything but a source of inconvenience to persons whom the smallest trifle will frequently discompose? I remember an anecdote of the late Mr. Abernethy which is so *apropos* to what I have just been telling you, that I do not know I can better finish what I have to say upon the subject of diet than by letting you hear it, even at the risk of its proving to some of you a twice-told tale:—An American captain, on being one morning shown into his consulting-room, immediately, in Yankee fashion, emptied the contents of his mouth upon the floor. The man of medicine stared, keeping his hands in his pockets, according to his custom, until the patient should explain. "What shall I do for my dyspepsy?" asked the American captain. "Pay me your fee, and I 'll tell you," replied the doctor. The money was produced, and this advice given: "Instead of squirting your saliva over my carpet, keep it to masticate your food with." Now, upon my word, he could not have given him better advice.

Gentlemen, I shall conclude this lecture by reading to you a few of many communications I have received from medical men of repute, since I first published my doctrines in 1836. Dr. Fosbroke, of Ross, began his medical career as the associate of the immortal Jenner; he lived in his house, and materially assisted to propagate his great doctrine of Vaccination. You will therefore fully appreciate the evidence of a gentleman so distinguished in the history of medicine. From a letter I received from

him in January, 1840, I shall read to you a passage or two :—

"In April, 1835, our acquaintance and free communication commenced; and though I pricked up my ears, like one thunderstruck, at your wholesale denunciation of Blood-letting and your repeated asseverations, that in a practice embracing to my knowledge the treatment of several thousands of patients per annum, you never employed a lancet or a leech,—your assertions *made an impression*, though it was slowly and reluctantly received." That it strengthened by time, Gentlemen, you will see by the next extract.—"Nothing can be more striking than the great disparity between the proportion of persons who were bled in the first two years of my Ross practice, 1834 and 1835, (in which latter year I first became acquainted with your views,) and the three following years, 1836, 1837, and 1838. In the former two years, I bled one in *seven;* in the fourth, only one in *twenty-eight;* and in the fifth year I bled NONE! The year 1839 is now concluded, and again in all that time I have NOT bled a single individual!"

"Your crime is, that you are before the age in which you live. If you had done nothing else but put a bridle upon Blood-letting, you would deserve the eternal gratitude of your race, instead of the calumny and oppression of the two-legged fools—the Yahoos, who persecute their greatest benefactors. But how can *you* expect to be more fortunate than your predecessors in this respect? The health of Sir Humphrey Davy was affected by the ingratitude of his country. 'A mind,' said he, 'of much sensibility might be disgusted, and one might be induced to say,—Why should I labour for public objects only to meet abuse? I am irritated more than I ought to be, but I am getting wiser every day,—recollecting Galileo and the times when philosophers and public benefactors were burnt for their services.' Whence is all this? Pride, poverty, disappointment, difficulty, and envy—and 'envy,' said Jenner to me in his last days, 'is the curse of this country.' These are kept up by the canker of party and the taint of corruption.

"One of the greatest obstacles to reform of blood-letting and blistering, will be the prospective loss of guineas, half-guineas, five shillings, and half-crowns. I saw a farmer last summer come into a druggist's shop. Some one had told him 'he must be cupped;' so he drove a bargain, and stepped into a back room. 'That fool,' said I, 'does not want cupping.' 'He does not look as if he did,' said the druggist, 'but *we can't afford* to let him go without.'"

Gentlemen, the next two communications are from an army medical officer, Staff-Surgeon Hume, a gentleman who, from the nature of his duties, has the very best opportunity of testing any particular practice—and one who, were he to give a false report, must be at once contradicted by regimental records. His statements may therefore be relied upon with somewhat greater confidence than the Reports which annually emanate from the Medical Officers of Civil Hospitals and Dispensaries throughout England. From the Tables of Mr. Farre, we learn that these officers make the deaths at their Institutions infinitely less than the average number of deaths of sick and *well* throughout the country! so that, if their reports be correct, sickness would appear to be actually a protection against death! Dr. Hume first writes from Dover, 6th of December, 1838:—"My object in writing is to congratulate you on the moral courage you have evinced in your last two works. I have been now nearly THIRTEEN years in the service—mostly in charge of an hospital, and it will be gratifying to you to know that an old fellow-student *adopts and carries out your principles* in his daily practice. I have NOT used the lancet these last TWO YEARS. My cases yield readily to warm baths, cold affusions, emetics, and *Quinine*. You may ask me where I have been? Four years in Jamaica, the rest in North America and home service. If you had seen Marshall's digest of the Annual Reports of the Army Medical Officers since 1817, you might have quoted it as a proof of your startling fact—the Unity of Disease. The more I read your book, the more I am convinced it is based on truth, and consistent equally with common sense and nature's laws. However little this age may appreciate your

labours, and the persecution you are likely to suffer from a certain class of doctors, every liberal mind must do justice to your unwearied zeal. Your holding up to ridicule the most fatal of all medical errors—Bleeding a patient into a temporary calm and incurable weakness, ought to stamp you as the benefactor of mankind."

The same gentleman again writes to me from Naas Barracks, Ireland, 5th December, 1839. "It is now twelve months since I wrote to you, saying that I had not used the lancet for the two previous years;—and I am now more convinced than ever of its utter inutility in the treatment of disease. Every day's experience confirms me in the truth of your doctrines. During the LAST YEAR, I have neither bled, leeched, nor cupped in any case—and I have NOT had a single death of man, woman, or child. The depôt was never more healthy—and I attribute this principally to my *abstaining*, during the last THREE YEARS, from every kind of depletion in the treatment of disease. I am satisfied that Pneumonia and Enteritis, (inflammation of the lungs and bowels) which are at present the bugbears of the faculty, are indebted for their chief existence to the remedies used for ordinary ailments—namely, bleeding, starvation, and unnecessary purging. I never saw a case of either (and I have seen many) in which the patient had not been the inmate of an hospital previously; where he had undergone the usual antiphlogistic regimen, or had been otherwise debilitated—as in the case of long residence in a warm climate. I am not surprised at the opposition you meet with. It has ever been the lot of those who have done good to humanity, to be offered up as sacrifices at the altars of ignorance, prejudice, and obstinacy. It is a fact related by Harvey, he could not get a physician above the age of forty to believe in the Circulation of that Blood whose VALUE in the economy YOU have so forcibly proved. Although I yield to you, as your just due, the origin of the improved principle of treating disease, I take credit to myself for being one of the first to carry it into effect; and I am doubtful whether a person in private practice could ever so far overcome prejudice as to use the *cold bath* with the confidence I do in every kind of fever. Its power, together with a warm one, is truly wonderful in equalising the temperature of the body. When I compare the success of my treatment during the last few years, with that of my previous experience, I feel inclined to curse the professor who first taught me to open the vein with a lancet.

Yours most truly, T. D. HUME."

LECTURE V.

MEDICAL DOCTRINES, OLD AND NEW—GOUT—RHEUMATISM — CUTANEOUS DISEASE — SMALL-POX — PLAGUE—YELLOW FEVER — DYSENTERY—DROPSY —CHOLERA.

GENTLEMEN,

When a young man has run the usual course of study at a university, he thinks he has learned everything worth knowing. But herein he grievously mistakes; for if we may trust Lord Bacon, who had no interest in the matter, rather than the professors who have, we shall find that "in the UNIVERSITIES all things are found *opposite* to the advancement of the sciences; for the readings and exercises are here so managed, that it cannot easily come into any one's mind to think of things out of the common road; or if here and there one should venture to use a liberty of judging, he can only impose the task upon himself without obtaining assistance from his fellows; and if he could dispense with this, he will still find his industry and resolution a great *hinderance* to his *fortune*. For the studies of men in such places are confined and pinned down to the writings of certain authors; from which, if any man happens to differ, he is presently represented as a disturber and innovator."

Gentlemen, in this passage you at once see the reason why Medicine has progressed so little from the time of Hippocrates to the present. Every person who has in any way improved the practice of physic has had to repent it. Harvey lost his business by discovering the circulation of the blood;

Lady Mary Montague suffered in her reputation for introducing the small-pox inoculation; and Jenner for a long period of his life was victimised for the still greater improvement of the Vaccine. His moral character was for years at the mercy of the most venal and corrupt members of the profession. "Such," in the words of Milton, "are the errors, such the fruits of misspending our prime youth at schools and universities, as we do, either in learning mere words, or such things chiefly as were better unlearned." So far as they relate to Medicine, the doctrines of the schools have been a succession of the grossest absurdities. Let us briefly glance at a few of the most prominent.

For several ages the state of the Blood was held to be the cause of all disease—no matter how the disorder originated. Had you a shivering fit from exposure to cold or damp, the "Blood" required to be instantly purified, —a fever from a bruise or fall, the only thought was how to sweeten "the Blood;" nay, were you poisoned by hemlock or henbane, "the blood," or its blackness, was the cause of all your sufferings—and the chief anxiety was how to get rid of it. It never occurred to the physicians of that day that the blood was an indispensable part of the economy, or that "black blood" was better than no blood at all;—so on they bled and continued to bleed while a drop would flow from the veins. When their patients died, it was all owing to the accursed "black blood" that still remained in the system! How to get the whole out, was the great subject of scholastic disputation, and treatises innumerable were written to prove that it might be done. In progress of time, another doctrine arose, namely, that all diseases first originate in the *Solids*, and many were the partizans that took it up; so that for several centuries the *fluidists* and *solidists* divided the schools, and, like Guelph and Ghibelline, ranged themselves under their respective leaders. What medical man is ignorant of the wars they waged, the ink they shed, and the eloquence they wasted upon the still unsettled point, whether the solids or the fluids ought to bear the blame of first imparting disease to the constitution!

But to turn from these to the doctrines of more modern schools. The chief feature in the professional notions of the day, is the assumption that all diseases may be traced to the "inflammation" or other theoretical state of a *given portion* of the body,—one School taking one organ—another, another; but why should I say Organ? seeing there are professors who exclusively patronise a given Tissue, and others a given Secretion even; —which *One* thing, after they have wrapped it round in mummery and mysticism, they gravely proceed to magnify into the very Daniel O'Connell of every corporeal disturbance! Exposure to cold and heat, the midnight revel, and the oft-repeated debauch—any, or all of these may have injured your constitution. This, of course, you already know and feel; so you wish to have the sense of your physician upon it. And what does he do? Why, he takes you by the hand, counts, or affects to count, your pulse, looks at your tongue perhaps, and then, with a seriousness becoming the occasion, he tells you, your "*Stomach* is wrong;"—and so far, so true, as your own want of appetite and sensation of nausea abundantly testify. But as if this were not enough, and more than enough, he must proceed to tell you the *cause* of your disease; and what does he say that was? Being a "stomach doctor," of course he says, "the stomach" again. "The stomach," he tells you, is the cause of all;—your headache, tremor, and blue devils, all proceed from "the stomach!" But herein, if I mistake not, the doctor falls into the same error as a man who, seeing a house in ruins, should point to one of the broken bricks, and saddle it with the whole amount of mischief; when, in reality, it was only *one* of many *coincident effects* produced by agency from without, such as accident, time, or tempest.

For a considerable space, the Stomach held undisputed sway in the medical schools,—John Hunter having contributed much to bring it into fashion. His pupil Abernethy afterwards coupled the whole alimentary canal with it, under the name of the "digestive organs;" and for a time nobody dared to dispute his dictum that derangement of the di-

gestive organs must be the cause of all disease. Some other partialist would have it, however, that the "*Liver*" is the great source of all ailments;—and a very convenient substitute this organ became; for not only did it save the physician the trouble of thinking, but the patient, by constantly directing his mind to it, very soon found out that the liver was the only organ of the body worth a moment's cogitation. Oh! "the Liver" has put a great many fees into the pockets of the faculty, and might continue to do so still, but for Laennec's invention, the stethoscope.—Adieu, then, to the liver, and adieu to the stomach and digestive organs! for, from the moment people heard of this instrument, the "*Heart and Lungs*" eclipsed them all. We have no liver and digestive organs in these days;—we have only "the Heart and Lungs;" and these, as the world wags, are always in such a state—in such a deplorable condition of disease and danger, Heaven only *knows* for what end they were given us, unless our bodies were

——————— intended
For nothing else but to be mended!

—in other words, were expressly created for the benefit of our next-door neighbour, the apothecary! Never was such a catalogue of disease as these organs have entailed upon us;—but the curious thing is, that nobody knew it until Laennec made the discovery by means of the stethoscope. Since then, leech, lancet, cupping-glass, and purge have followed each other with unexampled rapidity;—but whether the "fits" and "sudden seizures," which now-a-days carry off so much mortality, be the effect of these very safe and gentle remedies, or of the "Heart-disease," under which the doctors, in their innocence, are pleased to class them, I leave to persons of common sense and common discrimination to decide. One thing is certain, physicians have made a great stride since the days of Molière—for whereas in his time the only organ they ever thought or theorised about was the lungs; now, thanks to the stethoscope, they have got the heart, with its valvular and vascular apparatus, to the bargain.—So much for ORGANS, Gentlemen;—let us now speak of TISSUES. To be chronologically correct, we must first take the "*Skin*"—for of skin, and nothing but skin, our bodies at one time would appear to have been entirely constructed. The skin was the medical rage, and the doctors were very certain they had made a great discovery, when they turned their attention to it. Derangement of the skin explained everything in existence, and many other things besides; whatever your sufferings, the answer was always the same, "The Skin, Sir, the Skin!"—The Skin solved every possible difficulty; and if patients were pleased, why undeceive them? Sick men do not reason, you must therefore treat them like children; and he who can best impose upon their credulity, is sure to become the popular physician. The Skin, however, had a pretty long run; but, like its predecessors, it was destined to fall in its turn—to be supplanted by another tissue, the "*Mucous Membrane.*"—In the hands of Broussais the "Mucous Membrane" first rose to eminence. Bustling, active, ready, he first pushed it into notice; and so skilled was he in all the arts of scholastic juggling, that not only did he parry every blow aimed against his favourite theme by the skin supporters, but he at last obtained for it so great an influence in the sick-room, that no patient of importance could be legitimately put to death till *he* had been first called in to prescribe something for the "Mucous Membrane." Broussais thus became the French medical dictator—and the "Mucous Membrane" the French ruling doctrine. Carried by his numerous partisans and disciples into every commune in France, the "Mucous Membrane" at last found its way into England, where it was taken up by the late Dr. Armstrong;—and an excellent stepping-stone it proved to him in practice. Every body came to hear what he had to say of the "Mucous Membrane." You could not have an ache in your back, or a cramp in your leg, but the "Mucous Membrane" was at fault;—nay, had you a pimple on your nose, or a pain in your great toe, it was still the "Mucous Membrane!"—Nor is this doctrine even now quite exploded. How many of the various SECRETIONS have run this gauntlet of accusation, it

would be unprofitable to do more than allude to. The *Perspiration* was at one time much in vogue—and "checked perspiration" the reply to every inquiry. Our grandmothers use the phrase occasionally still; though some of them betray a leaning to the system of the *Water*-doctors—not the Water-doctors of the present day, Priesnitz and his followers, to wit, —no, quite a different class of persons. The persons I speak of only needed to inspect *your* water to find out a cure for your complaint. Many curious stories come to my mind in connexion with this;—but the subject is too grave to be trifled with—let us therefore pass from that to "the *Bile*"—the mysterious cause of so much offending. How many difficulties has not this secretion mastered? How many has it not made where none existed before? You derange every organ and function of your frame by intemperance—"the Bile," not the *Wine*, is the criminal! You have headache from *Hard Study*, it is still "the Bile;"—the palpable and obvious agencies going for nothing—while ONE of many EFFECTS, produced by a common cause, is absurdly singled out as the father and mother of the whole!

I have still to notice another school of physicians, who ring the same changes upon a word, which, having no very definite signification itself, may, therefore, signify anything they have a mind, without in the least committing them in the opinion of the public. "*Rheumatism*," "*Gout*," "*Scrofula*," "*Scurvy*,"—what is the meaning of these terms? They are synonymes simply, having all a common import, *fluidity* or *humour*. In Rheumatism, we have merely a derivation from the Greek verb ῥέω, (*Rheo, I flow*,) and Shakspeare used it in its proper sense when he said,

> Trust not these cunning *waters* of his eyes,
> For villany is not without such *Rheum*.

Then, as regards Gout,—what is it but a corruption of the French word *goutte*, a "drop?" And this, perhaps, some of you may think not so bad a name for a class of symptoms which occasionally proceed from "a drop too much"—but that is not what the doctors mean by the term. Gout with them is merely a fanciful "humour." "Scrofula" in Latin, and "Scurvy" in Saxon, have the same signification,—namely, a "dry humour." Only think of dry-*humidity*, Gentlemen,—and the confusion of tongues during the building of Babel, will readily occur to you as a type of the language in which even now Medicine is taught in most of our schools! The German physicians of the present day tell us that "Scrofula" has taken the place of "Scurvy" in the European constitution. But this is only one of the many modes in which professors play at "hide and seek" with words. Diseases which the Continental doctors formerly termed Scurvy, they now term Scrofula; Heaven only knows what the same corporeal variations will be called before the world comes to an end! So much, Gentlemen, for the "*Humoral* school,"—a school that impressed upon its disciples a doctrine of *purgation* scarcely less fatal than the sanguinary practice of the present pathologists. In fact, theirs is the identical system of "Morrison, the hygeist," and all those quacks, who, by their determined perseverance in purging away a fancied "impurity of the blood," have too often purged away the flesh and the lives of their credulous victims. Do people at this time of day require to be told that you may purge a *healthy* man to death!—that by any class of purgatives, whether vegetable or mineral, you may so disturb every action of the body—may so alter every corporeal structure and secretion, that not one shall be of natural consistence or appearance! By the eternal use, or rather *abuse*, of any purgative you please, in a previously healthy body, you may so change the alvine secretions, that they shall take the form of any "impurity" you fancy;—and for this impurity of *your own creation* you may, day by day, and week by week, purge and purge, till you have brought your patient to the state of inanition which constitutes, as I shall in the course of this lecture explain to you, the disease termed "Ship-Scurvy." See, then, the effect of that "*Humoral* doctrine!" But even this kind of folly appeared too *simple* to some teachers, and these taxed their invention to make nonsense *compound*. Who has not heard of "*Rheumatic-Gout?*"—and who

will be so bold as to deny its existence? Yet, what is it but a self-evident absurdity! Its literal meaning is, "fluid fluidity." You might as well call an injury from fire, an *igneous* burn." Gentlemen, does such jargon convey to your minds the most distant idea of the true motions which take place in the body in the course of any one disease? How, then, can you wonder at men of observation laughing at the whole medical profession? It is only a *fool* or a *physician* who could be duped for a moment by such puerility; and Lord Stowel was right when he hinted a man might be *both* at forty. "When youth made me sanguine," says Horace Walpole, "I hoped mankind might be set right. Now that I am very old, I sit down with this lazy maxim, that unless one could cure men of being *fools*, it is to no purpose to cure them of *any* folly, as it is only making room for some other." This, I believe, was said in regard to religious doctrines—but that it applies equally well to medical doctrines, may be seen from a statement of Sir William Temple:—"In the course of my life," he says, "I have often pleased or entertained myself, with observing the various and fantastical changes generally complained of, and the remedies in common vogue, which were like birds of passage, very much seen or heard of at one season, and disappeared at another, and commonly succeeded by some of a very different kind. When I was very young, nothing was so much feared or talked of as Rickets among children, and Consumptions among young people of both sexes. After these, the Spleen came into play, and grew a formal disease. Then the Scurvy, which was the general complaint, and both were thought to appear in many various guises. After these, and for a time, nothing was so much talked of as the ferment of the Blood, which passed for the cause of all sorts of ailments, that neither physicians nor patients knew well what to make of; and to all these succeeded Vapours, which serve the same turn, and furnish occasion of complaint among persons whose bodies or minds ail something, but they know not what; and among the *Chinese*, would pass for mists of the mind or fumes of the brain, rather than indispositions of any other parts. Yet these employ our physicians more than other diseases, who are fain to humour such patients in their fancies of being ill, and to prescribe some remedies, for fear of losing their practice to others that pretend more skill in finding out the cause of diseases or care in advising remedies, which neither they nor their patients find any effect of, besides some gains to one and amusement to the other. As DISEASES have changed vogue, so have REMEDIES, in my time and observation. I remember at one time the taking of tobacco; at another, the drinking of warm beer, proved universal remedies—then swallowing of pebble-stones, in imitation of falconers curing hawks. One doctor pretended to help all Heats and Fevers by drinking as much spring-water as the patient could bear; [Priesnitz's plan?] at another time swallowing up a spoonful of powder of sea-biscuit after meals, was infallible for all indigestion, and so preventing diseases. Then coffee and tea began their successive reigns. The infusion of powder of steel has had its turn; and certain *drops* of several names and compositions. But none that I find have established their authority, either long, or generally, by any constant and sensible successes, but have rather passed like a *mode* which every one is apt to follow, and finds the most convenient or graceful while it lasts, and begins to dislike in both these respects when it goes out of fashion. Thus men are apt to play with their healths and their lives as they do with their clothes; which may be the better excused, since both are so transitory, so subject to be spoiled with common use, to be torn by accidents, and at last to be so worn out. Yet the usual practice of physic among us runs still the same course, and turns in a manner wholly upon evacuation either by blood-letting, vomits, or some sorts of purgation; though it be not often agreed among physicians in what cases or what degrees any of these are necessary, nor among other men whether any of these are necessary or no. Montaigne questions whether purging ever be so, and from many ingenious reasons. The Chinese NEVER LET BLOOD." Sensible people those Chinese!

Gentlemen, you now see the correctness of

Dr. Gregory's remark that medical doctrines are little better than "stark-staring absurdities." And God forgive me for saying it, but their authors, for the most part, have been very nearly allied to those charlatans and impostors, who

> ——— wrap nonsense round
> In pomp and darkness, till it seems profound;
> Play on the hopes, the terrors of mankind
> With changeful skill; * * * *
> While Reason, like a grave-faced mummy, stands
> With her arms swathed in hieroglyphic bands.
> MOORE.

As for the schools, at this very moment, the whole *régime* of medical teaching is a system of humbug, collusion, and trick—embracing intrigue and fraud of every kind, with the necessary machinery of hebdomadal Journals and quarterly Reviews, by which the masters are enabled to keep down truth, and mystify and delude the student and country practitioner at their pleasure. In physic, now as formerly, the very clever world

> ——— bows the knee to Baal,
> And, hurling lawful GENIUS from his throne,
> Erects a shrine and IDOL of its own,—
> Some leaden Calf—

who, by virtue of his puppet-position, maintains a reputation and a rule in matters medical, to which neither his merits nor his learning in the very least entitle him:—nevertheless he reigns the Esculapius of the day, and it is only in the next age that

> ——— the vulgar stare,
> *When* the swollen bubble bursts and all is air!

But, Gentlemen, what do the Faculty of our own time mean by the term

GOUT?

What do they mean by it! You may ask them that, indeed. According to Crabbe, who studied physic, but left the profession in early life to take orders,

> Some to the GOUT contract *All* human pain,
> They view it raging in the frantic brain,
> Find it in fevers all their efforts mar,
> And see it lurking in the cold catarrh.

Gout, then, may be anything you please; for if the received opinion be right, this offspring of Nox and Erebus, this *vox et preterea nihil*, takes shapes as many and Protean as there have been authors to treat of it. This much I may venture to assure you, that nothing will so soon help a man to a chariot as to write a book with Gout for its title—for being supposed to be a disease peculiar to aristocracy, every upstart is fain to affect it. You cannot please a mushroom squire, or a retired shopkeeper better than by telling him his disease is "Gout"—"Gout suppressed"—"Gout retrocedent"—"Gout in this place," or "Gout in that!" And what is Gout?

> ——— Of all our vanities the motliest—
> The *merest word* that ever fooled the ear,
> From out the schoolman's jargon!—BYRON.

In sober seriousness, is there such a *disorder* as Gout? Gentlemen, as a "counter to reckon by," you may use the word; having first so far made yourselves acquainted with its real meaning that nobody shall persuade you that it is in itself anything but a piece of hypothetical gibberish, invented by men who knew as little of Disease and its nature as the tyros they pretended to illuminate. When a lady or gentleman of a certain age complains to you of a painful swelling in some of the joints of the *hand* or *foot*, you may say, if you please, that such patient has got the Gout. If the same kind of swelling should appear in the *knee* or *hip*-joint, or take the shape of an enlarged *gland* or a rubicund *nose*, you must then change your phrase; and you may easily exhaust a volume in pointing out the differences betwixt them. But as neither this kind of disquisition, nor the baptizing your patient's disease by one name or another, can in the very least help you to cure it, I may just as well explain to you that this swelling, like every other malady incident to man, is not only a developement of constitutional disease, but comes on in *fits* or *paroxysms*:—you have all heard of a "fit of the Gout." Gentlemen, you will find this fit in one case perfectly periodic and regular in its recurrence: in another, less determinate as to the time of its approach. The result of repeated paroxysms, as in other diseases where great heat and swelling

take place, must be a tendency to decomposition; in this instance, the product for the most part is a deposit of chalky or earthy matter. When this happens, nobody will dispute the name you have given to the disorder; but should the result of the decomposing action be purulent matter or ichor, instead of chalk or earth,—which neither you nor anybody else can know beforehand,—you must not be astonished if a rival practitioner be called in to give the disease another sobriquet, — to christen it anew by some other phonic combination full as indefinite as the first; and which may thus serve you both to dispute about very prettily from one end of the year to the other, without either of you becoming a whit the wiser! You see, then, that the only difference betwixt what is called "Gout," and what is called "inflammation," is, that the result of the morbid action in the former case, is earthy instead of purulent deposit, a *solid* instead of a *fluid* product. Now, this difference may be accounted for, partly by hereditary predisposition, and partly by the age of the respective subjects of each. Young plants contain more *sap* than old ones; the diseases of both must therefore in some points vary; for though in the blood of the old or middle-aged we find the same elemental principles as that of infancy and youth, from these elements being in different proportions, the results of decomposition must, *mutatis mutandis*, be different. What are the CAUSES of Gout? One writer says one thing; another, another. Dr. Holland, Physician-Extraordinary to the Queen, is among the latest who has written upon the subject, and he says the cause is "a *morbid* ingredient in the blood;"—nay, he says, "it cannot be denied." Still, not only do I presume to dispute his dictum, but I challenge him to bring forward a tittle of proof in support of it. His whole doctrine of Gout, I apprehend, is a fallacy; for if you inquire, the patient will tell you that he took too much *Wine* the night before his first fit; or that he had got *Wet;* or had been exposed to the *East Wind;* or had been *Vexed* by some domestic matter.—From which you see, the causes of Gout are anything and everything that may set up any other disease,—Small-pox and the other Contagious Fevers of course excepted. A paroxysm of Gout has been actually brought on by *Loss* of *Blood* and also by a *Purge;* for which statement, if you will not believe me, you may take the authority of Parr and Darwin. What, then, is the remedy? If you ask me for a *Specific*, I must again remind you there is no such thing in physic; and what is more, the man who understands his profession would never dream of seeking a specific for any disorder whatever. No—the remedies for Gout are the same as cure other diseases; namely, attention to temperature *during the Fit*, and the exhibition of the chrono-thermal or ague medicines *during the Remission;*—for we have seen that, like the ague, it is a periodic disorder, and such is the description given by Sydenham, who was half his life a martyr to it,—to say nothing of Dr. Samuel Johnson's explanation in his dictionary. That it comes on like the ague with cold shiverings, the experience of almost every case will tell you; but as your minds may be too much occupied with school theories to mark that fact for yourselves, I will give it to you in black and white in the words of Darwin. Speaking of some cases of the disease, he says: "The patients, after a few days, were both of them affected with cold fits like ague-fits, and their feet became affected with Gout." To meet it in a proper manner you must treat the disease purely as an ague. With quinine, arsenic, opium, and colchicum, I have cured it scores of times; and truth obliges me to say I have in some cases failed with all. Now what can I say more of any other disease? Every day you hear people talk of the "principle" of a thing, but really without knowing what they are talking about. The true meaning of the word "principle" is UNITY—something simple or single to which you may specially refer in the midst of an apparently conflicting variety. That a perfect unity of type pervades all the variations of disease is indisputable, and of the correctness of a unity or principle to guide your treatment, there is as little doubt. What, then, are all your school-divisions but "flocci, nauci, nihili, pili!" I shall now give you a case or two which may perhaps suffice to show you my treatment of Gout.

Case 1.—Colonel D——, aged 60, had a fit of Gout which came on every night, and for which leeches and purgation had been ineffectually prescribed, before I was called in. I ordered a combination of quinine and colchicum, but as this did not stop the fit, I changed it for arsenic, after taking which, the patient had no return.

Case 2.—Captain M——, aged 56, had a fit of Gout which recurred every night during his sleep. I prescribed arsenic without effect; I then gave him quinine, which acted like magic. The same gentleman, twelve months after, had a recurrence, but was much disappointed, on resuming the quinine, to obtain no relief. I then prescribed arsenic, which, though it failed the year before, this time perfectly succeeded!—a lesson to such as would vaunt any remedy as a specific for any disease.

The influence of the Passions in causing or curing Gout is well known. One of many cases so *Cured* comes just at this moment to my mind. A country clergyman was laid up with a severe attack of the Gout—his wife having heard of the effect of *Surprise* in cases of the kind, dressed up a large *hare* in baby-clothes, and brought it to his bed-side, telling him how fearfully changed their child had become. The old gentleman eyed the animal with a look of terror, sprung out of bed, and complained of his foot no more!

Now, Gentlemen, as Gout, like Ague, is a remittent disease, and curable in the same manner,—whether by mental or physical agency,—what right have we to assume that its cause is a "morbid ingredient in the blood," any more than that the cause of ague is? Still, let us suppose for a moment that it is the effect of a "morbid ingredient in the blood;"—what, then, allow me to ask, is this morbid ingredient doing all the time of remission? Does it *sleep* or *wake* during this interval of immunity?—and how comes it that arsenic, quinine, and colchicum so often neutralise its effects—while purgation and blood-letting, in too many instances, produce a recurrence? In a word, is not this "morbid ingredient in the blood" a mere crotchet of Dr. Holland's brain?—a goblin—a phantom—that, like other goblins and phantoms, disappears the moment the daylight comes in!

Having stated my reasons for dissenting from Dr. Holland's hypothetic view of the cause of Gout, it may not be out of place here to request your attention to some points of infinitely greater importance, upon which that physician and myself, by some curious fatality, maintain a remarkable COINCIDENCE of opinion. The following passages occur in his *Medical Notes and Reflections*.

"Has sufficient weight been assigned in our pathological reasonings to that principle which *associates together* so many facts in the history of disease, namely, the tendency, in various morbid actions, to distinct INTERMISSION of longer or shorter duration, and more or less perfect in kind?" "The subjection of so many diseased actions to this common law, establishes RELATIONS which could not have been learned from other sources, and which have MUCH VALUE EVEN IN THE DETAILS OF PRACTICE."

Again, he says, "It will probably be one of the most certain results of FUTURE research, to *associate together*, by the connexion of causes of common kind, diseases now regarded as *wholly distinct* in their nature, and *arranged as such* in our systems of nosology. This remark applies very widely *throughout all the genera* of disease." "We can scarcely touch upon this subject of FEVER (particularly that which our present knowledge obliges us to consider as of *idiopathic* kind,) without finding in it a *Bond* with which to associate together numerous forms of disease, but withal *a knot* so intricate, that *no research has hitherto succeeded in unravelling it.*"

Now, what does *Idiopathic* mean? It means *peculiar* or PRIMARY—in opposition to SYMPTOMATIC disease, or disease of long standing. The profession, then, according to Dr. Holland,—and he is quite right—have been all perfectly in the dark in regard to the *beginning* of any disease. The "knot" they have for so many centuries been trying to unravel, I hope he, they, and every body else will now consider as completely untied,—but *not*, as I shall in a few minutes prove, in consequence of Dr. Holland's "prediction."

When speaking of the Influenza and other Epidemics, Dr. Holland says: "I may briefly notice the singular analogy to the milder forms of Typhus and Intermittent Fever which these epidemics have occasionally presented." Why he puts Typhus BEFORE Intermittent fever, I know not; but this I do know, that except where badly treated, the Influenza seldom takes the "typhoid" shape. However, Dr. Holland admits he has prescribed *Bark* in influenza with very great advantage.

On the subject of Temperature, the same physician thus speaks:—"The patient may almost always choose a temperature for himself, and inconvenience in most cases, positive harm in many, will be the effect of opposing that which he desires—his feeling here is rarely that of theory, though too often contradicted by what is merely such. It represents in him a definite state of the body, in which the alteration of temperature desired is that best adapted *for relief*, and the test of its fitness usually found in the advantage resulting from the change. This rule may be taken as applicable to all fevers, even to those of the *exanthematous* kind." By which term medical men understand small-pox, chicken-pox, measles, and scarlet fever. Some include the plague.

Dr. Holland asks: "Is not depletion by blood-letting still too general and indiscriminate in affections of the Brain, and especially in the different forms of Paralysis? I believe that the soundest medical experience will warrant this opinion. The vague conception that all these disorders depend upon some inflammation or PRESSURE which it is needful to remove, too much pervades and directs the practice in them—and if the seizure be one of sudden kind, this method of treatment is often pursued with an urgent and dangerous activity." * * * * "Theory might suggest that in some of these various cases, the loss of blood would lead to mischief. Experience undoubtedly proves it; and there is cause to believe that this mischief, though abated of LATE YEARS, is still neither infrequent, nor small in amount." It is now the fashion of fashionable practitioners to say, "Oh, there has certainly been too much bleeding," and "Oh, we don't bleed as we used to do;" but it is not so convenient for them to tell who opened their eyes to their errors.

Now, Gentlemen, if any of you be disposed to question by whose influence this abatement of mischief was principally brought about, I may suggest that, from numerous letters I have received from medical men, long before Dr. Holland's volume first appeared, my writings must at least have in something contributed to it. Dr. Holland's work, from which I quote, was published by Messrs. Longman and Co. in 1839. Mark that date, and mark also, if you please, that it was in the year 1836—THREE years before—that the *same Publishers* brought out my work *The Fallacy of Physic as taught in the Schools*,—wherein I stated:—

1. "We hope to prove even to demonstration, that FEVER, *Remittent* or *Intermittent*, comprehends every shape and shade which Disorder can assume."

2. "That many cases of Disorder have been observed to partake of the nature of *Remittent* Fever, and to derive benefit from the modes of treatment adapted to that periodic distemper, we are sufficiently aware. But we have yet to learn that any author, ancient or modern, *has detected that* TYPE, *and advocated that* TREATMENT *in every shade and variety of disease.*"

3. "That attention to *Temperature* is the end of all medicine."

4. "That *Blood-letting* might be advantageously dispensed with in all diseases, even in APOPLEXY."

Gentlemen, some of you may have read an anecdote of Dennis the Critic. Having invented a new mode of producing *theatrical* thunder, he submitted his discovery to the managers; but their high mightinesses only affected to laugh at it. Some weeks afterwards, he went to see a play, in which there was a thunder-scene. 'Now,' thought Dennis, 'is my turn—now I can afford to laugh at *their* thunder as much as they laughed at mine;' but judge his surprise, when, instead of the farcical squall he expected, his ears were saluted with a thunder as terrible and true as

the "hurly-burly" of his own invention. Perceiving, in an instant, the trick that had been played him, he cried aloud, "By G—! that's *my* thunder!" This, or something like this, —always excepting the irreverent adjuration —was the sentiment that escaped me when I first perused the passages I have read to you from the *Medical Notes and Reflections*. "These are MY doctrines," I said; "ay—the identical doctrines which Dr. James Johnson, physician-extraordinary to the King deceased, two years before, stigmatised as a PYREXY-mania, or FEVER-madness. How will he receive them now—now that they are patronised at 'second hand" by an F.R.S. and a physician-extraordinary to the QUEEN that reigns?" That was my exclamation—and how did he receive them, Gentlemen? Why, he praised Dr. Holland to the skies; said he was this, and said he was that; and concluded by telling us that "it is impossible to lay down his book without an acquiescence in the decision of the public, which has placed him in the first rank among the practical physicians of the capital;" adding, moreover, that "his bearing toward his brethren is fair and open, and his *candid* mind, instructed by LIBERAL READING and polished by society, is willing to allow their *meed of merit* to all." But not a syllable did Dr. James Johnson say in condemnation of Dr. Holland's prophecy, that "FEVER" would one day be found to be "the *Bond* with which to associate together numerous forms of disease;"—nor did he remind him that when that prophecy was actually FULFILLED by me to the letter YEARS BEFORE he, Dr. Holland, took the trouble to make it, he, Dr. James Johnson, ridiculed it as a Fever-MADNESS!—Gentlemen, if, in the course of his "liberal reading," the Author of the *Medical Notes and Reflections* NEVER saw the *Fallacy of Physic as taught in the Schools*,—NOR the Review of it by his patron Dr. Johnson!—NOR Dr. Forbes's equally honest criticism of it!—NOR the controversy in the Lancet, to which the former gave rise!—NOR heard in "society" the remarks made by the laughter-loving part of the profession, when that controversy was concluded!—NOR met with the UNITY OF DISEASE!—NOR the many Reviews that were written upon it!!—you must acknowledge the "coincidence" to be curious—startling!!! And, further, you must admit that this "coincidence" affords another of many proofs of the truth of a DISCOVERY, which when Dr. Holland—with the candour, I am willing, in common with Dr. Johnson, to allow him—takes into account dates, facts, and other similar trifles, I hope he will, in return, permit me now, henceforth, and for ever, to call MINE! Meantime, I have much pleasure in availing myself of the testimony of a physician so eminent, in favour of its "VALUE, EVEN IN THE DETAILS OF PRACTICE."

[Shortly after the above observations made their appearance in print, Dr. Holland addressed to me a letter in "explanation." The correspondence which followed I am not quite at liberty to give, as the doctor expressed a wish that his communications should be kept "private." This much I may, however, state, that though couched in very polite, very diplomatic language, the "explanation" afforded by his letters did not appear to me to be any explanation at all. His observations might apply to this, that, or the other, or anything else! But seriously, if Dr. Holland intended to do more than shuffle me out of my discoveries, why did he send a "private" answer to my published charge,—or *insinuation*, if he like it better? The concluding paragraph of his last letter is so adroitly worded, with or without his leave I must quote it. "It gives me pleasure to know that you find anything of truth or useful SUGGESTION [suggestion!] in what *I* have published. And I shall be gratified by any opportunity which may hereafter occur of talking with you on these subjects, of common interest to us, *out of print*, [no doubt!] Ever, my dear Sir, yours faithfully, H. HOLLAND." "New truths of a higher order," says an enlightened physiologist, "and of which the connexion is not seen with common and hackneyed doctrines, are scouted by all, and especially sneered at, denied, and abused by the base creatures who have just sense enough to see there really is something in them,—who have just ambition enough to make them hate one who appears to know more than they

do,—and who have just cunning or skill enough to bias minds yet weaker than their own. To crown suitably such procedure, the doctrines at first denied are subsequently PILFERED with all the little art of which such minds are capable."—*Alexander Walker on the Nervous System.*]

From this digression I now turn to

RHEUMATISM.

Like Gout, the word "Rheumatism" conveys nothing beyond the expression of the false theory which first gave rise to it. But as we are compelled, by long custom, to retain this among other equally unmeaning terms, I may tell you, that the profession of the present day class under it numerous affections of the great joints, particularly such as have come on suddenly, and are attended with much pain and swelling. You will find that these, in every case, have been ushered in by fever fits. The young and middle-aged are more liable to Rheumatism than the extreme old. Like the Gout, it is a *remittent* disorder, and Dr. Haygarth, long ago, wrote a work illustrative of the value of *Bark* in its treatment. My own practice is to premise an emetic; this I follow up with a combination of Quinine and colchicum. If that mode of treatment fail, I have recourse to opium, arsenic, guiaic, mercury, silver, turpentine, copaiba, arnica montana, aconite, or sulphur,—or combinations of them—all of which remedies have succeeded and failed in Ague as well as in Rheumatism. In most instances of acute Rheumatism, the first combination will be found to answer perfectly; though in cases of long standing, you may have to run from one medicine and combination of medicine to another, before being able to bring about this desirable termination; —and it is my duty to confess to you, that in some cases, particularly where either much depletion, or much mercury, or both, have been employed—as I grieve to say, they too often are in the primary treatment—you may fail with every means you may devise.

Under the head of Rheumatism, medical men also include certain muscular pains, which occur in various parts of the body, but which are unattended by any apparent morbid structural developement. With nitrate of silver and prussic acid, I have often cured these pains; and with the cold plunge-bath, I have sometimes succeeded after every other means had failed. Of my mode of treating *acute* Rheumatism, I will give you two examples.

Case 1.—A young man, aged 25, had been suffering severely from Rheumatism for four or five days before I saw him. At this time, the joints of his wrists and ankles were much swelled and exquisitely painful; his heart laboured, and was in such pain as to impede his breathing; his tongue was foul and furred, and he had been occasionally delirious. I ordered an emetic, which was some time in operating, but when it did, the relief was signal. I followed this up with pills containing a combination of quinine, blue pill, and colchicum, and in two days he was sitting up with scarcely any swelling remaining in the affected joints; in two days more he had no complaint. Not a drop of blood was taken in this case.

Case 2.—A gentleman, aged 30, after exposure to wet and cold, had a shivering fit with fever, in the course of which almost every joint in his body became swollen and very painful. He was bled, leeched, blistered, and took mercury to no purpose, before I was called in. I ordered him a combination of quinine, colchicum, and opium, which agreed so well with him, that in three days I found him free from every symptom but weakness, which I presume was as much the effect of the former sanguinary treatment, as of the disease: at any rate, he had certainly suffered very severely. But, Gentlemen, like every other disease incident to man, Rheumatism may not only be cured without loss of blood, but without any physic at all; and in evidence of this, I will read to you an extract from the writings of Sydenham: "As to the cure of Rheumatism," he says, "I have often been troubled, as well as you, that it could not be performed without the loss of a great deal of blood; upon which account the patient is not only much weakened for a time, but if he be of a weakly constitution, he is most commonly rendered

more obnoxious to other diseases for some years, when, afterwards, the matter that causes the Rheumatism [Sydenham, like Hippocrates, was a disciple of the Humoral School] falls upon the lungs, the latent indisposition in the blood being put into motion by taking cold, or upon some slight occasion. For these reasons, I endeavour to try for some other method different from *Bleeding, so often repeated*, to cure this disease; therefore, well considering that this disease proceeded from an inflammation, which is manifest from other phenomena, but especially from the colour of the Blood, which was exactly like that of *Pleuritis*, I thought it was probable that this disease might be as well cured by ordering a simple, cooling, and moderately nourishing diet, as by *Bleeding repeated*, and those inconveniences might be avoided which accompanied the other method; and I found that a whey-diet, used instead of Bleeding, DID THE BUSINESS. After last summer, my neighbour Matthews, the apothecary, an honest and ingenious man, sent for me; he was miserably afflicted with a Rheumatism, accompanied with the following symptoms. He was first lame in the hip for two days; afterwards he had a dull pain upon his lungs, and a difficulty of breathing, which also went off in two days' time, [both *remittent*,] after which his head began to pain him violently, and presently the hip of the right side which was first seized; and afterwards, *according to the usual course of the disease*, almost all the joints, both of the arms and legs, were afflicted *by turns*. He being of a weak and dry habit of body, I was afraid that by taking away much blood, his strength, before but infirm, would be wholly vanquished; especially the summer being so far spent, it was to be feared winter would come before he could recover his strength, weakened by frequent bleeding, and therefore I ordered that he should feed on nothing but whey for four days. Afterwards, I allowed him, besides the whey, white bread instead of a dinner, namely, once a-day, till he was quite well. He, being contented with this thin diet, continued the use of it for eighteen days; only I at last indulged him in bread at supper too; he daily drank eighteen pints of whey, made at home, wherewith he was sufficiently nourished. After these days, when the symptoms did no more vex him, and when he walked abroad, I permitted him to eat flesh, namely of boiled chickens, and other things of easy digestion; but every fourth day he was dieted with whey, till at length he was quite well, the *inconveniences* mentioned above being quite remedied by this method, with which he was grievously afflicted ten years before, bleeding being *then* used by my order for his cure, and often repeated. If any one shall contemn this method because it is plain and inartificial, I would have such a one know that only weak people despise things for their being simple and plain; and that I am ready to serve the public, though I lose my reputation by it. And I will say that I do not at all question, were it not for common prejudice, that the said method might be *accommodated to other diseases*, the names whereof I conceal at present, and that it would be more beneficial to the sick than the common pomp of Remedies that are used for people when they are just dying, as if they were to be sacrificed like beasts."—But

THE STONE!—

You will doubtless, Gentlemen, ask me whether or not I look upon that also as an *effect* of intermittent fever? To this question I have only to say, that Stone must be admitted to be a result of *morbid* urinary secretion. Can any secretion become morbid without the previous occurrence of constitutional (in other words, intermittent *febrile*) change? Certainly not; then, without such change, how could stone become developed at all?—moreover, are there not times of the day, when the subject of it is better and worse, and this not altogether to be referred to the period of micturition? A "*fit* of the stone" is as common an expression as a fit of the ague. Drs. Prout and Roget, who have paid much attention to *calculary* diseases, state, that while medicines styled "lithontriptics" exert but little influence in such cases, *tonics* have almost universally ameliorated the condition of the patient;—and what are the

medicines usually termed "tonics," but the remedies for ague?

Whether Gout and Rheumatism be remittent diseases or not, or whether they be remarkable for the changes of temperature and action, termed FEVER, nobody but such as prefer books of nosology to the book of nature and common sense, would be so ignorant as to question. Whether they be varieties of the same disease, is another thing; but this I know, they are both first-cousins to ague, and by treating them as such, the practitioner may save himself a world of trouble, and the patient a world of pain, which neither might escape, in adopting the doctrine of the "pathologists," that these are inflammatory diseases, and only to be subdued by leech, lancet, and mercury to salivation. Gentlemen, laugh at the pathologists, and laugh too at their disputations, which, being all about nonsense, can never possibly come to a satisfactory conclusion.

The calculary *(gritty)* or stony concretions which are occasionally deposited in the different joints during Gout, suggested to medical men, even at an early period, the analogy subsisting betwixt that disease and stone. During constitutional disorders, calculus may be developed in any tissue or structure of the body. Salivary concretions are common: Pulmonary calculi I have seen in two instances: in one case they were expectorated by a Consumptive female, who died; in the other, by a gentleman whose lungs being otherwise organically uninjured, recovered his health completely by attending to the temperature of his chest, and by the occasional use of hydrocyanic acid and quinine, which I prescribed for him. This patient had previously consulted two of the best-employed medical men in London, one a physician, the other a surgeon, neither of whom held out a hope for him but in a warm climate. Dr. Chambers and Sir B. Brodie, for these were the practitioners the patient previously consulted, showed in this instance, at least, their good opinion of *attention to temperature*. How often the liver, gall-bladder, and kidney are the seat of stone, I need not tell you. Taking place in the course of an artery, calculus is erroneously termed "ossification." I wonder it never occurred to authors to call it "the Gout!" seeing there is, at least, this resemblance betwixt them, that both generally become developed during or after middle age.

There are not wanting authors who have traced an analogy betwixt Rheumatism and

CUTANEOUS OR SKIN DISEASE—

and as all disorders are cousins-german to ague, we must give them full credit for their powers of observation—stating, at the same time, our readiness to help them out to a still more comprehensive view of the relationship which subsists betwixt all "the various genera of disease."

What a fine thing to be able to master the cloud of ridiculous distinctions and definitions by which Drs. Willan and Bateman have contrived to disguise the whole subject of Cutaneous Disorder;—to distinguish, for example, psoriasis from lepra—erythema from erysipelas, diseases only differing from each other in being acute or chronic, or from being more or less extensively developed; all, too, depending upon the same constitutional unity and integrity of state—all more or less amenable to identical agency! Most truly, then, has my Lord Bacon remarked, "*Divisions* only give us the husks and outer parts of a science, while they allow the juice and kernel to escape in the splitting." What! I shall be asked, is Erysipelas or Rose nothing more than a result of ague—Erysipelas, for which, according to Mr. Lawrence, we must make incisions in the skin, at least a foot long—gashes not quite so short, but quite as deep as sabre wounds! Hear what Sir James Mackintosh says when describing his own case; and the accuracy of his description will scarcely be questioned, if it be remembered, that previously to entering upon his legal career, Sir James had not only studied but taken his degree in physic:—"We had an unusually cheerful day," he says, "but just as I was going to bed I was attacked by a *fit of shivering*, which in the morning was followed by a high *fever*, and in two days by an Erysipelas in the face. The disease went through its course mildly, but it is liable to such sudden *turns*, (fits?) that one is always

within six hours of death." For the value of quinine or bark in this disease I could cite many authorities, but the candour of Mr. Travers entitles his evidence to a preference. At a meeting of the Medico-Chirurgical Society, he is reported to have stated that in "a great many instances (of Erysipelas) he had found the most decided benefit from the use of *Bark* and other *Tonics*, and which, at the commencement of the disease, he had often seen highly useful in the practice of others, even in cases where *he would have employed the antiphlogistic treatment*, if the patients had fallen into his own hands."—*Lancet.*

Every medical man of experience knows that Erysipelas is very often *epidemic;* in other words, it prevails at a particular time to a greater or less extent among a particular people or class of people. Wherefore it seems to depend upon a peculiar constitution of atmosphere; for during the time it is prevalent in camps or cities, the slightest scratch on the skin will set it up. I have known it follow the application of a blister to the chest; and I remember, when in Edinburgh Castle with the Royals, I was obliged to tell the officer commanding the troops a little of my mind upon the subject of corporeal punishment: one poor fellow had just escaped with his life from the Erysipelas brought on by a flogging. But even at periods when the disease is not epidemic, it may be produced by any one of the thousand things that daily occur in life. Cold and wet are frequent causes; and there are individuals who cannot take mercury in any shape or dose without being liable to an attack of it—nevertheless, I have myself cured many cases with mercury. The best practice, however, is to treat it like other acute fevers. Begin with emetics, and follow them up with arsenic or quinine; this practice will apply to all acute diseases of the skin, by whatever names they may be known or distinguished.

What are the causes of Cutaneous Disease generally? Everything that can set up *Fever;*—and what agent in nature, when abused, may not do that? Cutaneous disease may be produced by mechanical injury even—a blow, or a fall, for example. A friend of mine, who hunts a great deal, has had several falls from his horse, and on each occasion the accident was followed by an eruption all over his skin. I have known eruptions to be a constant effect of the introduction of a bougie into the urethra of a particular individual. What will the gentlemen of the Humoral school say to this? for you know the partisans of that school trace all such diseases to a "morbid ingredient in the blood," and they look upon eruptions as an effort of nature to expel the "peccant humour." Be careful, they tell you, not to drive it *in!* Now, what is an eruption but the effect of a tendency to decomposition of the matter entering into a detached portion of the cuticular tissue, so as to produce an arrangement and motion of the atoms composing it different from their motion and arrangement in health? Such caution, therefore, amounts exactly to this: be careful that you do nothing that shall make these cuticular atoms *resume* their respective places and motions in the economy, so as to resemble the healthy skin! See, then, to what a ridiculous pass the HUMORAL doctrine leads us! When that doctrine was more prevalent than it is at present, cutaneous diseases were very generally classed under the head of "Scurvy," or *Scorbutic;* whoever had eruptions on his skin of a chronic character was said to have the scurvy. Now, if this phrase had been used simply as a sign or "counter to reckon by," no great harm could have ensued; but, like "scrofula" and the "gout," "*Scurvy,*" in process of time, came to perform the part, not of a sign merely, but of a corporeal *something*—an indefinite entity or essence,—which, like a will-o'-the-wisp, played its "fantastic tricks" now in this part of the body, now in that. Some wise professor made his pupils suppose that he had detected it *in* the Blood even; and from that moment not only did people believe that Scurvy was a *specific* disease, but the whole faculty were anxious to discover a *specific* remedy for it. A specific for what, Gentlemen?—for an airy nothing, that only existed in the theoretic visions of their own most mystified brains. You may stare as you please—but this, after all,

is the truth. What, then, you will demand, is the disease which doctors call "Ship-Scurvy?" Having myself been months at sea without landing or seeing land, my evidence may be just as good as that of others who have handled the subject before me. During long and harassing voyages, what from being forced by foul weather to sleep under closed and consequently unventilated decks—what from being obliged to watch and work hard upon a short allowance of food and water—together with the anxiety and depression of spirits produced by "hope deferred," the men gradually begin to show signs of a constitutional "break-up." You will find them with faces pale and bloated; —their skins rough, rugged, and exhibiting *petechiæ* and hæmorrhagic ulcers; their gums weak, spongy, and bleeding; their hair harsh, dry, and falling away, and their bowels subject to fluxes; a low FEVER wastes them day by day and night by night, and they become at last so ill as to faint from the least exertion. This is Ship-Scurvy,—not depending upon a something noxious *in* the blood, but upon a positive *want* of something essential to its healthy reproduction. And how, think you, is this disease to be cured? By wholesome food and pure air, you will naturally reply. No such thing, Gentlemen—nothing so simple would do for scientific people. It can only be cured by *Lemon juice!* Lemon juice, according to the greatest medical professors, is not only a preventive of the bad effects of starvation—but a substitute for pure air and proper food in the cure of diseases produced by a deprivation of both! Now, it is a curious fact in the history of Ship-Scurvy, that just about the time that lemon-juice came into fashion as a cure for it, great improvements began to be made in navigation, as also in ship-building, and in the ventilating and victualling of fleets; voyages that formerly took up a year, can now be completed in a month or two, and the natural good effects of all this upon the habits and constitutions of the seamen are, up to this moment, very modestly claimed by the doctors as the result of their employment of lemon-juice. And not only are there fools in the world, but philosophers also, who daily echo this trumpery story!

There is not a disorder of the Skin, however named, that I have not seen cured by QUININE,—and I have met with examples of every kind of skin-disease, that have baffled me with every thing I could think of. I may here, nevertheless, state in regard to Cutaneous disease generally, that I have not very often been at a loss, while I had at my disposal quinine, arsenic, oxymuriate of mercury, hydriodate of potass, creosote, iron, and lead. In a very obstinate case of scalled-head, the subject of which was a young artist of talent, a combination of belladonna and stramonium effected a complete cure in about a fortnight. The disease, in this instance, had been upwards of twelve months standing, and had resisted the prescriptions of some of the ablest men of Dublin and London. Baths, of which I shall afterwards speak, I have also found of great service in diseases of the Skin;—but what, Gentlemen, do all these remedies come to at last, but to the various forces that produce thermal change?

In the great majority of instances, then, the local disorder *from* which physicians now almost invariably name disease, and *to* which they almost as invariably confine their attention, is only one of many features of universal disturbance. So far from being the causes of such disturbance, the local tendencies to disorganisation are merely hereditary or accidental developements occurring in its course—developements expressive, for the most part, of the weak points of individual constitution—though sometimes determined by climate or other speciality of cause. In England, for example, the viscera of the chest are the organs which chiefly suffer—while in the East and West Indies, the liver and other contents of the abdomen become more frequently implicated. Remittent fever, I need not say, is the parent of both.

Injuries, passions, poisons, then, are each capable of producing the same constitutional disturbance with every kind and degree of organic change to which the subjects of them may, by original weakness of configuration, be predisposed. To use a homely phrase—"when the whole house shakes, the worse-built room suffers most,"—and this, of course, differs

with every house. A blow on the head—nay, an injury to so minute a member as the finger, may produce a general FEBRILE disorder, *ending* in abscess of the lungs or liver, according to the predisposition of the patient. Even in the course of the Contagious or Pustular Fevers, we daily find all sorts of organic change developed—change which no man in his senses would place in the light of a *Cause* of those fevers. Among the organic and other disturbances induced by the

SMALL-POX FEVER,

or VARIOLA, as it is called by the profession, I have noticed Sore Throat, Deafness, Dropsy, Consumption, Glandular Swellings, Rheumatism, and Palsy; just as I have seen the same localisms developed in the course of a common *Remittent* fever; such consequences depending, of course, upon the original predisposition of the patient to the developement of this or that complaint by any agency capable of injuring the general constitution. And how should it be otherwise, when we come to reflect that the Small-Pox Fever, like every other fever, consists in a succession of paroxysms so exactly resembling ague, that, before the appearance of the eruption, it cannot possibly be distinguished from it!—Nor, so far as individual treatment is concerned, does that matter one straw; for, however perfectly specific the *Cause* of the disorder undoubtedly is, the disease itself admits of no specific mode of treatment. To shorten the COLD stage, you may resort to the nearest cordial you can get. During the HOT, keep the patient as cool as possible, or endeavour to break it by an emetic, which, in nine times out of ten, you may easily do; and when that and the SWEATING stage are ended, endeavour to prolong the interval of remission by opium, hydrocyanic acid, or quinine. Such, I believe, comprehends nearly the whole duty of the physician in this, as in every other acute disorder. By a reverse course, the most perfectly curable case of Small-pox may be very speedily rendered malignant. During the spring of 1824, a great many instances of the disease occurred in Edinburgh; and I remember two cases which, from the difference of the practice employed, and from the difference of the results, made a strong impression upon my mind. The first case was treated by the late Dr. Mackintosh by repeated bleeding and purgation, in consequence of which, the patient became delirious, and the pustules were rendered confluent. The subject of the second case was myself; having frequently visited the former gentleman during his illness, I may fairly presume I took the infection from him. But the treatment, in my own instance, was restricted to an occasional antimonial, and an opiate about seven in the evening, which had the effect of either entirely preventing the anticipated paroxysm, or of rendering it so trifling as to pass without observation. On two occasions it was neglected, and a night of fever and restlessness was each time the result. I was out of the house in ten days, and, as you see, I have not a perceptible mark on my countenance; while the other gentleman was confined to his room for more than a month, barely escaping with his life; and when he made his appearance in the streets, his face was so disfigured by scars, his most intimate friends did not know him when he addressed them. During the autumn and winter of 1825, while I attended the Parisian Hospitals, the Small-pox was raging fearfully in France. But so unsuccessful was the treatment employed,—bleeding, leeching, and purgation,—that the dissecting-rooms of Paris were literally crowded with the bodies of people who had died of the disease. Some of these bodies bore the mark of *Vaccination* on their arms. But what is Vaccination? Vaccination is only the artificial introduction into the human system of an animal Poison; and it was first practised by Dr. Jenner, of Berkeley, in Gloucestershire. Now Jenner was a man of great observation—great penetration—a man upon whom facts were never lost,—not a mere collector of facts,—not one of those poor creatures who cry, "Facts, facts, give me facts—I never think,"—men who might as wisely cry, "Bricks, bricks, give me bricks—I never BUILD!" Of a quite different stamp was Dr. Jenner. Practising his profession, chiefly at first among the poor of his native county,

from them he learned that many people connected with dairies had their hands attacked with an eruptive disease, which they traced to a similar eruption on the teats of the Cows they milked; and their general belief was that such as had this eruption could not take the Small-pox. All through Gloucestershire this fact was known to the peasantry,—but the wise doctors only looked upon it as a popular superstition. Not so Jenner,—who, on setting about an investigation, discovered it to be the truth; and, in spite of the greatest opposition from men of his own profession, and others whom they secretly influenced, he finally succeeded in establishing the practice of Vaccination—so called from *Vacca*, the Latin for Cow. Jenner, then, was the first who artificially introduced *Cow*-pox as a preventive of *Small*-pox; and that it is indeed a preventive you will have no difficulty in believing, if you choose to recall to memory the number of persons whose faces were fretted and seamed by the Small-pox in your younger days, and the few instances of a similar kind you meet with in these times, since Vaccination has been practised. Do you doubt the preventive effect of *Small*-pox against a recurrence of Small-pox?—No more can you doubt the effect of vaccination—for though small-pox does occasionally attack individuals who have previously undergone vaccination, so also does it recur occasionally in persons who bear the indelible marks of having previously suffered from Small-pox itself. What is the *Vaccine* disease but a modification of Small-pox? It is Small-pox in a milder form, a fact which Jenner suspected, and which Mr. Ceely of Aylesbury has recently proved by a very simple experiment. He first inoculated a cow with the matter of a *Small*-pox pustule. From the new pustules which were in due time produced in that animal, he took matter and inserted it into the arm of a child. The *Vaccine* or *Cow*-pox pustule was the result!—and these experiments he has several times repeated with the same success, in the presence of many medical men:—so that the *Cause* of small-pox in man (whatever its real nature be) becomes so altered in its Vaccine or Cow modification, as to constitute a most valuable preventive against the severer form. What is the nature of the specific agent which produces and reproduces, through such an infinity of individuals, an effect so generally specific? Can it be, as Linnæus thought, of an animalculine character? or, is it at all analogous to the influence produced by the magnet or iron? which metal, you all know, may, from the contact of a magnet, become itself magnetic. These are the most probable relations in which the subject may be viewed—if, indeed, it have not some analogy to the continuation and reproduction of all animal life.

There are a few questions, connected with this subject, which I confess myself unable to answer. Perhaps the ingenuity of some of you may solve them for me.

1. Why is small-pox, when directly inoculated, more generally mild than when taken casually by infection?

2. Why, after Vaccination, have we, in the majority of cases, only one pustule instead of many, as in the case of the Small-pox?

3. Why is the Cow-pox not infectious, like Small-pox—seeing that it is a mere modification of identical agency? The Cow-pox, so far as we know, can only be communicated by direct inoculation.

4. Has the protection which the *Cow*-pox and the *Small*-pox afford to the constitution against recurrence, any analogy to agricultural exhaustion—to the impossibility to obtain more than a given number of successive crops of a particular herbage, from a particular soil, in a given period of years?

But the Small-pox Fever is not the only fever which once having attacked an individual during his life, for the most part renders him unsusceptible of recurrence;—all the truly *Contagious* fevers have this effect—Chicken-pox, Measles, Scarlet-Fever, Hooping-cough, seldom affect the constitution above once in life—though sometimes, like Small-pox, they make their appearance twice, and even three times in individuals. By some authors, the Chicken-pox has been supposed to be a modification of Small-pox—an opinion to which I myself lean—for when we consider how remarkably Small-pox becomes modified after vaccine transmission, we can scarcely doubt

that it may admit of still further modifications by passing through the bodies of other animals besides the cow. This much is certain, that every one of the Contagious diseases has the most perfect analogy to the ague—seeing that all have remissions and exacerbations of fever more or less perfect in kind, and that all are more or less amenable to the chrono-thermal remedies—not one of which remedies, however, possessing such specific influence over them, as to be exclusively relied upon in the treatment of any case. Is not this the best of all proofs that there is no "specific" in physic? If for a most decidedly specific disease we have no specific remedial agency, how can we possibly expect to find such for any one of the great family of disorders which may be produced by anything and everything that can derange the general health? Yet Dr. Holland hopes that medical men may one day find a specific for Gout, and another for Consumption—diseases which may be produced and cured by any agency that can alter the moving powers of particular individuals!

Is the

Plague

an Intermittent Fever?—The case of Corporal Farrel, as detailed by Dr. Calvert, in the *Medico-Chirurgical Transactions*, will be a sufficient answer to the question:—"This man had been standing in the sea on the 10th of November, upwards of an hour, to wash and purify his clothes, according to an order to that effect. On coming out of the water he was seized with violent shivering and headache, succeeded by heat of skin, and afterwards by sweating, which alleviated the distressing symptoms. On the following day the paroxysm was repeated. He was permitted to remain in the barracks from a belief that his complaint was *intermittent fever*. The next day his fever returned as usual, but it now declared itself to be the Plague by a bubo (glandular swelling) arising in the groin, while the seat of the pain seemed to be suddenly transferred from the head to that part. The paroxysm was again followed by an intermission or remission. But the next morning, while dressing himself to go to the lazaret, he dropped down and expired."

Disputes still exist as to whether Plague be contagious or not. From a perusal of the evidence laid before the House of Commons, as well as from analogical reasoning, my belief is that it is NOT contagious; but on whichsoever side truth lies, there can be no difficulty as to the proper treatment. The indications, in Plague as in simple intermittent fever, or the *Small-pox*, are to regulate the temperature in the cold and hot stages, by the means already pointed out, and to prolong the remission by quinine, opium, arsenic, &c., according to particular constitutions. Treated in this manner, the disease could not by any possibility be more fatal than we are told it is under the present routine of practice. "In all our cases," says Dr. Madden, "we did as all other practitioners did,—we continued to bleed, and the patients continued to DIE!"—[*Madden's Constantinople.*]

From the same candid author, I find that the

Yellow Fever

of the West Indies, is not less remarkable for its periodic remissions and exacerbations than for the shiverings and alternations of temperature characteristic of every other disorder. The yellow appearance of the patient, like the milder jaundice of our own climate, is a mere *effect* of spasm of the gall ducts. Jaundice, then, is a symptom, not a disease; it is the result of spasm developed in the course of a febrile paroxysm. People will say, "You would not give Quinine or Bark in jaundice." But wherefore not? seeing I could muster a good half-hundred instances where I myself have cured the disease by one or the other." Dr. Madden details a case of yellow fever cured by Quinine, a case in which he says, "had the gentleman been *bled*, after the fashion of the country, I think in all probability he would have died; or had he survived, that he would have had left a debilitated constitution and a dropsical diathesis to encounter in his convalescence."

Previous to my embarkation for the East Indies, where it was my chance to serve five

years as a medical officer of the army, I read Dr. James Johnson's work on the "Diseases of Tropical Climates." Impressed when a boy with his pretty style, I put his sanguinary treatment and his twenty-grain doses of calomel to the test. But so far from confirming his assertions, my own after-experience led me to adopt conclusions much the same as Dr. Madden. Captain Owen of the Royal Navy, too, who could neither have a theory to support nor any interested end to serve, one way or the other, details at great length the mortality which took place among his people while employed in surveying the African coast. "It may, in fact, be questioned," says this intelligent navigator, "whether our very severe losses were not, in some measure, attributable to European medical practice, BLEEDING and CALOMEL being decidedly the most DEADLY ENEMIES in a Tropical Climate. During the whole time of the prevalence of the Fever, we had not one instance of perfect recovery after a liberal application of the lancet or of this medicine." Captain Owen farther states, that he himself recovered without either bleeding or calomel; while the ship-doctor fell a martyr to his medical faith,—he bled himself, took calomel, and died! [The above remarks were first printed in 1840. Two years afterwards, 12th November, 1842, Extracts from the *Report of the Select Committee on the Western Coast of Africa*, appeared in the *Times* newspaper, wherein, among other things, is the following: "The bleeding system has fortunately gone out of fashion, and the frightful mortality that attended its practice, is now no longer known on board our ships." — Dr. James Johnson, are you satisfied?]

But the Eastern practitioner will tell me possibly, that

DYSENTERY

cannot be safely treated in any other fashion. Is he sure he knows exactly what is meant by the word Dysentery? I shall say nothing of its etymology, but rather give you the symptoms included by Sydenham under the name. —"The patient," he tells us, "is attacked with a CHILLINESS and shaking, which is immediately succeeded by a HEAT of the whole body. Soon after this, gripes and stools follow." What, then, Gentlemen, is this Dysentery but an AGUE, with increase of secretion from one surface instead of another—from the mucous surface of the bowels instead of the skin; and the skin, remember, is only a continuation of the mucous membrane of the bowels. Now, Dr. Cumming, late of the East India Company's medical service, informs us, that while ascending the Nile in 1836, he was attacked with Dysentery. After suffering for a week with "intervals of *remission*," he fairly gave himself up, and so did his attendants, for he had nothing in the shape of medicine with him. As a forlorn hope, however, he ordered his guide to sponge him with *warm water*. And this simple remedy, [attention to temperature,] with fomentation of the abdomen, was the only treatment employed. He took a little wine and water, which remained upon his stomach; he then became drowsy, slept for a short time, felt his skin less hot and burning, and, in brief, began to recover, and that rapidly. In about a week afterwards, he writes in his journal: "My recovery is almost complete, and the rapidity of my convalescence leads me to contrast my late attack with a *precisely similar one* which I had at Cawnpore in the autumn of 1829. On that occasion I was *largely bled* at the arm, had *fifty leeches* applied to the abdomen, and during the first four days of the disease, in addition to extensive mercurial frictions, I swallowed *two hundred and sixteen grains* of calomel. True, I recovered; or rather I did not die! whether in consequence, or in spite of the above heroic treatment, I will not venture to say. My face was swollen to an enormous size; every tooth was loose in my jaws; and for six or eight weeks I could eat no solid food; my constitution received a shock from which it never fairly recovered, and I was obliged to come to Europe on furlough. On the present occasion, fortunately for me, the *vis medicatrix naturæ* was my sole physician, [he forgot the sponging part!] and I am now almost as well as before the attack commenced. BRITISH MEDICAL PRACTICE, IN MY HUMBLE OPINION, DEALS TOO MUCH IN HEROICS."

That opinion, Gentlemen, I hope, is now yours also—it has many years been mine. Such a case, from such a quarter, must doubtless be more than sufficient to warn you against the sanguinary and mercurial practice introduced into the East by the influence of Dr. James Johnson's work on the Diseases of India. What an idea, to break down by the lancet and mercury, to salivation, the attractive power of every atom of the body, in the expectation of thereby strengthening its weakest parts! Does this savour of madness, or does it not? and that too, as I hinted before, madness of rather a homicidal kind?

Dropsy.

How can there be a morbid superabundance of any secretion without a corresponding change of temperature? He who will rigidly scrutinise this disease shall find that the same shiverings and fever which precede the sweat of ague, usher in the tumid abdomen and swollen legs of Dropsy. Dropsy, then, may be termed an AGUE with *inward sweat*. That it is a remittent disease may be seen by the palpable diminution of the swelling on particular days; to say nothing of the hopes both of the patient and physician on such days being excited by general improvement throughout. How should the disease be treated? Not, according to modern practice, by diuretics and sudorifics solely; but by a combination and alternation of these remedies with the medicines of acknowledged efficacy in that most perfect type of all disease, the ague. Of cases successfully treated by me in this manner, I could give you hundreds,—but to what purpose? The recital, after all, would amount to little more than a mere repetition of the paroxysmal symptoms of ague, minus the sweating stage;—that stage being typified, nevertheless, by the cellular watery effusion, or by the morbid increase of the natural secretion which lubricates the various shut cavities of the body. The remedies and the results were such as I have already stated to you. What other proofs do you want of the unity of all disorder? The Paymaster-Sergeant of the Royals had Dropsy, which, notwithstanding the usual treatment by diuretics, purgatives, &c., was daily getting worse, when Dr. Stephenson, of the 13th Dragoons, suggested the application of poultices of *lichen vulgaris* to the loins. From that day the amendment was rapid, and the patient subsequently got well. Now, Gentlemen, everybody believed that there must have been some magical virtue in the lichen. But Mr. Brady, the surgeon of the regiment, thinking that the plant had less to do with the cure than the *heat* which, in the form of a poultice, it produced, determined to try poultices made with *rice* in a case exactly similar. The result was the same—a cure; proving how right he was in his conjecture. Since I entered into private practice, I have repeatedly prescribed poultices to the loins with advantage, and I have also, with the assistance of plasters of pitch, galbanum, &c., succeeded in curing cases of Dropsy, that resisted every kind of internal remedy.

Cholera,—

the scourge of nations—will cholera be found to partake of the same universal type of disease, the ague? You will be the best judges, Gentlemen, when I draw my parallel. While in India I had ample opportunities for ascertaining its nature. Tremulous and spasmodic action belong equally to Ague and to Cholera; vomiting or nausea characterises both. The ague patient has sometimes diarrhœa or looseness; oppression at the chest, and coldness of the whole body are the primary symptoms of each. The increased flow of pale urine, so often remarked in ague, is an occasional symptom of the Epidemic Cholera. In more than one instance of cholera, which came under my observation while serving in the East, that secretion passed involuntarily from the patient a short time before death. Suppression of urine, so common in the late epidemic, was a frequent symptom of the Walcheren ague. When there is no hot fit or reaction, death is usually preceded by a sleepy stupor in both. You have ague, too, with hot skin and bounding pulse, a state analogous to the milder forms of cholera, in which you

remark the same phenomena. When not fatal, cholera, like ague, has a hot and sweating stage. Moreover, when ague terminates life by a single paroxysm, you find the same appearances after death in the bodies of both. Lastly, frenzy, disease of the lungs, liver, and spleen, with dysentery and dropsy,—to say nothing of epilepsy and apoplexy,—have been the occasional sequelæ of each. Cholera, then, is an extreme of the cold stage of ague.

What are the remedies most beneficial in Cholera? Attention to Temperature comprehends every thing that has either failed or succeeded. Were I myself to become the subject of it, I should feel inclined to trust more to a bottle of brandy than to anything contained in the Materia Medica. While serving in the East Indies, I saw many hundred cases of the disorder, but I never could convince myself of the superiority of any one kind of active *medical* treatment over another. In my work upon the Diseases of India, I have proved that death, in the great majority of instances of Cholera, takes place from a palsy of the pneumo-gastric nerves,—those nerves that influence the functions of the lungs and stomach. If you divide these nerves in the dog, you have the essential symptoms of Cholera, viz. loss of voice, vomiting, and difficult breathing *always*,—cramps and flatulence *frequently;* and the animal seldom survives the third day. On dissection, you find the vessels of the head, lungs, and intestines, filled with black blood. That is exactly what you find on opening the bodies of persons who have died of cholera. Shortly after my *return* from India, Dr. Wilson Philip read a paper at the *Westminster Medical Society*, in which he took the very same view of Cholera; but wherein he forgot to say that *his* views of the disease had every one of them been anticipated by me, in a paper which I published in the *Lancet*, before I quitted India.

LECTURE VI.

PRESENT STATE OF MEDICAL PRACTICE IN ENGLAND—DYSPEPSIA—HYSTERIA AND HYPOCHONDRIA—INSANITY—EFFECT OF LIGATURES—FAINT—CONGESTION, ITS NATURE—INFANTILE CONVULSIONS.

GENTLEMEN,

After a long intercourse with the world, and a rigid examination of what, in his day, was called its wisdom, the great Lord Bacon, musing doubtless over his own philosophical discoveries, thus writes:—"It is a view of delight to stand or walk upon the shore-side, and to see a ship tossed with tempest upon the sea, or to be in a fortified town, and to see two battles join upon a plain; but it is a pleasure incomparable, for the mind of man to be settled, landed, and fortified in the certainty of truth; and from thence to descry and behold the errors, perturbations, labours, and wanderings up and down of other men." But, Gentlemen, however exciting this kind of pleasure be to him who should be content with merely making a discovery to *himself*—the making of it *public* has its drawbacks; for in the words of Johnson, "whoever considers the revolutions and the various questions of greater or less importance, upon which wit and reason have exercised their power, must lament the unsuccessfulness of inquiry, and the slow advances of truth, when he reflects that great part of the labour of every writer, is only the destruction of those that went before him. The first care of the Builder of a NEW SYSTEM, is to demolish the fabrics that are standing." But how can you brush away the cobwebs of ages from the windows of Truth, without rousing the reptiles and insects that so long rejoiced in the darkness and secrecy these cobwebs afforded?—the bats and spiders, to whom the daylight is death! Truth, like a torch, does two things; not only does it open up to mankind a path to escape from the thorns and briars which surround them; but breaking upon a long night of ignorance, it betrays to the eyes of the newly-awakened sleeper, the bandits and brigands who have been taking advantage of its darkness to rob and plunder him. What has Truth to expect from these?—What, but

to be whispered away by the breath of calumny, to be scouted and lied down by the knaves and fools whom interest or intercourse has leagued with the public robber as his partisans? Who will talk to me of conciliation? Who will tell me that mild and moderate measures ever brought over such implacable enemies to the ranks of their destroyer; or that robbers, rioting in the spoils of their victim, will listen to the voice of the charmer, charm he never so wisely? Surely people must be out of their senses, who imagine that any exposition of Truth will be acceptable to men whose emoluments are chiefly derived from a course of studied and systematic mystification—Professors, who lure the student by every possible promise to their schools, and when once in their net, keep him there by every possible artifice and pretext which collusion and corruption can devise! one day entangling him in a web of unmeaning sophistry—another, stimulating him to waste his time in splitting straws, or in magnifying hairs—now encouraging him in a butterfly chase after shadows—now engaging him in a wordy and worthless disputation with his fellows! How is that student to be repaid the capital of time and money he has expended upon what he calls his education? How, but by deluding and mystifying in his turn the suffering sick who apply to him for relief? For relief?—Vain hope! Look at the numbers of persons who live, or *try* to live by physic,—doctors, surgeons, apothecaries, druggists, cuppers, nurses—and ask yourselves how even one tithe of these can do so, but by alternately playing upon the passions and prejudices,—the hopes, fears, and ignorance of the public?—in one case inflicting visits too numerous to be necessary; in another, employing draughts, mixtures, or measures, too expensive, too frequently and too fruitlessly repeated, to be all for the benefit of the patient! Think you, that the members of the medical profession are different in their feelings from every other human being—that their minds are so constituted, that, under the most terrible temptations, they can so far set at defiance the stern law of *necessity*, as, in their present crowded and starving state, receive with open arms a system that threatens so many of their order with ruin? Is it in the nature of things that they will welcome a practical improvement, by which the practitioner may, in a few hours, cut short cases and chances, which, by daily visitations, or by *three draughts* a-day, might be profitably protracted to a month, if the system on which it is based were only advocated in calm, mellifluous, and complimentary language? As soon may you expect a needy attorney to be prevailed upon by his client's tears to cut short chancery suit; or the master of a sailing-smack to listen patiently to the praises of steam; or a coach-proprietor to admit the safety and superiority of railroad over coach conveyance, when estimating the losses they shall respectively sustain by the too general use of the superior motive power. What though the present condition of medical practice be less the crime of the *profession*, than the fault of the legislature, that permits men clothed with collegiate authority,—professors enjoying the sanction of its protection,—annually to lure, by misrepresentation and lying promises, thousands of credulous and unsuspecting youths into a path strewed, even in the very best of times, with thorns and briars innumerable? Better far that one-half of these should at once abandon a walk of life, where the competition is so keen and close, that comparatively few in the present day can live honestly by means of it,—than, that they should hereafter have to eat their precarious bread, at the daily and hourly sacrifice of their own honour, and their patients' interests. Who will tell me half-measures will be of any avail, under circumstances like these? Gentlemen, in corrupt and difficult times, half-measures, so far from succeeding, have either been taken as a sign of weakness in the cause, or as a symptom of timidity on the part of the advocate. Away, then, with half measures!—away with the idea of conciliating men, the already rotten tree of whose sustenance you sap—the long-cemented system, whose existence depends, not on a virtuous adherence to nature and truth, but upon a collusive and fraudulent perversion of both! When persons little versant with the *present* state of medical affairs, see men of established name support-

ing a system of dishonesty and error, they too often doubt the light of their own reason. "Would Dr. So-and-so," they ask, "and Mr. Such-a-one, hold this language, if they did not themselves *believe it*—men so respectable, and so amiable in private life?"—But tell these simpletons, that Dr. So-and-so's *Bread* depends upon his *Belief* — that Mr. Such-a-one's family must fall with his fading fortunes, if the father, in the language of Hazlitt, "ceased to support that which he had so long supported, and which supported *him*"—and you bring an argument which, though not quite convincing in itself, will at least compel a closer investigation of the system it is your wish to expose and crush.—"To abandon usurped power," says Robertson in his History of Scotland, "to renounce lucrative error, are sacrifices which the virtue of individuals has on some occasions offered to truth; but from any society of men no such effort can be expected. The corruptions of society, recommended by common utility and justified by universal practice, are viewed by its members without shame or horror; and reformation never proceeds from themselves, but is always forced upon them by some foreign hand." Gentlemen, I have been blamed for the tone and spirit in which I have spoken of my adversaries—I have been asked, Why assail their *motives*—why not keep yourself to their *errors?* But in this particular instance, I have been only the humble imitator of a great master—a man whose name will at once call up every sentiment of veneration — the indomitable Luther. *Magnis componere parva*, I have followed in his wake—I hope soon to add, *passibus æquis*. Think you, the Reformation of the Church could have progressed with the same rapidity, had its most forward champion been honey-mouthed—had his lip been all smiles, and his language all politeness —or had he been content, in pointless and unimpassioned periods, to direct attention solely to the doctrinal errors of Rome? No—he thundered, he denounced, he heaped invective upon invective, and dealt in every form of language which could tell best against his enemies, whether in exposure or attack. Too wise to leave them the moral influence of a presumed integrity, they were far from merit-ing, he courageously tore away the cloak of sanctity and sincerity, with which, in the eyes of the vulgar, they had been too long invested. Had he done otherwise, he might have obtained the posthumous praise of moderation, at the price of defeat and the stake.

Gentlemen, let it not for a moment be supposed that in thus sweepingly arraigning the present system of medical polity, I have the remotest wish to degrade the profession of the physician. It has ever, on the contrary, been my object to improve the social position of my order,—to render it useful, honourable, and honoured, that kings may still, as they once did, choose their counsellors from it. Nor is it my wish for an instant to insinuate that, among the individual members of the profession, there are not numerous exceptions to the line of conduct too generally pursued. In every one of its grades and conditions,—apothecary, surgeon, and physician,—I have had the pleasure to meet gentlemen who not only heartily join me in deploring the present shameful state of practice, but who aid me with their best efforts to expose and correct it. One and all of these honourable persons acknowledge that unless some great and speedy change in the mode of educating and remunerating medical men be introduced by the legislature, Medicine must shortly cease to be regarded in the light of a liberal profession; for as things now stand, the only sure path to lucrative popularity in physic is a complete sacrifice of conscience and principle on the part of the physician. How often have I been told, in my own case, that by courting the apothecary, and offering up incense at the false shrine of the professors, I might easily and cheaply obtain the bubble reputation, to be blown me by their breath;—while by exposing the intrigues of the schools, and the collusions and corruptions of the professional world, not only do I stand as one man to a host, but I lay myself open to the secret stabs of a thousand unseen assassins! To tempters of that sort this has been my answer;—let it be yours also—

> Slave! I have put my life upon a cast,
> And I will stand the hazard of the die!

That hazard now, thank Heaven, is small. The daily increasing number of upright and honourable practitioners who espouse my views, place me already sufficiently far above the reach of my enemies, to enable me to despise them thoroughly; and at this moment I feel as secure of victory, as at one period of my life I feared defeat! As yet, I have only assailed the *System*—carefully avoiding individual attack. True, I have repelled the attacks of others, somewhat strongly too; but that was in self-defence. If in tearing away the veil of iniquity, I have not altogether remained unscathed, I have, at least, the satisfaction to know, that my enemies have done everything but *laugh* at the blows I dealt them. If it be said, I have used language too strong for the occasion, I answer in the words of Burke: "When IGNORANCE and CORRUPTION have usurped the PROFESSOR'S CHAIR, and placed themselves in the seats of science and virtue, it is high time to speak out. We know that the doctrines of folly are of great use to the professors of vice.—We know that it is one of the signs of a corrupt and degenerate age, and one of the means of insuring its further corruption and degeneracy, to give lenient epithets to corruptions and crimes." What reformer has not been called a "*violent* person?"—none that I ever heard of. Now, Gentlemen, to the more orthodox matter of this lecture.

We have hitherto spoken of the Brain as a unity—yet this organ is divided into two hemispheres. Like the features of the face it is two-fold. We have two eyebrows, two eyes, two nostrils, two ears, and in the early fœtal state, the mouth and chin are separated in the middle—you have the marks of this original separation in the infant,—I may almost say in the adult. Now though a man may lose one eye, he is not therefore blind; or, though he lose the hearing of one ear, he is not necessarily deaf. It is just possible that a small *part* of one of the hemispheres of the Brain may in like manner become diseased, and the subject of it shall appear to reason very fairly to the last. But that must be a shallow observer indeed, who from such a possible fact should draw the fictitious inference that even one hemisphere of the Brain may be disorganised *throughout* its entire substance, without the intellectual powers being at all disturbed! If you read of such facts, set them down as *false* facts. The Brain, then, like the body, in some of its parts is double, yet like the body in its integrity, the Brain is a unity, and like the same body it has also a diversity of parts. That the scalpel has hitherto failed to trace any well-marked divisions betwixt the various cerebral portions to which phrenologists have ascribed variety of function, is no argument against this doctrine. Do not all the different parts of the frame merge into each other—the elbow into the arm—the arm into the hand, &c.? What is more clearly a unity than the Hand?—Yet do we not frequently find, from the weakness of one or more of its joints or muscles, an inability on the part of its possessor to do a particular work, though he may still accomplish many others by means of it?—It is the same thing with the head. Partial disease of the Brain produces partial intellectual injury, and you see the effects of such injury in those persons who reason rightly upon every subject but one,—"monomaniacs" as they are called. Oh! I want no better proof of diversity of parts in the Brain than this. Like every other organ, the Brain of man commences its fœtal existence in the lowest type of the same organ of those animals that possess a brain—gradually assuming, by additions and superadditions, the form of the infant Brain. In some instances, as in the case of other organs of the body, one or more of these superadditions are never properly developed. The result you can anticipate. Idiocy, according to the degree and locality of the defect; and yet there are medical twaddlers who have the audacity to deny that the Brain is the organ of intellect! Were their statements correct, why confide the treatment of mental derangement to the physicians—to men who, for the cure of mental disease, employ the identical material agency by which they profess to cure a diseased limb, or other injured member of the material body? You might as well talk of "*Walking*" apart from the matter of legs, as of *Mind* or thinking power apart from the matter of Brain! This

much I have thought it right to premise before entering upon the subject of

Dyspepsia or Indigestion;

for to the state of the Brain and Nervous System we shall have to ascribe the disease. When treating of Pulmonary Consumption, at a former meeting, I explained to you that no individual could possibly suffer from any complaint whatever, without his digestion being more or less implicated. The patient who labours under any severe form of disease, such as *Gout*, *Consumption*, or *Erysipelas*, has all the symptoms, or shades of symptom, that medical men group together under the head of Indigestion; but the superadded symptom which, from its prominence or locality, may dispose the physician to term the disease Consumption, Erysipelas, or Gout, may also dispose him to overlook, or esteem as insignificant, the coincident errors and disorders of the digestive apparatus. In the lower and more subdued forms of Fever, the patient very often has no particular tendency to decomposition in any organ or locality; but from every function being more or less wrong, he very naturally turns his attention to his stomach or bowels, the errors of which come more particularly under the immediate cognisance of his feelings. Such a patient will complain to you of flatulence and acidity, or of that distressing symptom termed "water-brash." If you ask him about his appetite, he will tell you it is "so-so;" or "he cares nothing about eating;" or it is positively "excellent"—which last, I need scarcely tell you, means that it is morbidly craving. Ten to one, it is capricious,—the patient now wishing for this, and now for the other, and rejecting what he desired most, the moment it comes before him. Perhaps he has thirst. He is wearied upon the least exertion; has little inclination to get up in the morning, and when he does get up, he is indolent, and dawdles his time away. He is apathetic in mind as he is indolent in body; and he has often a great disposition to sleep, especially after meals. Others again will just be the reverse of all this; these perpetually harp upon some particular topic—fidget themselves and every body else about trifles, and look always at the dark side of life. Some fly in a passion for nothing, or upon the least contradiction, and in a few minutes after the gust of passion has passed away, they lament their mental weakness. Their nights are either sleepless or broken and disturbed by unpleasant dreams. One moment they dream of robbers, from whom they cannot escape; or they are on the eve of tumbling down a precipice; dreaming sometimes within a dream—asking themselves, even in the very act of dreaming, whether they dream or not—and they will satisfy themselves by a process of *unreason*, that they are actually awake and walk the air. Even during the day many of these patients have their dreams or reveries—pleasurable sometimes, but more often the reverse;—they see things either as "through a glass darkly"—or their perceptions are all exaggerated and unnatural. Phantoms may even pass before them at mid-day, phantoms such as they see in their dreams of the night. The very colours of things may be altered to their eyes—red appearing to them green, and *vice versâ*. Even the shapes and dimensions of bodies may be quite changed to their sight—though the greater number have sufficient judgment remaining, to know this to be an optical delusion merely. John Hunter had the sensation that his own body was reduced to the size of a pigmy!—I have met with some patients who have even at times doubted their own existence.—Light and shade have wonderful effects upon most invalids of this class. One is perfectly miserable except when he is in the sunshine—another cannot bear the light at all. Ringing in the ears, or partial deafness, is a common complaint of dyspeptic persons. Some can only hear distinctly during the noise of passing carriages, or in the hum of a city, or of falling waters; while the ears of others are so sensitive, they complain of the ticking of the clock. The sense of touch is very often similarly vitiated; one patient having partial or general numbness,—another, his feelings so acute, that he shrinks with pain if you merely touch him. Occasionally, though more rarely, you have examples of a reverse kind; the

patient in that case will say,—"Oh, do not take your hand away, the pressure does me good—it acts like magnetism."

All kinds of aches are complained of by dyspeptic patients — headache perhaps most frequently,—headache, for which, on the hypothetical assumption of fulness of blood in the brain, the leech, lancet, and cupping-glass are so frequently in requisition. But to what end? In the words of Abernethy, supposing such assumption to be correct—"Does bloodletting *cure* diseases in which there is a fulness of blood in the head? It must be granted, that in many instances, it temporarily alleviates them, but in others, it *fails to relieve*, and even *aggravates* them." — What are those headaches, those night and day dreams, all those various signs and sensations, but the effects of a great instability of Brain, now brought on by one thing, now by another? I have known the most severe and distressing headaches arise from loss of blood, and I have known them originate in a long fast. Surely for such diseases, the leech and the lancet are not the proper remedies. But, Gentlemen, there are many other ways by which the brain may be weakened. You may as certainly exhaust it by prolonged literary or other mental labour, as by starvation or loss of blood; for there are times to think, and times to cease thinking; and if the Brain be eternally harassed by an over anxiety in any of the pursuits of life; if it be always at work on one subject, not only will there be headache, or confusion of head, but the constitution must be injured. How can this organ painfully revolve again and again the occurrences of the *external* world, and give the proper attention to the *internal* economy, over which it presides? When you listen to an orator or a preacher whose discourse powerfully affects you, the brain becomes so engaged, that it cannot at the same time attend to the breathing—and you are, therefore, compelled ever and anon to draw a long breath—you must take a deep sigh, to make up for the ordinary succession of short inspirations and expirations, which constitute the natural art of breathing. Now, Gentlemen, if the function of the *lungs* be so easily disturbed in this way, can you doubt that the heart, stomach, bowels, and other parts, may be similarly influenced? What are the complaints of men who have much on their minds,—bankers, merchants, and great lawyers?—what the diseases of *aged* persons—persons whose brains become weaker and weaker by the slow but certain operation of time?—Do not these patients constantly complain of their stomachs and bowels? Do not many of them suffer from palpitations of the heart,—from giddiness and sensations like fainting, with a fear of *falling?* Now, Gentlemen, this giddy sensation, this disposition to fall, is most commonly felt upon suddenly raising the head, or in rising from a chair. What surer sign of cerebral weakness? Yet, not long since, two gentlemen, each upwards of seventy, informed me they had been bled and leeched by their respective apothecaries for this disease of pure cerebral exhaustion. Bless my life, you may *bleed* or *purge* a healthy man into this state any day!

In these diseases, one patient will tell you, he is troubled by a feeling of sinking and pain of stomach, which is only relieved by eating. Another suffers from spasm, and pain of the heart or stomach, with acidity or flatulence, the moment he begins to eat; and in either of these cases the pain may sometimes become so violent, that if it did not soon go off, the patient must die. Now, this kind of spasm, whether affecting the stomach or heart, is a disease for which you are expected to give *immediate* relief, and nothing will do so more readily than a glass of hot water—water as hot as the patient can possibly drink it. This point of practice we owe to John Hunter, who having frequently suffered from spasm of the stomach, tried every thing he could think of, and among others hot water. The ease which this gave him, led him to extend its use to his dyspeptic patients; and my own experience of its virtues, enables me to bear him out in the encomiums he has passed upon it. To this simple means, palpitation, spasm, headache, wind, and acidity, will all sometimes yield as to a charm. Is not this another instance in proof, how mere change of temperature acts on the body under disease? Now, as hydrocyanic acid very frequently gives

the same immediate relief in every one of these affections, we at once see that its medicinal power must depend upon the change of temperature which it electrically produces. Of the various cordials to which you may have recourse for spasmodic pain of the heart or stomach, there is none so good as *Noyeau;* and the virtue of this "strong water" depends very much upon the prussic acid it contains. Of all the remedies with which I am acquainted, there is none equal to this acid, in convulsions and spasms of every kind. But spasms of the stomach and heart are not the only ones of which dyspeptic patients complain. Some are troubled with a sense of tension of the brain—others with a tightness of the throat or chest—and some, particularly females, suffer from a spasmodic affection of the gullet, which gives them a feeling as if they had a ball there. Others are subject to stitch or *pain of the side,* produced by cramp of the muscles of the ribs. How correctly Shakspeare described the nature of these pains, when he made Prospero say to Caliban in the Tempest—

> For this be sure, to-night thou shalt have *Cramps, Side*-stitches, that shall pen thy breath up!

The common practice in these cases is to say, "Draw your breath;" and if you cannot do so for the pain, "inflammation" is the imaginary goblin of the doctor, and blood-letting in some of its forms the too ready *remedy* to which he flies;—how vainly for the patient—how profitably for himself, Truth must one day tell! To small doses of nitrate of silver, prussic acid, or quinine, such pains will often yield, after having resisted every form of depletion, with all the usual routine of blisters, black draught and blue pill to the bargain. The great error of both patient and practitioner, in dyspeptic cases, is to seize upon some of the most prominent features as the *Cause* of all the others. In one instance, they will blame wind—in another, acid. But these, as it happens, instead of being causes, are only the common and *coincident Effects* of a great cerebral weakness: they are not the product, as many imagine, of fermentation of the food—they are *morbid secretions* from the lining membrane of the alimentary canal. And of this you may be assured, not only by the mode of their production, but by the manner of their cure, when that happens to be accomplished. Just watch a dyspeptic patient when he receives a sudden or unexpected visit; his "heart-burn," as he calls his acidity, comes on in a moment, and his bowels commence tumbling and tossing about, and will often guggle so audibly as to make even the bystanders feel sorry for him,—showing you clearly that this acidity, as well as the gases so suddenly extricated, are the effects of a weakened nervous system,—that they are, in a word, the common effects of wrong secretion. Now the term *Secretion* is so constantly associated in the mind of the student with the notion of a *Liquid,* that some of you may not all at once comprehend how gas can be secreted; but, Gentlemen, is not every tissue of the body the result of secretion?—are not the hair and the nails as certainly secreted as the saliva or the bile? Only place your naked arm for a few minutes under water, and you will find bubbles of air constantly forming upon it—such air being in that case actually *secreted* before your eyes by the glandular apparatus of the skin! Can you be at any difficulty now, to conceive how flatus is a secretion from the alimentary canal? If a doubt remain, you have only to debilitate the brain of an animal by bleeding him slowly, and his bowels will become full of flatus, even to bursting. Then again, as regards the cure of dyspeptic patients, a drop or two of prussic acid, twice or thrice a-day for a week, or a short course of treatment by quinine, nitrate of silver, or alternations and combinations of these medicines, will often do away for months, and even years, with every symptom of wind and acidity—while cordials, alkalis, and mild laxatives, seldom do more than give a temporary relief. Oh! I never saw much good done by that placebo mode of practice—nor is this at all to be wondered at, if you reflect, that every part of the constitution of a dyspeptic patient is more or less disordered. In every case of this kind there is an unnatural temperature of body; some patients complaining to you of chills or heats, or alternations of both in the back, stomach, hands, feet, &c.

In these cases, the skin, partially or generally, is either more moist than in health, or it is harsh and dry,—perspiring, if at all, with difficulty. In the latter case, some other secretion may be morbidly active. The urine or the bile may be in excess; or the natural fatty or watery deposit of the great cavities of the chest and abdomen, may be in superabundance. The looker-on may even have a false impression of the patient's case and condition from the increase of either in the minute cells of the investing membrane of the whole cellular substance. Should such a patient complain of being ill, he is sure to be laughed at for his pains—for nobody has any sympathy with him—and this is one of the many cases in the world where "appearances are deceitful."

The dyspeptic patient is either torpid, and with difficulty roused to exertion, whether corporeal or mental, or he is acted upon by every thing he hears. The last person that speaks to him is the man for him. His spirits are depressed by the merest trifle, and raised again by a straw or a feather. Then, as regards his actions or his promises, you can scarcely depend upon anything he tells you. What he is dying to do to-day, he is miserable till he can again undo to-morrow;—he spends his life betwixt acting and regretting;—hesitating, hoping, and fearing by turns—one moment all confidence, the next all suspicion. Now, is not this one of the strongest of many striking proofs how much our *mental workings* are the effects of our material state—the result of our brain's condition, and its atomic relations and revolutions? It is in perfect accordance with what we observe in all our corporeal motions. If the muscles be tremulous, can you wonder that the mind should be vacillating and capricious?—or when these are cramped and spasmodic, why should you be astonished to find a corresponding wrong-headedness, and pertinacious and perverse adherence to a wrong opinion?—*mens sana in corpore sano.* You may argue for hours to no purpose whatever with some patients;—for how can you expect the wrong brains of wrong bodies to reason rightly? These persons are like the inebriated, who see two candles when there is only one—their perceptions being false, so also are their reasonings. The plunge bath, or a short course of chrono-thermal treatment, will make them alter their minds sooner than the most powerful and persuasive arguments of a Cicero or Demosthenes.

Lady Mary Montague somewhere says, It is the nature of the world to hate truth. She came to this opinion, doubtless, from observing how badly the Public had for the most part treated its best benefactors. The first discoverer of anything useful generally meets with the fate of him who attempts to open the eyes of a person imposed upon—namely, to be called bad names for his pains. How forcibly this reminds us of the jackass that kicked the good-natured man, when trying to relieve the stupid brute from the weight of its panniers!

> The pleasure surely is as great,
> Of being cheated as to cheat.

The more unscrupulous and unprincipled the impostor, the more certainly he has appeared to fascinate his dupes. Let him only hold out an impossibility to them, and they will dance attendance at his door for months. Taking advantage of a popular but puerile prejudice against *Mineral* medicine, the Medical charlatan is very careful to prefix the word *Vegetable* to his nostrum; and this, he tells the public, is SAFE in every form, dose, and degree—which being in utter repugnance to every other thing in nature, is greedily swallowed by the multitude as an indisputable truth! Can weight, measure, heat, cold, motion, rest, be so applied to the human body with impunity? Can you without injury cover yourselves with any weight of clothes, or swallow any measure of food? Or can you retain any part of the body in perpetual motion or repose without that part suffering? No, truly! responds the same dyspeptic, who believes that such and such a medicine is safe in every form, dose, and degree! When treating patients of this class, it is better not to tell them what they are taking; but should they chance to find out that you have been giving them arsenic, prussic acid, or nitrate of silver, you will be sure to be worried to death by questions, dictated sometimes by their own timidity, and sometimes by the kind feeling of

some "damned good-natured friend" secretly set on by some equally damned good-natured apothecary. Now, as these patients are for the most part great sticklers for authority, your only course is to tell the truth—which, after all, in nine cases out of ten, will make no impression—and that is the reason why the quack and the subordinate practitioner who can keep their medicines secret, have an advantage over the honourable physician—an advantage so great, that in a few years, if matters do not take a turn, I doubt if one such will be found practising medicine at all. You may say then what, if it have no effect with patients themselves, will at least appear reasonable to their friends—that the medicines you ordered are all contained in the pharmacopeiæ of the three Colleges of Edinburgh, London, and Dublin, and they are therefore recognised as medicines of value by all physicians who have a name to make or a character to lose—that the dose in which you give them is perfectly safe, inasmuch as, if it *disagree* with their particular constitutions, it will only cause a short *temporary* inconvenience; and to sum up all, you may quote Shakspeare, who says, and says truly, "In POISON there is PHYSIC." And again:

"Oh! mickle is the powerful grace that lies
In herbs, plants, stones, and their true qualities:
For nought so vile that on the earth doth live,
But to the earth some special good doth give;
Nor aught so good but strained from that fair use,
Revolts from true birth, stumbling on abuse.
Virtue itself turns vice, being misapplied,
And vice sometime's by action dignified.
Within the infant rind of this small flower,
POISON hath residence, and MEDICINE power!"

So that Physic and Poison—whether vegetable or mineral—are Physic *or* Poison according as they are rightly or wrongly applied.

But to return to Dyspepsia, or that low FEVER so termed. In cases of this kind, my practice is to combine the chrono-thermal remedies with what you may call, if you please, *Symptomatic* medicines. For example, where flatulence is the most prominent symptom, I prescribe quinine, hydrocyanic acid, or nitrate of silver, with Aniseed or Cardamoms. In acidity, either of the two first remedies will often answer very well with Soda or Potash. Where the bowels are slow and torpid, Rhubarb, Aloes, or both, are very good medicines with which to combine any of the chrono-thermal medicines. In such cases aperient effervescing draughts are also useful. Should the patient complain of muscular or other pains, you may add Colchicum or Guaiac—and so proceed in a similar manner with other symptomatic remedies for other local indications; keeping in mind, however, that these symptomatic medicines are merely a means of *secondary* importance in the treatment of a great constitutional *totality* of derangement. In addition to these measures, plasters to the back or stomach may be very beneficially resorted to in many cases of dyspepsia, and you may also run the changes upon various kinds of baths. The cold plunge and the shower baths are my favourites; though I need not tell you that the feelings of the patient, after he comes out of it, are a better guide to you in your choice and continuance of any bath than all the theories of all the doctors that ever wrote or reasoned upon disease and its treatment. "How do you think me now, doctor?" is a question I am asked every day, and every day I give the same answer: "How do *you feel?*" If the patient is better, he says so; if worse, he will be sure to tell me he is not so well; and according to his answer do I change or continue his physic. Now, whether this be common sense or not, I leave you to judge. Heaven only knows it is not *science*, or what very learned people call science; for when the patient says he gets worse and worse every day, science generally tells him to continue his medicine, for that he has not taken enough of it, and that he will be worse before he be better—which I need not tell you is a lie—or more politely to speak, a piece of imposture. Should the patient die, why, then, he dies a natural death, and he has had the first advice, for not only did Mr. So-and-so, the fashionable apothecary, attend him, but Dr. Such-a-one, the great physician, was also called in, and he said all was right, and that nothing better could be done. Had the doctor said all was wrong, he might perhaps have been nearer the mark—but, in that case, what apothecary would either call him in again himself, or let him in again

when requested, where he could by a little gentlemanly trickery keep him out? In my own particular case, the custom of the apothecary has been secretly to play upon the fears of the patient or his friends against "strong medicine," to shrug his shoulders and smile contemptuously. "Oh, I can tell you something of Dr. Dickson," he has said, "but you must not give up *me* as the author;"—whereupon he has proceeded to lie Dr. Dickson's life away; and when he had thus, to his own thinking, sufficiently poisoned the ear of his patient, he has turned round in this manner to him—"But if you still want a second opinion, why do you not call in Dr. This, or Sir Thingumy T'other—they are leading men, you know!" Now that only means, that the physicians in question are the fashionable puppets whom he, and people like him, call in to conceal their bad work—men who would as soon think of differing with the opinion of their supposed subordinates but real patrons, as of quarrelling with their breakfast because it was purchased with the shilling of a dead man's guinea!

What a just observation was that of the author of Lacon: "The rich patient cures the poor physician much more often than the poor physician the rich patient; and it is rather paradoxical, that the rapid recovery of the one usually depends upon the procrastinated disorder of the other. Some persons will tell you with an air of the miraculous, that they recovered *although* they were given over; when they might with more reason have said, they recovered *because* they were given over." "The great success of quacks in England has been altogether owing to the real quackery of the REGULAR PHYSICIANS." What does that mean? Just this, that the morality of many legalised practitioners even of the highest grade, is not one remove above that of the Morisons and St. John Longs, whose dishonest practices they are so constantly decrying! Now, this you will say, is a startling statement—and much will doubtless depend upon the character of the person making it, whether you treat it with a laugh of contempt or listen to it with something like respectful attention. Gentlemen, the man who deliberately put that on paper, (and I quote him to the letter) was no less a person than *Adam Smith*,—the Author of the Wealth of Nations! If such, then, was the certain and settled conviction of that very keen-sighted observer of mankind, will any assertion, any asseveration on the part of individuals *interested* in declaring the contrary weigh with you one straw against the evidence of your own senses, when you choose to examine this matter fairly and fully for yourselves? So far as my own experience goes—that is, from what I have seen of the profession in London and the English county towns—eminence in medicine is less a test of talent and integrity than a just reason of suspecting the person who has attained to it, of a complete contempt for both! I say *suspecting*—for I have met with exceptions, but not many, to the rule. Could you only see as I have seen, the *farce* of a medical consultation, I think you would agree with me, that the impersonation of Physic, like the picture of Garrick, might be best painted with Comedy on one side and Tragedy on the other. In saying this much, not only have I acted against everything like medical *etiquette*—but I shall be sure to be roundly abused by the medical profession for it. The truth, however, I maintain it to be—but *not* the whole truth; for the world must have its eyes a little more open before it can believe all I happen to know upon the subject. By-and-by I shall tell the English people something will make their ears tingle!

To return to the consideration of Disease. You now see that in all cases of which we have been speaking, the constitution is for the most part primarily at fault, and that the names of disorders depend very much upon the greater or less prominence of some particular symptoms,—which symptoms, or their shades, may be readily detected in *all diseases*. With every case of Dyspepsia depression of spirits, and more or less mental caprice, such as hasty or erroneous notions upon one or more points, will be found to be associated. When such depression amounts to *despondency*, medical men, according to the sex of the patient, change the word DYSPEPSIA into

HYPOCHONDRIA, OR HYSTERIA;

and some professors are very particular in their directions how to distinguish the one from the other! Gentlemen, what is the meaning of *Hysteria?* It is a corruption of the Greek word ὑστερη, (Hystera, the *womb;*) and it was a name given by the ancients to the particular symptoms we are now considering, from a hypothetical idea that in such cases the womb was the principal organ at fault. From the same language we also derive *Hypochondria*, a compound word formed of ὑπο (Hypo, *under,*) and χονδρος (Chondros, *cartilage,*) the supposed seat of the disease being the liver or stomach; which organs are both situated under the *cartilaginous* portions of the lower ribs. So that when a female suffers from low spirits and despondency, with occasional involuntary fits of laughing, crying, sobbing, or shrieking, you must call her state Hysteria; and when a male is similarly affected, you must say he has Hypochondria. Now it so happens, medical men sometimes pronounce even their male patients to be "hysterical!" And this brings me in mind of an honest Quaker of the profession, who being very ill, had three doctors to attend him—Mr. Abernethy, Dr. Blundell, and a physician whose name I now forget. Each had his own notion of the disease: the last mentioned having put a stethoscope to the chest, at once declared the "Heart" to be the seat of mischief.—Mr. Abernethy, on the contrary, with a sarcastic "Pooh, pooh!" muttered something about the "stomach and digestive organs,"—while Dr. Blundell, in the true spirit of a man-midwife, decided that their patient was only "hysterical." Now the patient, though a Quaker, was a humorist; so he ordered in his will, that when his body should be opened after his death, his *Digestive Organs* should be presented to Mr. Abernethy, his *Heart* to his stethoscope physician; and to Dr. Blundell his *Womb*, if he could find one!

Gentlemen, that the BRAIN is the principal organ implicated in all disorders which come within the physician's province, more especially in such as are termed Hysteria or Hypochondria, the smallest reflection will convince you. Suppose a person of either sex has been accidentally debilitated by loss of blood—a person who previously was strong in nerve as in muscular fibre; suppose a letter comes with a piece of bad news,—the patient in that case bursts into tears, laughs and cries time about, and then sinks into a state of dismal and gloomy despondency. And all this forsooth, you must put down to the state of the womb or digestive apparatus, according to the sex of the patient, instead of placing it to the account of the brain and nerves, without which the ill-timed letter, the *cause of all*, could not, by any possibility, have affected the mind in the least! Another class of practitioners, scarcely less unreasonable than those to whom we have just alluded, will have it, that patients, coming under the head of hysteria and hypochondria, are not ill at all.—"Oh! there is nothing the matter with this man," they will say; "he is *only* hipped!" and if the female, "she is *only* hysterical." Dr. Radcliffe, when he refused to come to Queen Anne, declared he would not stir a foot, "for there was nothing the matter with her but the Vapours!" Such was the term by which the doctors of that day characterised the shifting shades of symptom now called Hysteria. Gentlemen, do I require to tell you that no man or woman suffers from melancholy, or indulges in whims and fantasies, without being positively ill? Whoever labours under mental delusion or despondency has alternate chills and heats; and remissions and exacerbations of all the more prominent symptoms characterise the disorder in every form. The late Lord Dudley, in a letter to the Bishop of Landaff, relates his own case, and it is so like what you will daily meet in practice, that I shall give it to you in his own words:—"It is in vain," he says, "that my reason tells me that the view I take of any unpleasant circumstances in my situation is exaggerated. Anxiety, regret for the past, apprehensive uneasiness as to my future life, have seized upon me as their prey. I dread solitude; for society I am unfit; and *every error of which I have been guilty in life* stands constantly before my eyes. I am ashamed of what I feel when I recollect how much pros-

perity I still enjoy; but it seems as if I had been suddenly transplanted into some horrible region beyond the bounds of reason or of comfort: *now* and *then* I enjoy a few hours *respite*, (the remission?) but this is my general condition. It is a dismal contrast; for you will remember that I was naturally gay and cheerful." Now, although Lord Dudley recovered perfectly from this particular attack, his disease, at a later period of his life, returned; but this time he was less fortunate; for the symptoms of his disorder gradually deepened in their hue, until they amounted to the most complete

INSANITY,—

a proof to you that the hypochondriac whim, and the hysteric fancy, differ from *hallucination* and *mania*, in shade merely, and the chills and heats which precede or accompany them, from the cold and hot stages of the most intense Fever, in nothing but degree. Has not the maniac, in every form of his delusion, lucid intervals—*remissions?* Your schoolmen, your "pathologists," your profound medical reasoners, speak of madness and other diseases, as if they were the effects of some fixed cerebral *malformation*, instead of being the consequences of external influences acting on an *atomic instability* of Brain. They tell you they are curable or not, according to the CAUSE;—they look in the dead body for the causes of an intermittent living action—for the origin of hypochondria and mania,—diseases which they have even themselves, perhaps, traced to hard study or a passion! External agencies, then, were the real causes, not the structural deviations detected *within* after death by the scalpel. Students of medicine! young men honourably ardent in the pursuit of knowledge, for the sake of your profession and your future patients, learn to think for yourselves. Pause, examine, weigh, before you give a slavish assent to the dicta of your teachers. When these tell you, that madness with a lucid interval is an inflammatory essence, or that it depends upon some cerebral malformation or tumour, ask them how they reconcile days or even hours of *sanity* and *sense* with a cerebral structure thus partially, but permanently malformed or disorganised! That medical men, mystified from boyhood by their teachers, should fall into such errors, is not so astonishing as that the leaders of our periodical literature should be equally unfortunate. What, for example, can be more egregiously absurd, than an observation the reviewer of Lord Dudley's letters in the Quarterly Review has allowed to escape from his pen! "The gifts of fortune and *intellect*," says this writer, "were counterbalanced by an ORGANIC MALFORMATION of the brain." How can *intellectual power* even for one moment be compatible with *defective* cerebral organisation? How can the cause of an *intermittent* disease be a corporeal entity, or something permanently fixed? Let no sounding words, no senseless sophistry, cheat you of a reply to this question. The maniac who has lucid intervals is curable in the greater number of instances—the hypochondriac who at any time of the night or day enjoys the very briefest immunity from his miserable feelings, may be equally susceptible of improvement from well-devised remedial means. The modern medical treatment of both being essentially AGGRAVANT, can you wonder that these diseases should so often remain unrelieved, or that a sceptic smile should be the reward of the individual who tells you that in his hands at least they have ceased to be the opprobria of medicine! What has been the result of the ANTIPHLOGISTIC treatment of insanity? Let the physicians who attended Lord Dudley in his last illness answer that question, for *they* spared neither lancet nor leech in his case. In the case of Lord Byron, "delirium," which is only another word for *mania*, was actually produced by the lancet. But the better to open your eyes to the effect of such cruel treatment in this disease, I will read a short extract from a letter I received from Dr. Hume, the same staff-surgeon whose successful practice I have already had occasion to detail to you.—"I lately," he thus writes, "paid a visit with our Depôt Paymaster to the Armagh lunatic asylum. Being the receptacle for the insane poor of four counties, namely, Monaghan, Fermanagh, Cavan, and

Armagh, it generally contains about 150 inmates. Having visited the different apartments, I inquired of the manager, Mr. Jackson, the treatment pursued. His answer was: 'Although I am not a professional man, I have paid great attention to the treatment of the insane for the last *five-and-twenty years*, and the result of my observation is, that the usual practice of bleeding, leeching, cupping, &c., only *aggravates* the condition of the patients. Of those who were BLED on admission I *never* saw *one* recover.' Now this is a curious fact elicited from a plain practical man of great experience, who, had he known I belonged to the medical profession, might not, perhaps, have been so candid in his remarks." Dr. Conolly, in his Report of the Hanwell Lunatic Asylum, is obliged to admit that great numbers die shortly after their admission into that establishment. The large abstraction of blood which he so lauds in his work on Insanity, will easily account for the unsuccessful termination of his cases.

Well, then, Gentlemen, Hysteria, Hypochondria, Mania, are merely modifications or developements of chronic or habitual low FEVER. And since I commenced to treat them as such, I have had a practical success and a mental satisfaction, that contrast somewhat strongly with the poor opinion I entertained of the resources of our art, and the vexation I experienced when first entering upon my professional career. This much you should know, however, that in all such disorders you will be obliged to change your remedies frequently—for in chronic diseases what will often succeed to admiration one day, may as often have an opposite effect the next; and this is strictly in accordance with what you find in every thing in life. The toy that will stop the cry of the weeping child to-day, may make it cry more loudly to-morrow. You must, in that case, change its rattle for some other gew-gaw; and so it is in the diseases we have been now considering — diseases where the temperament of the body, like the temper of the mind, is constantly varying. The great secret of managing chronic diseases properly, consists in the frequent change and right adjustment of the chrono-thermal and other remedies, to particular cases; and this also explains the good effect of Travelling upon many of these patients; for to the constantly shifting scenes and to the frequent repetition of novel *cerebral* excitement produced by those scenes, we must ascribe the chief advantages of such a course; —clearly proving that the Brain in this instance, as in every other, is the true key to all good medical treatment. Whatever, then, be the name by which you choose to designate your patient's complaint, you will be sure to meet with nothing but disappointment, if you pin your faith exclusively to any one medicine. To-day a mild emetic will give relief—temporary only if you do not follow it up to-morrow, with iron, opium, musk, quinine, or the bath. One week, arsenic will be a divine remedy; the next, having lost its power, you may dismiss it for prussic acid, valerian, creosote, strychnine, or silver. In regard to silver, the *nitrate* is the preparation which I am in the habit of using, and an admirable medicine it is, when properly managed. Boerhaave, the greatest physician that ever lived, speaks most highly of its remedial powers in "nervous complaints." Cullen, Pitcairn, every medical man but the most ill-educated apothecary or the equally ill-educated puppet who enjoys, at the mercy of his breath, the reputation of being *par excellence* a physician, will readily bear testimony to its safety and value as a medicine. Like every good thing, however, the nitrate of silver has been abused in practice, and in some half-dozen instances it has been pushed to so great an extent as to give the patient a permanent *blueness* of skin for life. But. Gentlemen, in these cases, the practitioners who employed it committed the double error of giving it too long and in too great quantities; and that people should entertain a prejudice against it on that score, is just as reasonable as that a man should be afraid to warm himself when cold, because his next-door neighbour had burnt his fingers at the fire. For myself, I can truly say, that though I have prescribed the nitrate of silver in some THOUSAND cases of disease, I never had the misfortune to give the slightest tinge to the skin of a single individual. But should

objections to the use of this medicine still continue to be urged after a proper explanation on your part, you may be pretty sure that some ignorant or interested rival has been secretly playing upon the timidity of your patient or his friends. In that case you are less to be pitied than the patient; for if you have no remedy for rascality, he may have no relief for his suffering. So much, then, for one of many annoyances every practitioner must experience when his patient happens to be

——— "the tool
That KNAVES do work with, called a FOOL."

But, Gentlemen, we must not suppose that medicine is the only profession where able and honourable men experience such annoyances. Doctors of divinity, and doctors of law, are equally obnoxious to intrigue and prejudice,—ay, and *State*-doctors too, as Sir Robert Peel and Lord Melbourne could tell you if you would ask them.

To return. The shifting shades of mental distress, and the various vagaries and wrong thoughts—to say nothing of wrong actions—of persons whose diseases come under the head we have just been considering, are so many and so multifarious, that to attempt to describe them all would be a mere waste of time and labour—inasmuch as, however greatly they may appear to differ from each other in shape and hue, they all depend upon a similar totality of corporeal infirmity, and yield, when they yield at all, to one and the same system of corporeal treatment. A few instances in proof, may suffice to show you this:—

Case 1.—A married lady consulted me under the following circumstances:—Every second day, about the same hour, she had an unconquerable wish to kill her children, and when she happened to look at a knife, her terror, lest she should do so, was extreme. Now, as every function of this lady's frame was more or less wrong, I prescribed for her quinine with sulphuric acid. From that day she had no return of the homicidal feeling.

Case 2.—A gentleman, every second day, took a fit of suspicion and jealousy of his wife, without the slightest cause whatever, as he confessed to me, on the day of remission, when he called to consult me; and however absurd and unreasonable the idea which haunted him, he found it impossible to drive it from his mind. Prussic acid and the plunge bath cured him completely.

Case 3.—Another gentleman, after a hard contest at his university for prize honours, suddenly became moody and sullen; lost his flesh and appetite, and fancied himself Judas Iscariot. Such was his belief one day—to be laughed at even by himself the next! I saw him six times, at the end of which he was perfectly cured by chrono-thermal treatment. Two years afterwards his sister consulted me for "nervousness," when I learnt that her brother had not had the slightest symptom of return.

Whoever, in his progress through life, takes the trouble to study individual character, must be struck by the perversities, inconsistencies, and other *bizarreries* of the human mind. Many people, for example, commit follies, faults, and crimes even, involuntarily and without any apparent object. Some of you may possibly remember the case of Moscati, a person singularly gifted with talent, but who, at the same time, had such an invincible disposition to *lie*, that no one would believe him, even when by accident he spoke the truth. A lady, who was once a patient of mine, told me that every time she became pregnant she caught herself frequently telling lies, for no end or purpose whatever. I knew a gentleman, with high feelings of honour, who was occasionally in the habit, when under the influence of wine, of pocketing the silver forks and spoons within his reach; you can easily imagine his distress of mind the next day, when he packed up the articles to return them to their owners. From these cases, you now see how much the *morale* of every one must depend upon his *physique*. Attention to corporeal temperature will be found of more avail in mending the morals of some individuals than a well-written homily.

How many pretty things have been said *for* and *against* the morality of Suicide! I wish it were always in a person's power to abstain from it. But that the *disposition to commit it*

may, like many other bad dispositions, be cured by medicine, I could give you a great many proofs. However, as our time will not now permit me to enter into these subjects so fully as I could wish, I shall content myself with reading to you a part of a letter I some time ago received from Dr. Selwyn, formerly of Ledbury, now of Cheltenham. Speaking of Mr. Samuel Averill, of the Plough Inn, Dynock, Gloucestershire, Dr. Selwyn says:—"Before he came to me, he had consulted Mr. ———, of Ledbury, and other medical men, to no good purpose, as you can easily understand, when I tell you they principally went over the old routine of cupping, purging, &c. Mr. Averill's symptoms were depression of spirits to crying—thoughts of *Suicide*, fears of becoming a lunatic, sleepless nights, and, generally speaking, the greatest possible state of mental wretchedness. He passed immense quantities of urine, as pale and pellucid as water from the pump. Finding no particular organ in a worse state than another, I thought this a good case for your doctrines; and accordingly I rang the changes on the nitrate of silver, strychnine, musk, prussic acid, creosote, iron, quinine, and opium—varying and combining these according to circumstances with valerian, hartshorn, blue pill, &c. In a fortnight you would have been astonished at the improvement effected upon him. In about six weeks more he had no complaint, and he was with me about a month ago, when I considered his cure complete. I have treated a great many cases of Dyspepsia successfully, by attending to the *intermittent* principle, and I had lately a case of Tic Douloureux, which, after having been under the successive treatment of several eminent practitioners with no perceptible improvement, yielded to the chrono-thermal remedies. The subject of it, Miss T——, was formerly a patient of your own for some other complaint. I still hold that, in *chronic* diseases, by keeping your principles in view, we have a great help in many of these anomalous cases, which I would defy a nosologist or pathologist to name or classify; and as I am still consulted in such cases, I do not, I assure you, lose sight of them. Often, indeed, when I should, under the scholastic system, have been completely puzzled what to do, I now proceed at once to act upon the intermittent principle, and I have every reason to be satisfied with my success."

Gentlemen, that the numerous diseases which medical men group together under the head of Dyspepsia, Hysteria, and Hypochondria, are caused by circumstances from *without*, acting upon an atomic instability of Brain *within*, might be proved by an infinity of facts. But this *instability* may be produced, or put in action rather, by different influences in different individuals—one patient being only susceptible to one agent, while another may be acted upon literally by every wind that blows. The late General O'Hara, for example, when he commanded the troops on the Mediterranean, was so sensible of the Levant wind, that before he rose in the morning, he knew if it had set in, by the effect it had on his temper; and during its continuance he suffered from a moroseness and irritability no effort on his part could conquer; by his own desire his servants kept out of his way on these occasions. The different effects of the winds on the human system, Shakspeare well knew when he made Hamlet say,

> ——— I am only mad *north, north-west*,
> When the wind is *southerly*, I know a hawk from a handsaw.

And in confirmation of Shakspeare's truthfulness to nature on this as on most other occasions, we read in Sir Woodbine Parish's Book about Buenos Ayres, that "not many years back, a man named Garcia was executed for murder. He was a person of some education, esteemed by those who knew him, and, in general, rather remarkable than otherwise for the civility and amenity of his manners. His countenance was open and handsome, and his disposition frank and generous; but when the *north wind* set in, he appeared to lose all command of himself; and such was his extreme irritability, that during its continuance, he could hardly speak to any one in the street without quarrelling. In a conversation with my informant, a few hours before his execution, he admitted that it was the

third murder he had been guilty of, besides having been engaged in more than twenty fights with knives, in which he had both given and received many serious wounds; but he observed that it was the *north wind* and not *he* that shed all this blood. When he rose from his bed in the morning, he said, he was at once aware of its accursed influence upon him:—a dull headache first, and then a feeling of impatience at every thing about him, would cause him to take umbrage, even at the members of his own family, on the most trivial occurrence. If he went abroad, his headache generally became worse, a heavy weight seemed to hang over his temples—he saw objects as it were through a cloud, and was hardly conscious where he went.—Such was the account the wretched man gave of himself, and it was corroborated afterwards by his relations, who added, that no sooner had the cause of his excitement passed away, than he would deplore his weakness, and he never rested till he had sought out, and made his peace with those whom he had hurt or offended." The same difference of effect upon individuals may take place from any of the common articles of diet. Dr. Millengen, in his *Curiosities of Medical Experience*, tells us he "knew a person who could never indulge in Tea without experiencing a disposition to commit suicide, and nothing could arouse him from this state of morbid excitement but the pleasure of destroying something — books, papers, or anything within his reach. Under no other circumstance than this influence of tea were these fearful aberrations observed." Coffee affects many people with Fever. But if coffee, tea, and other things so apparently trifling sometimes set up severe disorder—things equally trifling will sometimes cure it—indeed there is nothing, perhaps, in the whole history of disease more curious than the readiness with which the paroxysm of many complaints will occasionally yield to measures so simple and so seemingly powerless in themselves, it might almost seem puerile to suggest their application. Who, for example, could, *à priori*, suppose it possible to stop a fit of mania with a thread? or who would be believed, were they to tell a person that had never heard the like before, that aches and agues had been cured with a song?—Yet in sober truth, such things have been actually done!

Effect of Ligatures.

Of the power of mere *Words* over the morbid motions of the body, we shall afterwards have occasion to speak. Of the efficacy of a *thread* or ribbon in arresting the maniacal paroxysm, I shall now give you a striking example, from the *Annales d'Hygiène Publique, et de Médécine Légale.* "Mr. R——, a chemist, naturally of a gentle disposition, voluntarily claimed admission to a madhouse in the Faubourg St. Antoine, on account of a desire to commit homicide, with which he was tormented. He threw himself at the foot of the altar, and supplicated the Almighty to deliver him from the horrible propensity. Of the origin of his disease he could say nothing; but when he felt the accession of the fatal desire, he was in the habit of running to the chief of the establishment, and requesting to have his thumbs tied together with a ribbon. However slight the ligature, it sufficed to calm the unhappy R——; though in the end, he made a desperate attempt upon one of his keepers, and perished, at last, in a paroxysm of fury." Now, every man of any information in the profession, knows that the application of a *ligature* to the arm or leg will frequently stop the commencing Ague-fit. Dr. Davis, in his account of the Walcheren ague, tells us he very often arrested it merely by grasping the leg or arm strongly with his hand. Putting aside, then, all consideration of the intermittent nature of the case of homicidal mania I have just read,—all consideration of the thermal and other changes which usher in the fit of every maniacal case, you could not fail to find in the very simple measure, which may equally succeed in preventing or arresting the fit of mania and ague, a new *bond* of connexion with which to associate Ague and Mania together in the same category. But, Gentlemen, these are not the only complaints in which the ligature may be thus advantageously employed. In Epilepsy, Asthma, and other convulsive affections, I have often obtained the

same salutary result by its application. Not very long ago, I happened to be in the room of a medical man, when he was unexpectedly seized with *cramp* in his back and loins. Observing him to become pale and shiver all over, I caught him suddenly by the arm and opposite leg. "My God!" he exclaimed, "I am relieved." And his astonishment was extreme; for immediately afterwards he became warm and comfortable; though for several days previously he had been suffering from cold feet and general *malaise*. Mania, epilepsy, asthma, cramp, AGUE, then, completely establish their *relationship* by means of the ligature; for had we no other facts, no other bond of association than that which the ligature furnishes us, we should still be led to the irresistible conclusion, that those particular diseases, at least, amid all their apparent *diversity*, have yet some principle in common which determines their UNITY. When I come to explain to you the manner in which the ligature acts, you will find that the connecting link of the whole is the BRAIN. They are all the result of a weak and exhausted state of that organ; but not—as the late Dr. Mackintosh of Edinburgh supposed,—produced by any *Congestion* or fulness of its blood-vessels. This, you know, was his doctrine of the CAUSE of Ague;—and as he was a very eloquent man, and a very pleasant and gentleman-like person to boot, he made many proselytes to his opinion, not only among his own pupils, who were very numerous, but also among the profession generally. To prove his hypothesis, or dream rather, he was in the habit, first of detailing the "congestion" found on dissection of the heads of persons who had died in the cold stage of ague,—and then he appealed to the relief which very often followed the practice of bleeding at the commencement of that stage. "Behold the fact," he would say; "behold how the shiverings cease the very moment you open the vein—what can be a more triumphant answer to the opponents of the lancet!" But mark the fallacy of that *fact*—mark how the too-confident doctor was deceived by his own practice. The relief of which he boasted—for the most part *temporary* only,—instead of being produced by the very trifling quantity of blood which flowed before such relief was obtained, was in reality nothing more than the effect of the *ligature* by which the arm was necessarily bandaged for the operation! The late Dr. Parr tells us, that when called to a patient in the fit of *Asthma*, he was in the habit of tying up the arm as if he intended to bleed, but that though he never did more than scratch the skin with his lancet, the fit was at once arrested. But, Gentlemen, Ague, Asthma, Epilepsy,—nay, every one of the non-contagious diseases to which man is liable, have all been produced by LOSS OF BLOOD. In that case, at least, they must have been diseases of exhaustion,—the effects, in a word, of diminished cerebral power. But when we come to consider that, in every instance in which the causes of the diseases now under consideration have been known, the Brain has been suddenly and primarily affected—as in the case of a blow, a poison, a *purge*, a passion, we can be at no loss in forming an opinion as to the real nature of these diseases;—they are all the effect of cerebral weakness, and have all more or less analogy to FAINT. Faint, in fact, may be the premonitory symptom of them all; and the Walcheren ague in particular, generally began with a fainting fit,—which faint was sometimes so alarming as to cause the greatest possible anxiety in the minds of the attendants for the immediate result. Now, what is the condition of the body you call

FAINT?

Is it not a state very like death? A person, from his brain *all at once* ceasing to act, becomes instantly pale and pulseless,—the blood, having thus suddenly left the arteries and *ex*-ternal vessels of the body, must go somewhere else. Had we never dissected a person who had died of faint, we should naturally expect it to settle in the *in*-ternal veins; and *there* accordingly, when we do dissect the bodies of such persons, we do find the greater part of the blood. Now, this was what first misled Dr. Mackintosh. On opening the heads of subjects who had died in the cold fit of ague, he almost invariably found the

veins of the Brain gorged with Blood. This constant *Effect* of every kind of exhaustion he at once presumed was the *Cause* of such exhaustion. Gentlemen, he did not know that the very same internal vascular fulness may be seen on opening the bodies of those who die of *loss* of blood! To prove, however, what I say,—to demonstrate to you that this

CONGESTION,—

this bugbear of medical quidnuncs—instead of being the invariable *Cause*, is in reality the invariable *Effect*, of sudden exhaustion, I shall now read to you one of several experiments in which Dr. Seeds bled healthy dogs to death. The editor of the *Medical Gazette* will pardon me for reading it from his pages; but as my facts have been sometimes said to be "selected facts," I have at least this answer in store, that, in the great number of instances, they have been selected from the writings of my opponents.

"All the *larger veins* of the legs," Dr. Seeds tells us, "were opened in a small Dog. At first the pulse was accelerated—soon after it became slow and languid. The heart's motions, though feeble, were never irregular; and indeed, long before death, they could neither be seen nor felt. *Borborygmi* [flatulent gurglings] were early heard, and lasted a long time. The breathing at first was hurried; soon it became slow and laborious; and at last convulsive. The pupils were frequently examined: they became gradually less and less obedient to the influence of light, and at length ceased to contract altogether. [That is, they became *dilated*.] Slight spasmodic contractions took place, first in the femoral and abdominal muscles; then the head, neck, and fore-legs, were likewise *powerfully* affected with *spasms*, [or *convulsions*.] At this time a *deep sleep* seized the animal: he breathed slowly and with difficulty, and, for a little time before death, respiration at intervals was suspended altogether. [All the symptoms of apoplexy!] Whenever the breathing was strong and quick, the pupils recovered their tone, and the blood was more strongly propelled. In an hour death closed the scene." Now, Gentlemen, for the DISSECTION:—"The Dissection of the Head was first begun. The membranes of the *Brain* were *loaded* with *turgid* vessels, the larger of which were of a very dark colour. A bright red spot was observed near the cornua, where some degree of *sanguineous effusion* had taken place. The sinuses were FULL OF BLOOD. In all the ventricles there was more or less water effused: the base of the brain, and the eighth and ninth pairs of nerves, were inundated with water. A net-work of red vessels was spread round their origins, and the optics were in the same state. In the cervical and lumbar regions of the spinal marrow there was a considerable degree of redness. The right side of the Heart was *full of blood*; the left auricle contained a little. Some blood was found in the large veins, and a few clots in the thoracic aorta. The stomach, and all the intestines, were tumid with flatus; the veins of the mesentery were *turgid*. The TURGID STATE of the VEINS OF THE HEAD was very remarkable: indeed, THROUGHOUT THE WHOLE BODY THE VEINS WERE TUMID."

Now, Gentlemen, if anything in this world could open the eyes of "pathological" professors,—if facts or reasoning of any kind could possibly move those mechanical-minded persons, who plan their treatment of *living* men from what they see on dissecting *dead* bodies,—this and similar experiments ought surely to do so. For here you not only find dilated pupil, convulsions, deep sleep, slow and difficult breathing, with other APOPLECTIC symptoms, the effect of literally bleeding a healthy animal to death; but, to complete the deception of such as constantly ascribe these phenomena to PRESSURE on the Brain, the cerebral and other veins of the same animal were found after death loaded and congested with blood throughout! Nay, in addition there was water on the Brain, with "some degree of *sanguineous* effusion" even. Gentlemen, you constantly hear of children dying of "water on the Brain." I scruple not to declare, that in ninety-nine of every hundred such cases, the water in the Brain is produced by the lancet or leeches of the doctor!

Not long ago, I was shocked with the details of an Inquest which took place before the

coroner for Middlesex, Mr. Wakley, who is also the editor of the *Lancet*. The Inquest, according to the report in that paper, was held on the body of a man, who, in the act of disputing with his master about his wages, "turned suddenly *pale*, and fell speechless and insensible *for a time*, breathing heavily until his neckerchief was loosed. In falling, his head struck the edge of a door and received a deep wound three inches long, from which *blood* flowed enough to *soak through a thick mat* on the floor." Before being taken from his master's shop to his own house, he recovered sufficiently to complain of pain of his head; —and this fact I beg you will particularly mark. "His wife immediately sent for a doctor:" and what do you think was the first thing the doctor did,—what can you possibly imagine was the treatment which this wise man of Gotham put in practice the moment he was called to a person who had fallen down in a FAINT, and who, from the injury occasioned by the fall, had lost blood "enough to soak through a *thick mat?*" Why, to bleed him again! And what do you think was the quantity of blood he took from him? More than THREE PINTS! The landlady of the house,—and she was corroborated by other witnesses, — swore that "she thought that about Three and a fifth Pints of blood were taken besides what was spilt on the floor. The bleeding, she calculated, occupied twenty minutes. The bandage also got loose in bed, and some blood, not much, was *lost there* before its escape was discovered. He had CONVULSIONS on Saturday, after which he lay nearly still, occasionally moving his head. On Sunday he was more EXHAUSTED and quiet; in the evening he was still feebler, and on Monday afternoon, at ten minutes to one, without having once recovered his sensibility to surrounding objects, he died." Remember, Gentlemen, he *did* recover his sensibility AFTER he left his master's shop,—he even complained of headache; but after having been bled by the doctor he relapsed into his former state of unconsciousness. How could he possibly survive such repeated loss of blood? That he died from such loss of blood was the opinion of every person who heard the evidence, till Mr. Wakley the Coroner, luckily for "the doctor," had the corpse opened. Then sure enough, just as in the case of the dog that was bled to death, the *internal* veins were found to be turgid and CONGESTED throughout. Deceived by this very constant result of any great and sudden loss of blood, Mr. Wakley and the jury were now convinced, not that the man had been bled to death, but that he had not been bled enough! One of the strongest proofs of bad treatment was thus received as evidence of the best possible treatment under the circumstances—and a verdict pronounced accordingly! That an ignorant coroner and an ignorant jury should be imposed upon in this manner, is nothing very wonderful; but that the Editor of the *Lancet*, who publishes the case, and who from his position knows every thing going on at the present time in the medical world, should in his capacity of coroner pass over, without a word of reprobation, a mode of practice no conceivable circumstances could justify, only shows the lamentable state of darkness in which the profession are at this very moment on every thing connected with the proper treatment of disease! When St. John Long, or any other *unlicensed* quack, by an over-dose or awkward use of some of our common remedies, chances to kill only one out of some hundreds of his dupes, he is immediately hunted to death by the whole faculty; but when a member of the profession at one bleeding takes more blood by three times than is taken on any occasion by practitioners who kill their man every day with the lancet,—not from a strong powerful man, but from a person so weakly that during the excitement of a trifling dispute with his master, he *fainted* and fell, and in falling had already lost blood enough to soak through a thick mat,—not a word of blame is said! On the contrary, it was all right, or, if there was any error, it was on the *safe* side! If such things be permitted to be done in the heart of the metropolis, not only without censure, but with something like praise even, *homicide* may henceforth cease to be looked upon as a reproachable act. The only thing required of the perpetrator is, that he should do it under the sanction of a *diploma* and *secundrum artem!*

But, Gentlemen, to return to Ague, and the other morbid motions which led to this digression. Some of you may be curious to know how so simple a thing as the *Ligature* can produce such a salutary effect in these disorders. I will tell you how it does this—and the explanation I offer, if received as just, will afford you an additional proof not only that these diseases have all their common origin in the BRAIN; but that they are all the natural consequences of an arrest or other irregularity of the ATOMIC MOVEMENTS of the different portions of that organ; for to the *diversity* of the cerebral parts, and the diversity of the parts of the body which they respectively influence, we ascribe the apparent difference of these diseases, according to the particular portion of the brain that shall be most affected by some outward agency. Thus, after a blow on the HEAD, or elbow even, one man shall become sick, and vomit; another fall into convulsions; a third shiver, fever, grow delirious, and become mentally insane. In all these diseases, the atomic movements of the Brain being no longer in healthy and harmonious action, the natural control which it exercised in health over every part of the body, must be then more or less withdrawn from the various nerves through which it influenced the entire economy. The consequence of all this is, that some organs are at once placed in a state of torpidity, while others act in a manner alike destructive to themselves, and the other parts of the body with which they are most nearly associated in function. We find palsy of one organ, and spasm or palpitation of another. In fact, if I may be permitted to use so bold a simile, the various organs of the body, when beyond the control of the Brain, resemble so many race-horses that have escaped from the control of their riders—one stands still altogether; another moves forward in the right course perhaps, but with vacillating and uncertain step; while a third endangers itself and everything near it, by the rapidity or eccentricity of its movements. When the atoms of the various parts of the Brain, on the contrary, act in harmony with each other, there is an equally harmonious action of every organ of the body—supposing of course, every organ to be perfect in its construction. Whatever suddenly *arrests* or puts into irregular motion the whole cerebral actions, must with equal celerity influence the *previous* motive condition of every member and matter of the body—for evil in one case, for good in another. Were you suddenly and without any explanation to put a *ligature* round the arm of a healthy person, you would to a dead certainty excite his *Alarm* or *Surprise*. Now, as both of these are the effects of *novel* cerebral movements, would you not thereby influence in a novel manner every part of his economy? How should you expect to influence it? Would not most men in these circumstances, tremble or show some kind of muscular *agitation?*—their hearts would probably palpitate—they would change colour, becoming pale and red by turns, according as the Brain alternately lost and recovered its controlling power over the vascular apparatus. If the *alarm* was very great, the pallor and tremor would be proportionally long. But in the case of a person *already* trembling and pale from *another cause*, the very natural effect of suddenly tying a ligature round the arm would be a *reverse* effect—for if the *cerebral* motive condition should be thereby changed at all, it could only be by a reverse movement; and such reverse *cerebral* movement would have the effect of reversing every previously existing movement of the body. The face that before was pale, would now become redder and more life-like; the trembling and spasmodic muscles would recover their tone; the heart's palpitations would become subdued into healthy beats; and a corresponding improvement would take place in every other organ and function of the body. The ligature, then, when its application is successful, acts like every other remedial agency; and a proper knowledge of its mode of action affords us an excellent clue to the mode of action of medicinal substances generally,—all of *which*, as you have already seen, and I shall still further show, are, like the ligature, capable of producing and curing the various morbid motions for which we respectively direct their administration. It is in this manner that every one of the various Passions may cause or cure every disease you can name—always excepting, as I have said

before, the properly contagious disorders. The Brain, Gentlemen, is the principal organ to which, in most cases, you should direct your remedial means. When a person *faints* and falls, whatever be the cause of such faint—a blow, a purge, or loss of blood—the first thing to be done is, to rouse the Brain. You must throw cold water on his face, put hartshorn, snuff, or burnt feathers to his nose; and a little brandy, if you can get it, into his mouth. You may also slap or shake him strongly with your hand—if you can only make him *feel*, you will be almost sure to recal him to life: but to think of BLEEDING a person in such a state—ha! ha! After all, this is no laughing matter; for when we see such things done in the nineteenth century, we should rather blush for a profession that would endeavour to screen any of its members from the contempt they merit, when they have so far outraged everything like decency and common sense. The proper treatment of a fit of fainting or convulsion, should be in principle the same as you may have seen practised by any well-informed midwife, in the case of children that are still-born—children all but dead. You may have seen the good lady place the child on her knee and beat it smartly and repeatedly with her open hand on the hips and shoulders, or suddenly plunge it into cold water: now while this is doing, the infant will often give a gasp or two and then cry—that is all the midwife wants. And if you will only follow her example in the case of

INFANTILE CONVULSIONS,—

which, after all, are the very same thing as *Epileptic* fits in the adult,—you will often succeed in substituting a fit of *crying*,—which, I need hardly say, is attended with no danger at all,—for a spasmodic fit, which, under the routine treatment, is never free from it. Only get the child to cry, and you need not trouble yourself more about it,—for no human creature can possibly *weep* and have a convulsion fit of the epileptic or fainting kind at the same moment. Convulsive *sobbing* is a phenomenon perfectly incompatible with these movements —for it depends upon a *reverse* action in the atoms of the brain. The only thing which may prevent some of you from doing your duty on such occasions, is the fear of offending an ignorant nurse or mother, who will think you a monster of cruelty for treating an infant so. Gentlemen, these persons do not know how difficult it is to get a child in convulsions to *feel* at all;—and in proof of this, I may tell you, that such slaps as in a perfectly healthy child would be followed by marks that should last a week, in cases of this description leave no mark whatever after the paroxysm has ceased. During the fit, the child is so perfectly insensible as to be literally all but half-dead.

What is the present routine treatment of an infant taken with convulsion fits? That I can scarcely tell you; but when I settled in London, some six years ago, the COURT doctors, who, of course, give the tone to the profession in the country, had no hesitation in applying all at once the *Eight* lancets of the cupping instrument behind the ear of infants under six months old,—and that, in some cases, repeatedly! In addition, they were in the habit of leeching, purging, and parboiling the poor little creatures to death in warm baths! If mothers will really suffer their children to be treated in this manner, surely they only deserve to lose them. The strongest and healthiest child in existence, far less a sick one, could scarcely survive the routine practice. And yet, whether you believe me or not, such fits are

——— seldom mortal,
Save when the doctor's sent for!

In my experience it is only when the muscles of the *wind-pipe* become spasmodically involved, that you have any occasion to be anxious—asphyxia and sudden death being sometimes the result of such cases. In adult epilepsy, especially at the commencement of the fit, a very little thing will often at once produce a counter-movement of the Brain sufficiently strong to influence the body in a manner incompatible with its further continuance. The application of so simple a means as the *ligature* may then very often do this at once; but, like every other remedy frequently resorted to, it will be sure to lose

its good effect when the patient has become accustomed to it; for in this and similar cases, everything depends upon the *suddenness* and *unexpectedness* of the particular measure put in practice, whether you influence the Brain of a patient in a novel manner or not. The sudden cry of "fire" or "murder," nay, the unexpected singing of some old song, in a situation, or under circumstances which *surprised* the person who heard it, has charmed away a paroxysm of the severest pain. In the army, the unexpected order for a march or a battle will often empty an hospital. The mental excitement thereby produced, has cured diseases which had baffled all the efforts of the most experienced medical officers. In the words of Shakspeare, then, you may positively and literally

> Fetter strong madness with a silken *thread*,
> Cure ache with *air*, and agony with *words!*

LECTURE VII.

UNITY OF ALL THINGS—DISEASES OF WOMEN—CANCER—TUMOUR—PREGNANCY—PARTURITION—ABORTION—TEETHING—HEREDITARY PERIODICITY.

GENTLEMEN,

Many of you have doubtless read or heard of Dr. Channing, of Boston, one of the boldest and most eloquent of American writers. In a little Essay of his, entitled "Self-Culture," I find some observations bearing so strongly upon the subject of these lectures, that I cannot resist the temptation to read them at length. How far they go to strengthen the view I have thought it right to instil into your minds, you will now have an opportunity of judging for yourselves:—"Intellectual culture," says this justly eminent person, "consists, not chiefly, as many are apt to think, in accumulating information—though this is important; but in building up a force of thought which may be turned at will on any subjects on which we are forced to pass judgment. This force is manifested in the concentration of the attention—in accurate, penetrating observation—in reducing *complex subjects* to their *elements*—in diving beneath the effect to the cause—in detecting the more *subtle* differences and resemblances of things—in reading the future in the present,—and especially in rising from *particular facts* to general laws or *universal truths*. This last exertion of the intellect—its rising to broad views and great principles, constitutes what is called the philosophical mind, and is especially worthy of culture. What it means, your own observation must have taught you. You must have taken note of two classes of men—the one always employed on details, on particular facts—and the other using these facts as foundations of higher, wider truths. The latter are philosophers. For example, men had for ages seen pieces of wood, stones, metals falling to the ground. NEWTON seized on these particular facts, and rose to the idea that all matter tends, or is *attracted*, towards all matter, and then defined the law according to which this attraction or force acts at different distances;—thus giving us a *grand principle*, which we have reason to think extends to, and *controls*, the WHOLE outward CREATION. One man reads a history, and can tell you all its events, and there *stops*. Another *combines these events*, brings them under ONE VIEW, and learns the great causes which are at work on this or another nation, and what are its great tendencies—whether to freedom or despotism—to one or another *form* of civilisation. So one man talks continually about the particular actions of this or that neighbour,—while another looks beyond the acts to the inward principle from which they spring, and gathers from them larger views of human nature. In a word, one man sees all things *apart* and in *fragments*, whilst another strives to discover the harmony, connexion, UNITY OF ALL."

That such UNITY, Gentlemen, does actually and visibly pervade the whole subject of our own particular branch of science—the History of human diseases,—is a truth we have now, we hope, placed equally beyond the cavil of the captious and the interested. In this respect, indeed, we find it only harmonising with the history of every other thing in nature. But in making INTERMITTENT FEVER OR AGUE the *type* or *emblem* of this unity of disease, we

must beg of you, at the same time, to keep constantly in view the innumerable *diversities* of shade and period, which different intermittent fevers may exhibit in their course. It has been said of *Faces*,

> ——— Facies non omnibus *una*,
> Nec *diversa* tamen—

And the same may with equal truth be said of Fevers—all have resemblances, yet all have differences. For, betwixt the more subtle and slight thermal departures from Health,—those scarcely perceptible chills and heats, which barely deviate from that state,—and the very intense cold and hot stages characteristic of an extreme fit of ague, you may have a thousand differences of scale or degree. Now as it is only in the question of scale that all things can possibly differ from each other, so also is it in this that all things are found to resemble each other. The same differences of shade remarkable in the case of *temperature* may be equally observed in the *motive* condition of the muscles of particular patients. One man, for example, may have a tremulous, spasmodic, or languid motion of one muscle or class of muscles simply—while another shall experience one or other of these morbid changes of action in every muscle of his body. The chills, heats, and sweats, instead of being in all cases *universal*, may in many instances be *partial* only. Nay, in place of any increase of *perspiration* outwards, there may be a vicarious superabundance of some *other secretion* within; of this, you have evidence in the dropsical swellings, the diarrhœas, the bilious vomitings, and the diabetic flow of urine with which certain patients are afflicted. In such cases, and at such times, the skin is almost always dry. The same diversity of shade which you remark in the *symptoms* may be equally observed in the *period*. The degree of duration, completeness, and exactness of both paroxysm and remission, differs with every case. The cold stage, which in most instances takes the patient first—in individual cases may be preceded by the hot. Moreover, after one or more repetitions of the fit, the most perfect ague may become gradually less and less regular in its paroxysms and periods of return; passing in one case into a fever *apparently* continued—in another, reverting by successive changes of shade into those happier and more harmonious alternations of temperature, motion, and period, which Shakspeare, with his usual felicity, figured as the "fitful fever" of healthy life. If you take Health for the standard, everything *above* or *beneath* it—whether as regards time, temperature, motion, or rest, is Disease. When carefully and correctly analysed, the symptoms of such disease, to a physical certainty, will be found to resolve themselves into the symptoms or shades of symptom, of Intermittent Fever. Fever, instead of being a thing apart from man, as your school doctrines would almost induce you to believe, is only an abstract expression for a greater or less change in the various revolutions of the matter of the body. FEVER and DISEASE, then, are ONE and IDENTICAL. They are neither "essences" to extract, nor "entities" to combat—they are simply variations in the phenomena of the corporeal movements; and in most cases, happily for mankind, they may return to their normal state without the aid of physic or physicians. The same reparative power by which a cut or a bruise, in favourable circumstances, becomes healed, may equally enable every part of a disordered body to resume its wonted harmony of action. How often has nature in this way triumphed over physic, even in cases where the physician had been only too busy with his interference! It is in these cases of Escape that the generality of medical men arrogate to themselves the credit of a Cure.

"It was a beautiful speculation of Parmenio," remarks Lord Bacon, "though but a *speculation* in him, that all things do by scale ascend to UNITY." Do I need to tell YOU, Gentlemen, that everything on this earth which can be weighed or measured, is MATTER—Matter in one *mode* or another? What is the difference betwixt a piece of gold and a piece of silver of equal shape and size? A mere difference of degree of the SAME qualities,—a different *specific gravity*, a different *colour*, a different *ring*, a different degree of *malleability*, a different *lustre*. But who in his senses would deny that these two substances

approach nearer in their nature to each other than a piece of wood does to a stone; yet may not a piece of wood be *petrified*, be transformed into the very identical substance from which at first sight it so strikingly differs? Nay, may not the bones, muscles, viscera, and even the secretions of an animal body, by the same inscrutable chemistry of nature, be similarly transmuted into stone? Gold and silver have differences assuredly, but have they not resemblances also,—certain things in common, from which we deduce their unity, when we speak of them both as *Metals?* How much more akin to each other in every respect are these substances than water is to either of its own elemental gases! What certainty, then, have you or I that both metals are not the same matter, only differing from each other in their condition or mode? Does not everything in turn change into something else, — the organic passing into the inorganic, solids into liquids, liquids into gases, life into death, and *vice versâ?* The more you reflect upon this subject, the more you must come to the opinion, that all things at last are only modes or differences of ONE MATTER. The unity of disease is admitted by the very opponents of the doctrine, when they give to apoplexy and toothache the same name—DISEASE or DISORDER. But these approaches to unity may be traced throughout everything in nature. Betwixt the history of the human race, for example—the revolutions of empires, and the history of the individual man, the strongest relations of affinity may be traced. The corporeal revolutions of the body, like the revolutions of a kingdom, are a *series* of *events*. Time, Space, and Motion, are equally elements of both. "An analyst or a historian," says Hume, "who should undertake to write the History of Europe during any century, would be influenced by the connexion of *time* and *place*. All *events* which happen in that portion of space and period of time, are comprehended in his design, though, in other respects, different and unconnected. They have still a species of UNITY amid all their DIVERSITY."

The LIFE OF MAN is a series of REVOLUTIONS. I do not at this moment refer to the diurnal and other minor movements of his body. I allude now to those greater changes in his economy, those *climacteric* periods, at which, certain organs that were previously rudimental and inactive, become successively developed. Such are the periods of *Teething* and *Puberty*, and the time when he attains to his utmost *maturity* of corporeal and intellectual power. The girl, the boy, the woman, the man, are all different, yet they are the same; for when we speak of MAN in the abstract, we mean all ages and both sexes. But betwixt the female and the male of all animals there is a greater degree of conformity or unity than you would at first suppose, and which is greatest in their *beginning*. Now, this harmonises with every thing else in nature; for all things in the beginning approach more nearly to simplicity. The early *fœtus* of every animal, man included, has *no* sex,—when sex appears, it is in the first instance hermaphrodite, just as we find it in the lowest tribe of adult animals,—the oyster for example. In this particular, as in every other, the organs of the human *fœtus*, internal as well as external, first come into existence in the lowest animal type; and it depends entirely upon the greater or less after developement of these several *hermaphroditic* parts, whether the organs for the preservation of the race, take eventually the male or female form. How they become influenced to one or the other form we know not. Does it depend upon position? It must at any rate have a relation to temperature. For a long time even after birth, the breasts of the boy and the girl preserve the same appearance precisely. You can see that with your own eyes. But the comparative anatomist can point out other analogies, other equally close resemblances in the rudimental condition of the reproductive organs of both sexes. During the more early fœtal state, the rudiments of the *testes* and the *ovaries* are so perfectly identical in place and appearance, that you could not tell whether they should afterwards become the one or the other. What in the male becomes the *prostate gland*, in the female takes the form of the womb. To sum up all, the outward generative organs of both sexes are little more than *inversions* of each other. Every hour that passes, however, while yet in its

mother's womb, converts more and more the unity of sex of the infant into diversity. But such diversity, for a long period, even after birth, is less remarkable than in adult life. How difficult at first sight to tell the sex of a child of two or three years old when clothed! at puberty this difficulty has altogether vanished. Then the boy becomes bearded and his voice alters; then the breasts of the girl—which up to this period, in no respect differed from his, in appearance at least—become fully and fairly developed,—assuming by gradual approaches the form necessary for the new function they must eventually perform in the maternal economy. Another, and a still greater revolution, imbues them with the power of secreting the first nutriment of the infant. But even before the girl can become a mother a new secretion must have come into play,—a secretion which, from its period being, unlike every other, *monthly* only, is known to physicians under the name of "Catamenia," or the "Menses." How can such things be done but by a great constitutional change,—without a new febrile revolution of the whole body? Mark the sudden alternate *pallor* and *flush* of the cheek and lip, the tremors, spasms, and palpitations,—to say nothing of the uncontrollable mental depressions and exaltations,—to which the girl is then subject; and you will have little difficulty in detecting the type of every one of the numerous diseases to which she is then liable. Physicians may call them "Chlorosis," "green-sickness," or any other name; *you*, Gentlemen, will recognise in them the developements of an Intermittent Fever simply,—as various in its shades, it is true, as a fever from any other cause may become,—producing, like that, every wrong action of place and time you can conceive, and, like other fevers, often curing such wrong actions as previously existed, when it happens to reverse the atomic motions of the various parts of the body. Before touching upon the principal

Diseases incidental to Women,

I must tell you that the Catamenial secretion, in most cases, disappears during the period of actual pregnancy; nor does it return while the mother continues to give suck. During health, in every other instance, it continues from the time of puberty, or the period when women can bear children, to the period when this reproductive power ceases. As with a Fever it comes into play, so with a Fever it also takes its final departure. Why it should be a peculiarity of the *human* female, I do not know,—but in no other animal has anything analogous been observed. Some authors, indeed, pretend to have seen it in the monkey; but if this were really the case, I do not think so many physiologists would still continue to doubt it, especially as they have every opportunity of settling the question definitively. Various speculations have been afloat as to the uses of this secretion, but I have never been satisfied of the truth of any of them. I am better pleased to know, that the more perfect the health, the more perfectly periodical the recurrence of the phenomenon. It is, therefore, without question, a *Secretion*, and one as natural and necessary to females of a certain age, as the saliva or the bile to all people in all times. How absurd, then, the common expression that a woman, during her period, is "unwell!" It is only when the catamenia is too profuse or too defective in *quantity*, or too frequent or too far between in the period,—when the *quality* must also be correspondingly altered,—that the health is in reality impaired. Then, indeed, as in the case of other secretions imperfectly performed, pain may be an accompaniment of this particular function.

Need I tell you, that no female of a certain age can become the subject of any Fever without experiencing more or less change in this catamenia? or that during any kind of *indisposition*, how slight soever it may be, some corresponding alteration in this respect must, with equal certainty, take place? In cases where the alteration thus produced takes the shape of a too profuse flow, practitioners are in the habit of prescribing astringents and cold applications. Happily for the patient, the medicines usually styled "Astringents," (iron, bark, alum, opium, &c.) are all chronothermal in their action; and the *general* salutary influence which they consequently

exercise over the *whole* economy, very frequently puts the CATAMENIA, in common with every other function, to rights,—when the practitioner who prescribes them has no idea that he is doing more than attending to the derangement of a part. He accordingly places profuse menstruation in his list of *local* diseases! When *deficiency* or *suppression* of this secretion, on the contrary, chances to be the *coincident* feature of any general constitutional change,—a thing which may happen from a transitory passion even,—such effect or coincidence of *cerebral* disturbance is by many practitioners assumed to be the *cause* of all the other symptoms of corporeal derangement! And under the formidable title of "obstruction," how do you think some of your *great* accoucheur-doctors are in the habit of combating it?—By leeching the patient—by applying leeches locally. Now, I only ask you what you would think of a practitioner, who, on finding the same patient feverish and *thirsty*, should leech her *Tongue?* or when she complained of her *Skin* being uncomfortably *dry*, should apply leeches to that? You would laugh at him of course; and so you may, with just the same reason, laugh at the fashionable practitioners of the day, when you find them leeching their patients for defective or suppressed menstruation,—a derangement of function which a Passion might produce, and another restore to its healthy state. Is it, then, a *local* disease, or a disease of the BRAIN and nerves—an affection of a *part* or a disorder of *totality?* If the latter, who but a mechanic would think of applying leeches locally? In either case, who but a cow-leech or a quack-salver would dream of restoring any *periodical* secretion by a mode of practice so barbarous and disgusting? You might just as reasonably, in the absence of an appetite for dinner, expect to make your "mouth *water*" by the application of leeches to your gullet when the clock should strike five!

Having thus far explained the nature of these cases, I have now little else to say of them. The general principle of treatment is obvious—attention to temperature; for, in every case of catamenial irregularity, whether as regards Quantity, Quality, or Period, the *temperature* of the loins must be more or less morbid,—one patient acknowledging to chill, another to heat. In the former case, friction or a warm plaster may be tried as a *local* means—in the latter, cold or tepid sponging; though I may tell you, that, with the chronothermal remedies singly, you may produce the most salutary results in numerous cases. In both instances, cold, warm, and tepid baths may also be advantageously employed, according to the varying circumstances of the case.

The majority of women who suffer from any general indisposition short of Acute Fever, are more or less subject to a particular discharge which, by the patients themselves, is very often termed *Weakness*, but which is more familiar to the profession under the name of *Leucorrhœa* or *Whites*. The usual concomitant of this disease is a dull aching pain at the lower part of the back. Now, I never questioned a woman who suffered from it, but she at once acknowledged that the local flow was one day more, another less, and that she had, besides, the chills, heats, and other symptoms of general constitutional derangement. But of that derangement, the discharge so often supposed to be the cause, is in the first instance, nothing more than a coincident *feature* or effect; though, from pain or profuseness, it may re-act upon the constitution at large, and thus form a secondary and superadded cause or *aggravant*. In cases of this kind I am in the practice of prescribing quinine, iron, or alum, sometimes with, and sometimes without, copaiba, catechu, or cantharides—one medicine answering best with one patient, another with another.

I have been frequently consulted in cases of painful Whites, and also in cases of painful menstruation, disorders which practitioners, as remarkable for their professional eminence, as for their utter want of high professional knowledge, had been previously treating by leeches;—some applying these to the *loins*, which, in every case, whether of whites or irregular menstruation, is weak, and, consequently, painful; some, to the disgust of every woman of sensibility, introducing them even to the orifice of the womb itself. What practice can

be more erroneous? What relief, if obtained, more delusive? Bark, iron, opium,—these are the remedies for cases of this description; and the general constitutional improvement which, for the most part, follows their use, together with the disappearance of the more prominent local irregularities for which your aid had been asked, affords the best answer to any hypothetic objection that may be brought against their employment. The best topical application in these cases—and you will find it useful in most—is a plaster to the spine to warm and support it; though cold, hot, or tepid fomentation to the loins or womb may also be occasionally employed, according as one or other shall prove most agreeable to the patient's own feelings.

The various female disorders of which I have just been treating are matter of daily practice. The more formidable affection to which I now draw your attention,

Cancer of the Breast,

fortunately for the sex, is of rare occurrence, —not one woman, perhaps, in five thousand ever becoming the subject of it. Now, what is Cancer? What but a slow and painful decomposition,—a *Canker* or *blight* of the particular organ affected? The manner in which Cancer of the Breast generally commences is this:—A tumour, at first smaller than a nut, possessing more or less hardness, and to a certain extent circumscribed, is observed in the neighbourhood of the nipple; the patient's attention, in most cases, being first called to it by a slight itching or uneasiness in the part affected, which soon deepens into a "pricking," "darting," or "shooting" pain,—for such are the various phrases by which different patients describe their pain. This tumour slowly but gradually increases in size and hardness, while the pain becomes more and more intolerable and "lancinating." The disease, in every case, is *intermittent*, and in most instances, this intermission is *periodical*, the tumour being one day perceptibly diminished, another as obviously enlarged. The pain, in like manner, disappears more or less completely, for a time, to return at a particular hour of the clock with undiminished violence. Now, when surgeons were more in the habit of performing operations in cases of this kind, than at present, such tumours, after removal by the knife, were usually, from motives of curiosity, bisected. If their internal structure, when thus divided, resembled something betwixt a turnip and a cartilage, the disease was pronounced to be "true Cancer" —a *Schirrus* or *Carcinoma*. On the contrary, if, instead of this appearance, the tumour had a resemblance to the substance of the brain, or to lard, jelly, or was of a mixed character, disputes frequently arose as to the *name* by which the disease should be christened;—as if it signified one straw whether the breast, when so completely changed in its *structure* and *nature*, as to be productive of nothing but misery to its owner, should be called schirrus, carcinoma, cancer, or anything else! Oh! it matters very little what that organic change be termed, when, as in all these cases, the glandular fabric of the breast becomes at last completely destroyed and *decomposed*.

How and in what manner is this disease developed? Gentlemen, it is the result of general constitutional change. It is the effect of a weak action of the nerves on an originally weak organ; and of this you may be satisfied, when I tell you that in most instances cancer is a *hereditary disease;* or, to express myself better, there is hereditary predisposition; and what is more, the disease generally makes its first appearance about that period of life when the breast ceases to be anything but a mere personal ornament to its possessor. It comes on much about the time when the catamenial secretion is about to terminate for life. Can such termination take place without a new corporeal revolution? Impossible! at this epoch every female suffers more or less from constitutional disorder. Analyse that disorder, and you will find that it resolves itself into a general intermittent febrile action of the whole body, varying in its shade with every case. Cancer, then, is a developement of that fever. Now, why is it that the word "Cancer" sounds so fearfully to the female ear? The difficulty to cure it, simply—the difficulty in most instances—the absolute

impossibility in many. To understand the reason of this difficulty, we must consider the nature and uses of the organ. However beautiful and ornamental, the breast is not, like the heart or lungs, an organ of importance to the *vital* economy of the individual. It is a part superadded for the preservation of the race. Rudimental, or all but absent, in the child, this organ only reaches its full maturity of developement when the girl becomes the woman. After the woman ceases to bear children, or whether she has borne them or not, when the period of the possibility of her being pregnant has passed away, the substance of the breast is generally more or less absorbed; though you occasionally meet with instances where it becomes enlarged beyond its previous size. In fewer cases still it takes on a process of decay—in other words, it becomes Cancerous. But Nature in this instance, even when aided by art, will not often exert her usual reparative efforts—she will not put forth her powers (so to speak) for the preservation of a part which now, not only so far as the individual economy is concerned, but so far also as regards the race, has become a useless part. This I take to be the true reason of the difficulty to cure a Cancer; for although in many cases more or less improvement of the affected organ may follow the employment of remedial means—such means as beneficially influence the whole health—still, as if to prove more fully the truth of my explanation, you may even succeed to a great extent in raising the general healthy standard, and yet fail to procure the slightest *arrest* of the local process of decay. While a cut or bruise upon any other part of the body of a Cancer patient will heal with ease, the Breast, partaking no longer in the preservative power of the economy, may perish piece-meal. Gentlemen, never in my life did I meet with a Cancer in any state or stage, the subject of which did not acknowledge to chills and heats, or who did not admit errors of secretion; to say nothing of variations in the volume, temperature, and sensation of the part affected. I lately attended the sister of a Fellow of the College of Physicians, who was first induced to consult me, from hearing that I looked upon Ague as the primary type or model of all complaints. Her own Cancer, she assured me, was preceded by shivering fits, which she traced to a sudden chill; and during the whole progress of the disease she suffered more or less from agueish feelings. Previously to my seeing her, she had been visited by a surgeon of eminence, who ordered her to apply leeches; but the effect of their employment was an increase of her pain. And no wonder—for if that eminent person had only taken the trouble to inquire, he would have found that, instead of the hypothetic "inflammation," which doubtless suggested their employment, the breast in that instance was generally cold! Would not a warm plaster, under these circumstances, have been of more service? You, Gentlemen, may try it at least, and if you do not find it produce more or less relief in many similar instances, I know nothing whatever of the science I now pretend to teach you. No *local* application, however, will be long productive of any very effectual advantage in this or any other disease, without attending to the chrono-thermal principles of paroxysm and remission. Arsenic, quinine, opium, copper, prussic acid, may all be successively tried. But you must here always keep in mind that Cancer is a *chronic* disease, a disease of *time;* and you must farther hold in your remembrance what I have already said in regard to most cases of chronic disease, namely, that no medicine will produce its beneficial effect for any great continuance in those disorders; once the constitution becomes accustomed to the use of a remedy, such remedy either loses its salutary influence altogether, or acts in a manner the *reverse* of that which it did when tried in the first instance. No medicinal agent had a greater reputation at one time, in the treatment of Cancer, than arsenic; arsenic, in fact, was supposed to be a wonderful specific in cases of that nature. What was the consequence? Like every thing else in this world, whether person or thing, physician or physic, that ever enjoyed the temporary distinction of *infallibility*, after a few decided failures in particular instances, this mineral came at last to be almost entirely abandoned in such cases. And yet, notwithstanding this, I do not know a remedy which

may be more successfully used in Cancer than arsenic. "We have seen from its use," says Dr. Parr in his *Dictionary*, published in 1809, "an extensive [cancerous] sore filled with the most healthy granulations, the complexion become clear, the appetite improved, and the general health increased. Unfortunately, (he continues,) these good effects have *not* been permanent. By increasing the dose we have gained a little more, but, at last, these advantages were apparently lost." And was it ever otherwise with any other remedy? No power on earth could always act upon the living body in the same manner. The strongest rope will strain at last; and so will the best medicine cease, after a time, to do the work it did at first. But a physician who should, on that score, despise or decry a power that had, for a given time, proved decidedly advantageous in any case, would be just as wise as the traveller who on reaching his inn, instead of being thankful to his horse for the ground it had enabled him to clear, should complain of it for not carrying him without resting to the end of his journey! What, under the circumstances mentioned by Dr. Parr, either he or any other doctor should have done,—and what I have confidence in recommending you to do on every similar occasion, is this,—Having obtained all the good which arsenic or any other remedy has the power to do in any case, change such remedy for some other constitutional power, and change and change until you find improvement to be the result; and when such result no longer follows the employment of your medicine, change it again for some other; you may even again recur with the best effect to one or more of the number you had formerly tried with benefit; for when (if I may speak so metaphorically) the constitution has been allowed time to forget a remedy, that once beneficially influenced it, such remedy, like the re-reading of a once-admired, but long-forgotten book on the mind, may come upon the corporeal economy once more with much of its original force and freshness. In all such cases, then, you must change, combine, and modify your medicines and measures in a thousand ways to produce a sustained improvement. Arsenic, gold, iron, mercury, creosote, iodine, opium, prussic acid, &c. may be all advantageously employed, both as internal remedies and as local applications, according to the changing indications of the case.

When Cancer is suffered to run its course undisturbed by the knife of the surgeon, or the physic of the doctor, the usual termination of it is this—A small ulcer shows itself upon the skin of the most prominent part of the tumour, gradually increasing in dimension. And so exceedingly weak do the atomic attractions of the matter of the breast become during the change produced by the disease, that scarcely has the atmospheric air been allowed to come in contact with the tumour, than it commences to mortify and die—falling away in most cases, (as it did indeed in the case of the lady to which I have already alluded,) after a certain time in a dead and corrupted mass. The ulcer which it leaves behind, is in all such cases, extremely fœtid, and shows a great disposition to spread; the reason of which is this, —first, because the whole constitution of such persons is more or less weak; and secondly, because the particles of dead, or half-dead matter, which coat the bowl of the ulcer, not only have no power of reparation in themselves, but are the cause of a further failure of reparative power in the already weak parts with which they come in contact. Exactly the same thing takes place when any part of an old tree becomes decayed, and very much after the manner of such vegetable decay, as you may see it in a gnarled oak, we have in this disease mushroom-like and other excrescences springing from the sides and bottom of the ulcerous and decaying part, and that too with a rapidity truly astonishing. A case of this kind I lately attended with Mr. Farquhar of Albemarle Street. Unless every portion of these fungoid bodies be completely removed, you must not hope to arrest the progress of the disease. The whole surface of the ulcer should be cauterised and completely destroyed with a burning-iron, nitrate of silver, ammonia, or potass. All four may, in some cases, be resorted to with advantage. Nor must you here spare any part that shows even a symptom of weakness; but cauterise, and cauterise again and again, until you get red, small, healthy

granulations to appear. The dressings which you will now find most successful, are ointments or other preparations of the red oxide of mercury, iodine, arsenic, creosote, lead, &c.; and each and all of these will only prove beneficial in particular cases, and for particular periods. The law that holds good in the case of *internal* remedies, will be now more conspicuous in the case of *external* applications,—namely, that all medicinal powers have a certain relation to *persons* and *periods* only, and must in no case be *à priori* expected to do more than produce a temporary action. If that action be of a novel kind, they will produce beneficial results; if, on the contrary, the increased motion from their action be in the old direction, and which cannot be foreseen till tried, the result of such trial will be a greater or less aggravation of the state for whose improvement you ordered them to be applied.

Dr. Abel Stuart, while practising in the West Indies, where the disease is more frequent than in England, had many opportunities of making himself acquainted with every one of the various states and stages of Cancer—and since I settled in London, where he also now practises, he has shown me cases of this kind, which he has treated with the greatest success. You must not then suppose, like most of the laity, and not a few of the members of the profession, that Cancer of the Breast is necessarily a mortal disease. So long as you can prevent the ulcer from spreading, and at the same time keep up the general health to a certain mark, how can there be danger? The Breast, I repeat, is not a strictly vital organ; it is not necessary to the individual life,—it is a part superadded for the benefit of another generation. How many women at one time remarkable for a large full bosom, have in the course of years, lost every appearance of breast by the slow but imperceptible process of interstitial absorption;—what inconvenience do these suffer in consequence? But for the tendency to spread, and the accompanying pain, Cancer would seldom terminate fatally at all; it is the pain principally that makes the danger, not any loss of the organ itself. Pain alone will wear out the strongest: relieve this in every way you can, but avoid leeches and depletion, which, I need not say, are the readiest means, not only to exhaust the patient's strength, but to produce that extreme sensibility of nerve, that intolerance of external impression, which converts the merest touch into the stab of a dagger. Strong people seldom complain of pain: it is bloated or emaciated persons who mostly do so. Keep up the health, then, by every means in your power, and your patient may live as many years with a Cancer of the Breast, as if she had never suffered from such a disease. Sir B. Brodie mentions the case of a lady who lived *twenty years* with Cancer, and died at last of an affection of the lungs, with which he says it had no necessary connexion. What shall I tell you in regard to amputation of the Breast? Will amputation harmonise the secretions? Will it improve the constitution in any way whatever? Those patients who, in the practice of others, have been induced to undergo operations, have seldom had much cause to thank their surgeons,—the disease having, for the most part, reappeared at a future period in the *cicatrix* of the wounded part. Gentlemen, you have only to look at the pallid, bloated, or emaciated countenances of too many of the sufferers, to be satisfied that something more must be done for them than a mere surgical operation,—a measure at the best doubtful in most cases, and fatal in not a few. Shiverings, heats, and sweats, or diarrhœa, or dropsy,—these are the constitutional signs that tell you you have something more to do than merely dissect away a diseased structure,—which structure, so far from being the cause, was in reality but one feature of a great totality of infirmity. That the knife may sometimes be advantageously employed I do not deny, but instead of being the rule it should be the exception; the majority of honourable and enlightened surgeons will admit how little it has served them in most cases beyond the mere purpose of temporary palliation. When you hear a man now-a-days speaking of the advantage of early operating, you may fairly accuse him of ignorance, with which, I regret to say, interest, in this instance, may occasionally go hand in hand. The *fee* for amputating a breast enters into the calculation of some operators.

I have twice in my life seen Cancer of the *male* Breast—the subject of one was a European, the other a native of India.

Let me now say a few words on

Tumors

generally; premising that the term "Tumor" is merely the Latin word for *any* Swelling, though we usually employ it in the more limited sense of a morbid *growth*. It is a very common error on the part of medical men, to state in their reports of cases, that a "healthy" person presented himself with a particular tumor in this or that situation. Now, such practitioners by this very expression show how much they have busied themselves with artificial distinctions—distinctions which have no foundation in nature or reason—to the neglect of the circle of actions which constitute the state of the body termed Health. Never did a tumor spring up in a perfectly healthy subject. In the course of my professional career, I have witnessed Tumors of every description, but I never met one that could not be traced, either to previous constitutional disturbance, or to the effect of local injury on a previously unhealthy subject. Chills and heats have been confessed to by almost every patient, and the great majority have remembered that in the earlier stages their Tumor was *alternately* more or less voluminous.

Every individual, we have already shown, has a predisposition to disease of a particular tissue. Whatever shall derange the general health may develope the weak point of the previously healthy, and this may be a tendency to Tumor in one or more tissues. The difference in the organic appearance of the different textures of the body, will account for any apparent differences betwixt the Tumors themselves; and where Tumors appear to differ in the same tissue, the difference will be found to be only in the amount of the matter entering into such tissue, or in a new arrangement of some of the elementary principles composing it. It is a law of the animal economy, that when a given secretion becomes morbidly deficient, some other makes up for it by a preternatural abundance. If you do not perspire properly, you will find the secretion from the kidneys or some other organ increase in quantity. I was consulted some time ago by a female patient, whose bosom became enormous from excess of adipose or fatty deposit. Now, in the case of this female, the urine was always scanty, and she never perspired. Every tissue of the body is built up by secretion. The matter of muscle, bone, and skin, is fluid before it assumes the consistence of a tissue, and the atoms of one texture are constantly passing into some other. "The great processes of nature," says Professor Brande, "such as the vegetation of trees and plants, and the phenomena of organic life generally, are connected with a series of chemical changes." But, Gentlemen, this chemistry is of a higher kind than the chemistry of the laboratory;—it is *Vital* Chemistry, under the influence, as I shall afterwards show you, of *Vital* Electricity. Secretion of every kind is the effect of this vital chemistry; and Tumors, instead of being produced, as Mr. Hunter supposed, by the "organisation of extravasated blood," are the result of *errors of secretion*. They are principally made up of excess of some portion of the tissue in which they appear, or the result of new combinations of some of the ultimate principles which enter into its composition.

If you search the records of Medicine upon the subject of Tumors, you will find that the agents by which these have been cured or diminished, come at last to the substances of greatest acknowledged efficacy in the treatment of ague. One practitioner (Carmichael) lauds *Iron;* another (Alibert) speaks favourably of the *Bark;* the natives of India prefer *Arsenic;* while most practitioners have found *Iodine* and *Mercury* more or less serviceable in their treatment. Gentlemen, do you require to be told that these substances have all succeeded and failed in ague! Marvel not, then, if each has one day been lauded, another decried, for every disease which has obtained a name, Tumors of every description among the number. We now come to

Pregnancy.

But this, you will very likely say, is not a disease. In that case, I must beg to refer you to

ladies who have had children, and I will wager you my life, that they will give you a catalogue of the complaints that affected them during that state, equal in size to Cullen's Nosology. In the case of every *new* phenomenon in the animal economy, whether male or female, there must be a previous corporeal revolution. We find this to be the case at the periods of Teething and Puberty—and so we find it in the case of *Pregnancy*. Can the seedling become an herb in the frost of winter, or the sapling grow to maturity without a series of changes in the temperature and motion of the surrounding earth?—No more can the fœtal *germ* become the infant without a succession of FEBRILE revolutions in the parent frame! Once in action it re-acts in its turn.

The influence of the mother's Brain over the growth of the child while in the womb, is sufficiently proved by the effects of frights and other passions, induced by the sight of objects of horror, and so forth, while in the pregnant state. Hare-lip, distortions, moles, marks, &c., have been traced by the mother to such passions in far too many instances to render us in the least sceptical upon that point. Now, in this particular instance, some of the parts or divisions of the mother's Brain must act in association or simultaneously, while others act independently or in *alternation;* for otherwise you could not understand how the Brain of the mother should influence the growth of the child *in utero,* and at the same time continue to play its part in the parental economy. Some of its various portions must act in these respects *alternately,* for they cannot do *both* at one and the same moment of time. But, here again, as in other instances, a want of harmony may arise—the Brain may continue to exercise its influence over the child too long; in other cases it may forget the child for the mother. How such want of harmony affects the child, we can only guess from analogy. How a too long cerebral neglect of the mother's economy may influence her, we daily see in the numerous disorders to which she is then liable—more particularly in the *periodic* vomitings, and also in the swoon or faint which occasionally comes on during the pregnant state. Are not these the very symptoms that happen in the case of a person who has had a blow on the head, or who has been much bled? It appears to me probable that the infant's growth must take place principally during the period of maternal sleep; for it is chiefly in the morning, just as she awakes, that the mother experiences those vomitings and other symptoms from which I infer the Brain has been too long neglecting her own economy. But even as a natural consequence of the more favourable alternations of cerebral movement which take place during pregnancy, the mother for the most part experiences Chills, Heats, and Sweats,—she has symptoms, or shades of symptom at least, of the same disorders that may arise from any other agency affecting the Brain in a novel or unusual manner—she becomes at certain times pale and flushed alternately, and, as in the case of other Fevers, frequently complains of headache. When blood-letting—the usual refuge of the ignorant—is in such cases tried, the blood drawn exhibits the same identical crust which, under the name of "buffy-coat," "inflamed crust," &c., so many practitioners have delighted to enlarge upon as the great *peculiarity* of "true inflammatory fever!"

Pregnancy has been defined by some very great doctors, to be a "natural process." Now, that certainly is a very great discovery; but they might have made the same discovery in the case of Disease and Death. Is not every thing in *Nature* a natural process, from the fall of an apple to the composition of the Iliad? Every thing that the eye can see or the ear can hear is natural; miracles only are miraculous; for they are events that are CONTRARY to the natural order of things. Pregnancy, then, *is* a natural process;—but is it on that account the less surely a FEBRILE state? Is it for that reason the less certainly an *Intermittent* Fever? What disorders have not originated in Pregnancy? What, in cases where they previously existed, has it not, like every other Fever, cured? If it has produced Epilepsy, Apoplexy, Toothache, Consumption, Palsy, Mania,—each and every one of these diseases have I known it to ameliorate, suspend, or cure! I remember the case of a lady who, before her marriage, squinted to perfection. But when she became pregnant her Squint diminished,

and long before the period of her confinement it was cured;—never did I see such an improvement in the face of any person. Still, if Pregnancy has cured squint, I have known cases where it produced it. How completely, then, does this harmonise with the Unity which pervades Disease generally!

Parturition,

I have already said, is a series of pains and remissions, but it is NOT an Intermittent Fever; nor, indeed, has it any resemblance to that affection! So, at least, I have been assured by very clever doctors: and they have told me the same of Pregnancy! Is this question, then, completely settled in the negative? Certainly —It is settled to the satisfaction of all who pin their faith upon mere human *Authority*. But human Authority seldom settled anything with me; for wherever I have had an interest in knowing the truth, I have generally appealed from the decree of that unsatisfactory court to the less fallible decision of the Court of Fact. And what does Fact say in this instance? Fact says that child-labour, in almost every case, commences with chills and heats, and that these are again and again repeated with longer or shorter periods of immunity during its progress. But how do I know all this? you will ask,—*I* who hold modern midwifery in horror! I will tell you truly—I first *guessed* it; for I could not suppose that Parturition, unlike every other great revolution of the body, could be either a *pain*-less or an unperilous state; or that it could be free from the chills, heats, and remissions, which I had always observed in cases of that character. Still, not being a person easily satisfied with guess-work, I took the trouble, in this particular instance, to interrogate Nature. And as sure as the sun ever shone on this earth, Nature completely verified the fact of my anticipation, that Parturition, in every instance, *is* an intermittent fever. In some of my medical books, too, I found *shiverings* among the numerous other symptoms mentioned as incidental to women at this period. "Sometimes," says Dr. Ramsbotham, himself a man-midwife, "they are sufficiently intense to shake the bed on which the patient lies, and cause the teeth to chatter as if she were in the cold stage of an *ague*-fit; and although she complains of feeling cold, the surface may be warm, and perhaps warmer than natural." Now, this cold sensation, as you well know, is often complained of by ague patients, even in the hot stage. In spite of every assertion to the contrary, then,—in spite of every declaration on the part of medical or other persons, Pregnancy and Parturition *are* agues—agues in every sense of the word; for not only do their revolutions take place in the same manner as those of ague, but, like ague, both may be influenced by medicines as well as by mental impressions. Indeed, in most cases of parturition, the labour-*fit*—mark the word!—will stop in a moment from the new cerebral movement induced by Fright or Surprise. In some the fit never returns, and the most terrible consequences ensue. When the fœtus is fairly developed in the case of Pregnancy, and the labour completed in that of Parturition, health is the general result; but in the course of both, as in the course of other fevers, every kind of disease may show itself, and, when developed, may even proceed to mortality. An occasional termination of Pregnancy is

Abortion or Miscarriage;

and this, in every case, is preceded by the same constitutional symptoms as Pregnancy and Parturition, namely, the symptoms or shades of symptom of ague. Moreover, when a woman gets into a habit of miscarrying, such miscarriage, like an ague, recurs periodically, and takes place almost to a day at the same month as the first. A lady who had been married several years, but who had never borne a living child, although she had had frequent abortions, consulted me upon the subject. Her miscarriages having always taken place at the *same period* of pregnancy—about the end of the third month—I desired her when she should again become pregnant to let me hear from her within a fortnight of the time she might expect to miscarry. She did so, telling me at the same time she knew she should soon be taken ill, as she had already had *shiverings*.

I directed her to use an opium suppository nightly, which she did for a month, and she was thus enabled to carry her child to the full time. She has had two children since, and all three are now well and thriving. I have succeeded in similar cases with the internal exhibition of quinine, iron, hydrocyanic acid, &c. But opium, where the drug does not decidedly disagree, will be found the most generally useful of our medicines in checking the *habit* of miscarriage. Need I tell you that in no case should it be continued where it excites vomiting?

The tendency to return of any action which has once taken place in the constitution, is a law even in some effects of accidents. A lady who, from fright during a storm, miscarried of her first child, a Boy, never afterwards, when pregnant with *boys*, could carry them beyond the time at which she miscarried of the first. On the other hand, she has done well with every one of her *daughters*, five in number, all of whom grew to womanhood.

To mothers and nurses, next to Pregnancy and Parturition, there is no subject so interesting as

Teething.

By both the birth of the first Tooth, like the birth of a first Child, is commonly expected with a certain degree of anxiety, if not of fear. Why is this? Why, but because, as in the case of Pregnancy, *before* the dormant germ can be called into action—*before* the embryo tooth can be developed—there must be a complete corporeal REVOLUTION, an intermittent FEVER of more or less intensity, varying according to the varying conditions of particular constitutions? And what a curious unity runs through all creation, producing those wonderful analogies that alone can lead us to the proper study of nature! The embryo tooth, like the embryo infant, is the offspring of a *womb*—tiny indeed, but still rightly enough termed by the profession *matrix*—that being only another Latin word for *uterus* or womb. Both also are ushered into the world by Fever. The more *healthy* and vigorous the child, the more subdued will the Teething Fever for the most part be, and the Teething itself will consequently be less painfully accomplished; just as under the same circumstances the parturient mother will more surely bring forth her young in safety. In those cases, on the contrary, where the child is weakly or out of health, the Fever will be proportionally severe. The generality of teething children, after having been comparatively well during the day, become feverish at a particular hour in the night. Now, the newly-developed tooth, though in the first instance itself a mere effect of the fever, very soon contributes, by the painful tension which its increasing growth produces in the gum, to aggravate and prolong the constitutional disorder. It is first an *effect*, and then a superadded *cause*, or aggravant. Gentlemen, in this Fever we have a fresh illustration of the Unity of Disease—a fresh proof that Intermittent Fever, in some of its many shades, is the constitutional revolution which ushers in every kind of corporeal disorder. How many varieties of local disease may be produced during the *Intermittent* Fever of Teething! Every spasmodic and paralytic distemper you can name—convulsions, apoplexy, lock-jaw, squint, curved spine, with all the family of structural disorders, from cutaneous rash and eruption to mesenteric disorganisation and dysentery. Should the gum be lanced in these cases? Who can doubt it? If you found the painful tension produced by the matter of an abscess keeping up a great constitutional disorder, would you not be justified in letting out the matter with a lancet? The cases are similar. In many instances of Teething, then, the gum-lancet may be used with very great advantage—but with greater advantage still may you direct your attention to the temperature of the child's body. When that is hot and burning, when its little head feels like fire to your hand, pour cold water over it, and when you have sufficiently cooled it throughout, it will in most cases go to sleep in its nurse's arms. During the *chill*-fit, on the contrary, you may give it an occasional tea-spoonful of weak brandy-and-water, with a little dill or aniseed to comfort and warm it — having recourse also to friction with hot flannel, or to the warm bath. During the period of *remission*, the exhibition of small doses of calomel, quinine,

or opium, with prussic acid occasionally, will often anticipate the subsequent fits, or render them trifling in comparison with those that preceded them.

But, Gentlemen, I should explain to you that you may sometimes be met with considerable opposition on the part of the wiseacres of the profession, when you propose *Quinine* or *Prussic Acid* in infantile disease,—in the cases of infants suffering from convulsions and flatulence. You remember what I told you of this disease—that infantile convulsion depends in every instance upon cerebral exhaustion. It is often the effect of cold, and frequently follows upon a purge; I have known the disease come on after the application of a leech. "No fact," says Dr. Trotter, "is better known to the medical observer, than that frequent *convulsions* are a common consequence of the large *loss* of *blood*." And you may recollect that in the experiment of the animal bled to death by Dr. Seeds, flatulence and convulsions were among the symptoms produced by the evacuation. Some years ago, I was requested to visit a child affected with convulsions; before I saw it, the poor little thing had been the subject of thirteen distinct fits, with an interval of remission of longer or shorter duration between each. What do you think was the treatment to which this infant had been in the first instance subjected by the practitioner, then and previously in attendance? Though its age was under six months, and the disease clearly and obviously remittent, he had ordered it to be cupped behind the ear,—afraid, as he explained to me, of the old mechanical bugbear, PRESSURE on the brain. How compatible this doctrine, *permanency of cause*, with *remission of symptom!* The quantity of blood taken was about an ounce, but the convulsions recurred as before. This was the reason why I was called in. The child at that particular moment had *no* fit—so after taking the trouble to explain the nature of the symptoms to the attending Sangrado, I suggested Quinine as a possible preventive. The man of cups and lancets stared, but acceded. The quinine, however, upon trial, proving abortive in this instance, I changed it, according to my custom, for prussic acid—after taking which, the infant was *free* from fits for a period of at least five or six weeks,—when the convulsive paroxysm recurred—from what cause, I know not, unless it might be from a *Purge* which its mother injudiciously gave it on the morning of recurrence. The flatulence, too, with which the child was all along troubled, began to diminish from the moment it took the prussic acid. You may perhaps ask me in what *dose* I prescribed the acid here. I ordered *one drop* to be mixed with *three ounces* of cinnamon water, and a tea-spoonful of the mixture to be given every two hours all that day—so that there is no earthly agent, however powerful, even in a *small* quantity, that may not, by farther diminution, be adapted to any state and strength—to any age or condition of life for which you may be desirous of prescribing it. In this respect, medicine resembles every thing in nature. In the case of colours, for example,—the most intense blue and the deepest crimson, by the art of the painter, may each be so managed that the eye shall not detect, in his design, a trace of either one or the other. In the case of the infant just mentioned, the dose of prussic acid was about the *twenty-fourth* part of a drop, and its good effects were very immediate and very obvious. Nevertheless, when the attending practitioner came in the morning to see the little patient, then completely out of danger, he was so horrified by the medicine which had produced the improvement, that he stated to the family he could not, in conscience, attend with me any longer. He accordingly took his leave of the child he himself had brought into the world, and all because he,—a man-midwife!—could not approve of the treatment that saved its life. Yet this very person, without hesitation, let loose all at once the *Eight* lancets of the cupping instrument on the head of the same infant, whose age, be it remembered, was under six months! Gentlemen, though I will not condescend to name the individual who, having so heroically, in this instance, swallowed the camel, found such a difficulty afterwards in approaching the gnat, I may state for your diversion that he is a very great little man in his way—being no

less than one of Her Majesty's principal accoucheurs—a proof to you that "Court-*fools*" are as common as ever. Indeed, the only difference I see in the matter is this,—that whereas in the olden times such personages only exhibited in cap and bells at the feast and the revel, they now appear in a less obtrusive disguise, and act still more ridiculous parts on the gravest occasions.

One very great obstacle to improvement in medicine has been the very general preference given by Englishwomen to male over female practitioners of midwifery; for by means of that introduction, numbers of badly-educated persons not only contrive to worm themselves into the confidence of families, but by the vile arts to which they stoop, and the collusions and conspiracies into which they enter with nurses and each other, they have in a great measure managed to monopolise the entire practice of physic in this country. To check the career of these people, Sir Anthony Carlisle wrote his famous letter to the *Times* newspaper, wherein he declared that "the birth of a child is a natural process, and not a surgical operation." Notwithstanding the howl and the scowl with which that letter was received by the apothecaries, it is pleasing to see that the public are now beginning to be aware of the fact that more children perish by the meddlesome interference of these persons, than have ever been saved by the aid of their instruments. How many perish by unnecessary medicine common sense may form some notion —for the fashion of the day is to commence with physic the moment the child leaves the womb—to dose every new-born babe with castor oil before it has learnt to apply its lip to the nipple! Who but an apothecary could have suggested such a custom? Who but a creature with the mind of a mechanic and the habits of a butcher would think of applying a cupping instrument behind an infant's ear to stop wind and convulsions? The nurses and midwives of the last age knew better. Their custom in such cases was to place a *laurel*-leaf upon the tongue of the child. The routinists laughed at what they called a mere old woman's remedy, and declared that it could have no effect whatever; they little knew that its strong odour and bitter taste depended upon the *prussic acid* it contained! Gentlemen, you may get many an excellent hint from every description of old woman but the old women of the profession—the pedantic doctors, who first laugh at the laurel-leaf as *inert*, and yet start at the very medicine upon which its virtues depend, when given with the most perfect precision in the measured form of prussic acid! men who, in the same mad spirit of inconsistency, affect to be horrified at the mention of opium or arsenic, while they dose you to death with purgative physic, or pour out the blood of your life as if it were so much ditch-water!

Gentlemen, there is such a thing as

Hereditary Periodicity.

If you take a particular family, and, as far as practicable, endeavour to trace their diseases from generation to generation, you will find that the greater number die of a particular disease. Suppose this to be Pulmonary Consumption. Like the ague, which makes its individual revisitations only on given days, you shall find this disease attacking some families only in given generations—affecting every second generation in one case; every third or fourth in another. In some families it confines itself to a given sex, while in the greater number, the age at which they become its victims is equally determinate—in one this disease appearing only during childhood, in another restricting itself to adult life or old age. By diligently watching the diseases of particular families, and the ages at which they respectively reappear, and by directing attention in the earliest stages of constitutional disorder to those means of prevention which I have in the course of these lectures so frequently had occasion to point out to you, much might be done to render the more formidable class of disorders of less frequent occurrence — mania, asthma, epilepsy, and consumption might thus, to a certain extent, be made to disappear in families where they had been for ages hereditary. But alas! then, for the medical profession, the members of which might in that case exclaim, "Othello's occupation's gone!"

LECTURE VIII.

THE SENSES—ANIMAL MAGNETISM—THE PASSIONS—BATHS—EXERCISE—HOMŒOPATHY.

GENTLEMEN,

The CAUSES of DISEASE, we have seen, can only affect the body through one or more of the various modifications of *nervous perception*. No disease can arise independent of this—no disease can be cured without it. Who ever heard of a corpse taking the Small-pox? or of a tumour or a sore being healed in a dead body? A dreamer or a German novelist might imagine such things. Even in the *living* subject, when nerves have been accidentally paralysed, the most potent agents have not their usual influence over the parts which such nerves supply. If you divide the *pneumo-gastric* nerves of a living dog—nerves which, as their name imports, connect the BRAIN with the *Lungs* and *Stomach*—arsenic will not produce its accustomed effect on either of these organs. Is not this one of many proofs that an external agent can only influence *internal* parts BANEFULLY, at least, by means of its Electric power over the nerves leading to them? Through the same medium, and in the same manner, do the greater number of our Remedial Forces exert their SALUTARY influence on the human frame. But whether applied for good or for evil, all the forces of nature act simply by Attraction or Repulsion. The Brain and Spinal Column—the latter a prolongation of the former—are the grand centres upon which every medicine sooner or later tells, and many are the avenues by which these centres may be approached. Through each of

THE FIVE SENSES,

the Brain may be either beneficially or banefully influenced. Take away these, and where would be the joys, sorrows, or the DISEASES of mankind?

We shall first speak of SIGHT. The view of a varied and pleasant country may, of itself, improve the condition of many invalids—while a gloomy situation has too often had the reverse effect. There are cases, nevertheless, in which pleasant objects only pain and distract the patient by their multiplicity or brightness. Night and darkness, in such circumstances, have afforded both mental and bodily tranquillity. The presence of a strong light affects certain people with headache; and there are persons to whom the first burst of sunshine is troublesome, on account of the fit of *sneezing* it excites. A flash of lightning has caused and cured the palsy. Laennec mentions the case of a gentleman who, when pursuing a journey on horseback, suddenly arrived at an extensive plain. The view of this apparently interminable waste affected him with such a sense of suffocation that he was forced to turn back. Finding himself relieved, he again attempted to proceed; but the return of the suffocative feeling forced him to abandon his journey. The common effects of gazing from a great height are giddiness, dimness of sight, with a sense of sickness and terror; yet there are individuals who experience a gloomy joy upon such occasions; and some become seized with a feeling like what we suppose *inspiration* to be—a prophetic feeling, that leads them to the utterance and prediction of extravagant and impossible things. Others again, under such circumstances, have an involuntary disposition to hurl themselves from the precipice upon which they stand. Sir Walter Scott, in his *Count Robert of Paris*, makes Ursel say, "Guard me, then, from myself, and save me from the reeling and insane desire which I feel to plunge myself in the abyss, to the edge of which you have guided me." Any kind of motion upon the body may affect the Brain for good or for evil; and through the medium of the Eye *novel* motion acts upon it sometimes very curiously. Who of you has not experienced giddiness from a few rapid gyrations? Everything in the room then appears to the eye to turn round. If for a length of time you look from the window of a coach in rapid motion, you will become dizzy; the same thing produces sickness with some. Many people become giddy, and even epileptic, from looking for a length of time on a running stream; with others, this very *stream*-gazing

induces a pleasurable reverie, or a disposition to sleep. Apply these facts to Animal Magnetism—compare them with the effects of the manipulations so called, and you will have little difficulty in arriving at a just estimate of their nature and mode of action. What is animal magnetism? It consists in passing the hands up and down before the eyes of another slowly, and with a certain air of pomp and mystery; now moving them this way, now that. You must, of course, assume a very imperturbable gravity, and keep your eye firmly fixed upon the patient, in order to maintain your mental ascendency. On no account must you allow your features to relax into a smile. If you perform your tricks slowly and silently in a dimly-lit chamber, you will be sure to make an impression. What impression?—Oh! as in the case of the *stream*-gazer, one person will become dreamy and entranced; another, sleepy; a third, fidgetty, or convulsed. Who are the persons that, for the most part, submit themselves to this mummery? Dyspeptic men, and hysteric women — weak, curious, credulous persons, whom you may move at any time by a straw or a feather. Hold up your finger to them, and they will laugh; depress it, and they will cry! So far from being astonished at anything I hear of these people, I only wonder it has not killed some of them outright—poor fragile things! A few years ago I took it into my head to try this kind of pawing in a case of epilepsy. It certainly had the effect of keeping off the fit; but what hocus-pocus has not done that? I have often done the same thing with a stamp of my foot. In a case of cancer upon which I tried the "passes," as these manipulations are called, the lady got so fidgetty, I verily believe, if I had continued them longer, she would have become hysterical or convulsed! That effects remedial and the reverse, however, may be obtained from them, I am perfectly satisfied. Nor do I mean to deny that in a few—a very few instances, these, or any other monotonous motions, may produce some extraordinary effects — effects which, however, are the rare exception instead of the general rule. Whatever any other cause of *Disease* may produce on the human body, these manipulations may by possibility occasion—Somnambulism, Catalepsy, or what you please. There is no more difficulty in believing this than there is difficulty in believing that the odour of a rose, or the sight of a cat, will make certain people swoon away. This much, then, I am disposed to admit.—But when the animal magnetisers assert that the senses may be transposed,—that the stomach may take the office of the eye, and render that beautiful organ, with all the complete but complex machinery by which it conveys light and shadow to the Brain, a work of supererogation on the part of the Creator, I turn from the subject with feelings of invincible disgust. If it be objected that the magnetisers *have* produced persons of both sexes who with their eyes closed and bandaged read a book placed upon their *stomach* by means of that organ, through waistcoat, boddice, and heaven knows what all!—I reply, that the charlatans of all countries every day perform their tricks with a swiftness that altogether eludes the unpractised eye. Thousands of persons have seen the Indian juggler plant a mango-stone in the ground, and in the course of a few minutes do what nature can only do in the course of years, make it successively produce a plant with leaves, blossoms, and lastly, fruit! How this trick is done, the witnesses who describe it know no more than you or I do how the magnetisers perform their juggleries; but few who have seen the Indian trick believe in the *reality* of any one of the various transformations with which their eyes have been cheated. Gentlemen, the transposition of the senses, is only an old whimsy, newly dressed up under the name of "clairvoyance." We read in *Hudibras* of

> ——— Rosicrucian virtuosis
> Who see with *Ears* and hear with *Noses!*

The greater part of the influence of external impressions upon the eye, as upon other organs, depends upon novelty solely, for pomp and pageantry affect the actors and the spectators in exactly opposite ways. With what different feelings, for example, the courtier approaches his Sovereign, from a person newly "presented!" The one, all coolness, looks

only for an opportunity of improving his advantages, while the other's only care is not to make a fool of himself. How different the effect of a *punishment parade* upon the raw recruit and the old soldier! In a regiment of veterans, a thousand strong, you will not find a man move from his place—no—nor a countenance change its cast or hue, while lash follows lash, and the blood flows in streams from the back of the culprit. The same scene enacted before a body of newly-enlisted lads of equal numerical strength, will alter the expression of every face; nay, half-a-dozen or more will drop, some fainting, some vomiting, some convulsed and epileptic. A medical student of my acquaintance, the first time he saw an amputation, not only fainted, but lost his sight for nearly half-an-hour; yet the same student afterwards became celebrated for his manual dexterity, and the coolness and steadiness with which he performed his amputations. To use a vulgar phrase—familiarity breeds contempt. How awkward most persons feel when, for the first time, they experience a ship's motion at sea! The young sailor, like the young surgeon, soon gets cured of his squeamishness; for the disposition to be sea-sick vanishes after a voyage or two. Now all this ought to convince you of the necessity of changing your remedies in disease; for what will produce a particular effect one day will not always do it another. With the body, as with the mind, Novelty and Surprise work wonders.

Do you require to be told that you can influence the whole corporeal motions through the organ of HEARING? I have stopped the commencing epileptic fit by simply vociferating in the ear of the patient. The atoms of the Brain, like the atoms of other parts, cannot do two things at once; they cannot, at one and the same moment of time, maintain the state of arrest which constitutes *attention*, and the state of motion on which the epileptic convulsions depend. Produce cerebral attention in any way you please, and there can be no epilepsy. In this way a *word* may be as efficacious as a medicine. Certain sounds, on the contrary, set the teeth on edge.

The influence of melody upon the diseases of mankind was so fully believed by the ancients, that they made Apollo the god both of medicine and music; but sweet sounds, like other sweets, are not sweet to every body. Nicano, Hippocrates tells us, swooned at the sound of a flute; what would he have done had he been obliged to sit out an opera? Many people are melancholy when they hear a harp; yet the melancholy of Saul was assuaged by David's harping. Some persons become frantic when a fiddle plays,

> And others when the bagpipe sings i' the nose
> Cannot contain their urine,—for Affection,
> Mistress of Passion, sways it to the mood
> Of what it *likes* or *loathes*.—SHAKSPEARE.

Everybody has heard of the wonderful effects of the Ranz des Vaches—that air which, according to circumstances, may either rouse the Switzer to the combat, or stretch him hopeless and helpless upon the sick-bed from which he shall rise no more. Oh! these national airs have marvellous effects with many people! I have known them produce and cure almost every disease you can name; but their influence in this case greatly depends upon association. Captain Owen had more faith in an old song as a remedy for the tropical fever, from which his crew suffered, than in all the physic prescribed for them by the ship's surgeon. The singing of a long-remembered stanza, he assures us, would, in a minute, completely change for the better the chances of the most desperate cases. Upon what apparently trifling things does not Life itself often turn!—

> ——— It may be a sound,
> A *tone of music*, summer's eve or spring—
> A flower, the wind, the ocean, which shall wound,
> Striking th' ELECTRIC CHAIN with which we're darkly bound.—BYRON.

How strangely some people are affected by SMELL! Who that had never seen or experienced it, would believe that the odour of the rose could produce *Fainting?* or that the heliotrope and the tuberose have made some men asthmatical? There are persons who cannot breathe the air of a room containing ipecacuan, without suffering from asthma. The smell of musk, so grateful to many people,

sickens some. An odour, in certain cases, may be as good a cordial as wine: every old woman knows the virtue of hartshorn and burnt feathers.

I am almost afraid to speak of TASTE, for, you know, *de gustibus non est disputandum.* Might not the Red Indian, when taunted for devouring vermin, retort upon the "Pale-face" for his mite-eating propensity? The Esquimaux, who rejects sugar with disgust, esteems 'rain-oil a luxury; but though he prefers a tallow-candle to butter, he has as perfect a taste for whiskey as any Irishman among us—that is, before Father Mathew and Temperance Societies became the rage. How you would stare if you saw a man, in his senses, chewing quick-lime! yet I have seen some hundreds at a time doing that. I allude to the practice of the Asiatics, who first wrap up a little portion of lime in a betel-leaf, and chew both, as our sailors do tobacco. Now, that very tobacco-chewing has always seemed to me an odd taste, and I do not wonder that others besides fine ladies have sickened at the sight of a *quid.* Was there ever such a fancy as that of the Chinese, who eat soup made of birds' nests? Morbid in the first instance, such tastes, like other diseases, spread by imitation or contagion. In the West Indies, the negro is liable to a peculiar fever, called from the avidity with which he devours clay, *Mal d'Estomac.* His whole sensations during this fever, are, doubtless, more or less deranged. What extraordinary likings and longings ladies in the family way occasionally take! Some will eat cinders, some have a fancy for rats and mice, and some, like Frenchmen, take to frog-eating! I remember reading of a lady who paid fifty pounds for a bite of a handsome young baker's shoulder; the same lady went into hysterics because the poor fellow would not permit her to take another bite, at any price. If you smile, and look incredulous at this, how will you receive what I am going to tell you? While I was myself studying at Paris, some twenty years ago, a woman was tried for decapitating a child. When asked her motive for a crime so horrible, she replied, "*l'envie d'une femme grosse.*"

Well now, I think we have had quite enough of Tastes—We shall, therefore, say something of TOUCH. You will tell me, perhaps, not to trouble you on that subject;—no great good or ill can happen from a touch, you will say. But here you are mistaken: many curious and even dangerous affections may originate in touch simply, provided it be of a novel or unusual kind. Touch the white of the eye, however lightly, with your finger, or a feather, and you shall have pain that may last an hour. The application of either the one or the other to the throat or fauces may vomit you as effectually as tartar emetic or ipecacuan: every nurse knows that. A bristle introduced, in the softest manner, into the nose or ear, has thrown some people into fits. Then what extraordinary effects may sometimes follow the most painless touch of the bladder by a catheter or a bougie! I do not know what other medical men have seen, but I have over and over again witnessed ague, epilepsy, faint, vomit, and diarrhœa all from the mere introduction of the catheter or bougie; and I have even traced rheumatism and eruptions to the same operation. You all know the effect of *tickling.* Now what is tickling but a succession of short touches? And see how wonderfully it affects most people!—you may drive some men mad by it. Though it has been carried so far, in some cases, as to have produced convulsions and even death itself, Mr. Wardrop actually found it efficacious in some convulsive affections. I have already given you instances where the mere application of a ligature to the arm or leg arrested the fit of mania, epilepsy, &c. Now the influence of that apparently trifling application depends upon the cerebral *attention* which it excites through the double influence of sight and touch. As I hinted to you before, the lancet has often got the credit for the good effects produced by the bandage. Fear of the operation may also, on some occasions, have aided its efficacy. How many virtues were, at one time, attributed to a king's touch!—how many more are still believed to attach to the touch of relics—the bones, rags, and other rattle-traps of saints! Priests and Princes, you have by turns governed mankind—justly and well, sometimes—more frequently you have deluded

and deceived them. If the credulity and weakness of the masses have, in most cases, been *your* strength, here at least the *dupe* has not always been a loser by the deceptions you practised. The emotions of Faith and Hope, which your mummery inspired, by exciting new revolutions in the matter of the brain, have assuredly alleviated and even cured the sufferings of the sick. Strange infatuation of mankind,—with whom, where truth fails, imposture may succeed! In what does the adult differ from the infant—gullible man, who gives his gold for an echo, from the child who caresses its nurse when telling lies to please it? IGNORANCE in *degree* makes the only difference. Gentlemen, let us now inquire into the manner in which the human frame may be influenced through the medium of

THE PASSIONS.

What are the Passions? Grief, Fear, and Joy—what are these?—Are they entities or actions—the workings of demons *within*, or corporeal variations caused by impressions from *without?* Have not the Passions all something in common, certain features or shades of feature so precisely the same as to form a bond of unity by which they may be all linked together? Are not the resemblances, in many instances, so very close that you could not tell one from another? A person is pale in the face, his lip quivers, his whole frame trembles or becomes convulsed. Is this Fear, Rage, Love, or Hate? May it not be the effect of a change of temperature simply? Bailly, when on the scaffold, was taunted by the bystanders for trembling. "Yes," he replied; "but it is with *Cold*." "You are pale, Sir, your *Fear* betrays you." "If I am pale, it is with *Astonishment* at being accused of such a crime!" "You blush, Madam, you are *Ashamed* of yourself." "Pardon me, Sir, it is your Audacity brings the redness of *Rage* to my cheek." You see, then, how like the Passions are to each other, and how difficult it is to guess at the causes of them from mere appearance.

Like the various diseases of which we have had occasion to speak, the Mental Emotions,—or rather the corporeal actions so called,—have all been associated with particular organs and secretions. Their very names have changed with the changes in medical doctrine. Who among you would dream of placing *Grief* in the liver? That the ancients did so, is evident by the name they gave it—Melancholy literally signifies "black-bile." *Envy* or *Spite* we still call the "Spleen," and when a person is enraged, we say "his Bile is up." Europeans place Courage, Benevolence, and Fear in the Heart,—the Heart which has quite enough to do in the performance of its own proper office, namely, that of a vessel to circulate the blood through the system!—The Persians and Arabs associate Fear, Courage, and Benevolence with the liver: "White-liver" is their term for a coward. Shakspeare uses the word *lily*-livered in the same sense.

People often speak of "Temperament," and professors of philosophy tell us there are four kinds. If a man is hasty or violent, his temperament is said to be Choleric or bilious; if mentally depressed, Melancholic or black-bilious; if of a joyful and happy turn of mind, he is of a Sanguineous or full-blooded temperament; if apathetic or listless, the temperament is Phlegmatic—a word somewhat difficult to translate, inasmuch as it originated in a fanciful phantom, which the ancients believed to be an element of the body, and which they termed "phlegm." Some add another temperament, which they call Leucophlegmatic, or white phlegm! I wonder they never took the *Saliva* to distinguish a temperament; surely the "Salivous temperament" would be quite as rational as the "Bilious." What, then, are all these Temperaments—so far, at least, as their nomenclature goes, but pretty gibberish?—mere sounds invented by Pedantry to gull Folly; or, in the words of Horne Tooke, "an exemplar of the subtle art of saving appearances, and of discoursing deeply and learnedly on a subject with which we are perfectly unacquainted!" It never occurred to the sophists of the schools that man's mental dispositions, like his corporeal attributes, are every day altered by time and circumstance. Need I tell you, that disease

has made the bravest man quake at his own shadow, and turned the most joyous person into a moody and moping wretch? When the doctrines of the Humoral School prevailed, the word Temperament gave way to *humour*, and good and bad humour took the place of cheerful and sulky temper. We are in the daily habit of speaking of "the spirits." We say, "low spirits," and "high spirits;" which forms of expression may be traced to the period when physicians were so ignorant as to suppose that the arteries, instead of carrying blood, contained air or "spirits," from *Spiritus*, the Latin for breath or air. That was the reason why these blood-vessels were first called *aer*-teries. This confusion which pervades all language has materially impeded our knowledge both of the physical and moral man. Locke must have felt this when he said, "Vague and insignificant forms of speech, and abuse of language, have so long passed for mysteries of science, and hard or misapplied words, with little or no meaning, have, by prescription, such a right to be mistaken for deep learning and height of speculation, that it will not be easy to persuade either those who speak or those who hear them, that they are but the covers of ignorance and hindrances of true knowledge."

"We cannot entertain a doubt," says Sir H. Davy, "but that every change in our *sensations and ideas* must be accompanied with some corresponding change in the *organic matter* of the body." Through the medium of one or more of the five senses must some external circumstance first operate on that part of it called the BRAIN, so as to change the existing relations and revolutions of its atoms, before there can be what we term a Passion. Whatever alters the cerebral atoms must alter the actions of every part of the body—some more, some less. According to the prominence and locality of one set of actions or another, do we, for the most part, name the Passion. The jest that will make one man laugh may enrage another. What are the features common to all Passion?—Tremor, change of temperature, change of secretion. Do not these constitute an Ague-fit? Shakspeare, with his accustomed penetration, speaks of "this ague-fit of Fear," and he stretched the analogy even to the world around him:—

> "Some say the EARTH was *fever'd* and did *shake*."

Hate, Love, and Anger are equally remarkable for their ague-like changes. You remember what Hudibras says of Love—that it is only an "ague-fit reversed." The same may be said of Hope, Joy, and Rage; for in all these Passions the "hot fit takes the patient first." Such at least is their general effect; but in particular instances, as in the real Ague, coldness and pallor usher in every one of those passionate fits. I care not what be the nature of the Passion—joy, grief, or fear—the constitutional circle of actions is still the same; differing, where they do differ, in shade, place, and prominence solely—but in no greater degree than one Fever differs from another. Moreover, there is no constitutional affection which these Passions may not excite or cure. In this respect, also, they resemble the Ague, that type of every disturbed state, whether of man the microcosm, or the globe he inhabits. We have already, to a certain extent, demonstrated the influence of particular Passions in the production of certain diseases. We have further proved that the same morbid actions which we recognise under so many different names, when arising from a blow or a poison, may be equally the result of a mental impression: we have established their *absolute identity* by curing them with the same physical agents. The history of medicine, on the other hand, presents us with innumerable instances of the beneficial agency of these very Passions in every kind of disorder, whatever may have been the nature of the primary cause. Faith, Confidence, Enthusiasm, Hope,—or rather the various Causes which produce them,—are as powerful agents in the cure of the sick as any remedies we possess. Not only, like Bark, or Wine, do they often give rise to a salutary Excitement, or mild *Fever*, sufficient to prevent the access of the most malignant diseases—but, like these agents, they have actually arrested and cured such diseases after they had fairly and fully commenced. A stone, a ring, with a history real or supposed; a verse of the Koran or the Bible sewn in a piece of silk—

these worn, now on one part of the body, now on another, have inspired a mental firmness and induced a corporeal steadiness which have enabled the wearer to defy the united influence of Epidemic and Contagion. If the Arabs have still their talismans, and the Indians their amulets, the Western nations have not ceased to vaunt the cures and other miracles effected by their relics, their holy wells, and holy water. When we boast of the success of a particular measure, we say it acted like a Charm. What is a charm?—whence its origin? It is a corruption of the Latin word *Carmen*, a Song or Verse. In all times and in all countries, there have been men who have found their advantage in playing upon the ignorance of their fellow-men; he that would appear wiser than another has always had recourse to some kind of imposture; and as priest, poet, prophet, and physician were often united in one person, it was not wonderful that such person should clothe his mummery and mysticism in verse. To be able to read or spell was, at one time, a mark of superior wisdom, and he who could do so, had only to mutter his "spell" to cure or kill. From the earliest antiquity, we find charms a part of medical practice; Homer, in his Odyssey, introduces the sons of Autolycus charming to stanch blood; the physicians of Egypt and India are to this day charmers; the north men composed Rhunic rhymes to charm away disease. Indeed, with the Norwegians and Icelanders verse or song was supposed to be all-powerful; one of their poets thus expresses the belief of his time and country in this respect: "I know a song by which I can soften and *Enchant* the arms of my enemies, and render their weapons harmless. I know a song which I need only to sing when men have loaded me with bonds; for the moment I sing it my chains fall in pieces, and I walk forward at liberty. I know a song useful to all the children of men; for as soon as hatred inflames them I sing it, and their hate ceases. I know a song of such virtue, that I can hush the winds with it, and subdue the storm to a breath." Such, Gentlemen, was the origin of Enchantment, or Incantation, terms borrowed from the Latin verb *Canto*, I sing. With the Jews, the simple enunciation of their mystical word *Abracalan*, was sufficient to inspire the confidence that baffled disease; nay, Quintus Severinus Samonicus vaunted his success in the cure of the hemitritic or double tertian fever, by pronouncing mysteriously the word *Abracadabra*, a phonic combination of his own invention! At this very hour, the Caffre rain-maker, the Cingalese devil-dancer, and the Copper Indian sorcerer, with their charms and chants, are enabled to work changes in the bodies of their several countrymen that put the boasted science of the schoolmen to shame. That these act by inspiring Confidence simply, may be seen from what took place in 1625, at the Siege of Breda. "That city from a long siege, suffered all the miseries that fatigue, bad provisions, and distress of mind could bring upon its inhabitants. Among other misfortunes, the scurvy made its appearance, and carried off great numbers. This, added to other calamities, induced the garrison to incline towards a surrender of the place, when the Prince of Orange, anxious to prevent its loss, and unable to relieve the garrison, contrived, however, to introduce letters to the men promising them the most speedy assistance. These were accompanied with medicines against the scurvy *said to be* of great price, but of still greater efficacy; many more were to be sent them. The effects of the deceit were truly astonishing. Three small vials of medicine were given to each physician. It was publicly given out that *three* or *four drops* were sufficient to impart a healing virtue to a GALLON of water. [Mark this, Homœopathists!] We now displayed our wonder-working balsams. Nor even were the commanders let into the secret of the cheat upon the soldiers. They flocked in crowds about us, every one soliciting that part may be reserved for his use. Cheerfulness again appears in every countenance, and an universal faith prevails in the sovereign virtues of the remedies. The effect of this delusion was truly astonishing; for many were quickly and perfectly recovered. *Such as had not moved their limbs for a month before*, were seen walking the streets with their limbs sound, straight, and whole! They boasted of their cure by the Prince's remedy."—[*Ives'* Journal.]

And what was this remedy?—a mere sham medicine, Gentlemen! After this, do I require to caution you, when you visit your patients, not to put on a lugubrious or desponding look before them? Such conduct, on the part of a medical man, is unpardonable; yet there are practitioners so base and sordid as to make it a part of their policy to represent the malady of every patient as dangerous. These find their profit in croaking; for it is a course of conduct that almost infallibly contributes to keep up disease. To God and their consciences I leave these men.

Such of you as might be disposed to question the depressing influence of a long face upon the sick, may read the history of Lord Anson's voyages with profit. There you will find it recorded, "that whatever discouraged the seamen, or at any time damped their hopes, never failed to add new vigour to the distemper, (the Scurvy,) for it usually killed those who were in the last stages of it, and confined those to their hammocks who were before capable of some kind of duty." And this is in perfect accordance with the observation of Solomon, that "a merry heart doeth good like medicine, but a broken spirit drieth the bones."

Let me, therefore, counsel you not only to assume a cheerful look in the presence of the sick, but endeavour at the same time

> To render with your *Precepts* less
> The sum of human wretchedness,
> And STRENGTHEN man with HIS OWN MIND.

What are all your trumpery Pathology and Dissecting-Room knowledge compared with this? You may dissect dead bodies for twenty years and never be one whit the wiser on the mode of influencing the motions of the living. Now, this brings to my mind certain lines of a cotemporary poet, the celebrated Beranger; but as some of you may not understand the French language, I shall offer no apology for giving you his sentiments in my own not over poetical English:—

> Was ever such an ass as that
> Who hoped by slicing mutton-fat,
> And pulling candle-wicks to pieces,
> To tell why *Light* should spring from *Greases?*
> Yes, one—that still more precious fool,
> Who in the anatomic school
> Expected with dissecting knife
> To learn from DEATH the laws of LIFE!
> Ha! ha! when sick myself I'd rather
> From some old nurse a "wrinkle" gather,
> Than trust to such pedantic pate
> To cure my frame's disordered state!

But seriously, Gentlemen, I have known a great many first-rate anatomists in my time; yet there are old women who never saw the inside of a dead body, whom I would sooner consult in my own case than any of these hair-splitting gentry. These men are mere geographers, who will point out rivers and towns, if I may say so,—corporeal hills, and dales, and plains,—but who know nothing of the manners, customs, or mode of influencing the animated atoms constantly entering into and departing from them. If any such mechanical-minded creature presume hereafter to mystify you on this point, tell him to watch the wounded of contending armies; and ask him to explain to you why the same description of injuries which heal with rapidity when occurring in the persons of the victors, too often prove intractable, or even fatal, to the vanquished! He might dissect their dead Nerves as clean as he pleased, and never find out that the living body of man may be either weakened or strengthened through the medium of his own Mind.*

The depressing power of GRIEF is familiar to every body; but there are cases where a reverse effect may take place from it—and Shakspeare, with his usual accuracy, explains the reason of this.

> In Poison there is Physic—and these news,
> Having been WELL, that would have made me SICK,
> Being Sick, have in some measure made me Well;
> And as the wretch, whose fever-weakened limbs,
> Like strengthless hinges buckle under life,
> Impatient of his fit, breaks like a fire
> Out of his keeper's arms, even so my limbs,
> *Weakened* with Grief, being now *Enraged* with Grief,
> Are THRICE THEMSELVES.

* The remarks in the text apply solely to the *Morbid* Anatomists—to those who argue from the end as if it were the beginning—not to the philosophical *Comparative Anatomists*, who, by comprehensively comparing the structure of one tribe of animals with another, have arrived at the *Unity* of *Structure* of all animals.

The strength imparted to the constitution in cases of this nature, has a relation to the novel atomic revolutions caused by DESPERATION; or that determination to act in an energetic manner which so often comes upon a man in his extremity. Such re-action resembles the glow that succeeds the sudden shock of a cold shower-bath. There are persons whom a slow succession of petty misfortunes would worry to death; but who, on sudden and apparently overwhelming occasions, become heroes.

It will be readily admitted, by all who have profited by their experience of life, that one-half the world live by taking advantage of the passions and prejudices of the other half. The parent of prejudice is Ignorance; yet there is no man so ignorant but who knows something which you or I may not know. The wisest judges have played the fool sometimes from ignorance; they have allowed themselves to be gulled by individuals of a class they despise. Poor, decrepid, ill-educated females, calling themselves Witches, have imposed upon the ablest and most learned men of a nation. Lord Bacon and Sir Matthew Hale believed in witchcraft; nay, the latter judge went so far as to sentence to death wretches supposed to be convicted of it, and they were executed accordingly. Samuel Johnson was a believer in ghosts and the second-sight. Where, then, is the country so enlightened that, upon some points, the wisest and best may not be mystified? If such a country exists, it must be England at the present moment; if there be a profession in which deception is never practised, it must be Medicine. Happy England! happy Medicine! where all is perfect and pure —where the public are neither cheated by an echo, nor led by a party for party interests! Here collegiate corruption is unknown, and corporate collusion is a mere name; here we have no diplomas or certificates to buy—no reviewers to bribe—no humbug schools—no venal professors; here, having no mote in our own medical eye, we can the better distinguish and pluck out that of our neighbours. Who will doubt our superiority in this respect over all the other nations of the earth? Or who will question me in what that excellence principally consists? Scapegrace, sceptic, read Dr. Hawkins—read Dr. Bisset Hawkins' Continental Travels—and you will there find it recorded, that the brightest feature of British Medicine—the most distinguishing point of excellence in English treatment—is the copious blood-lettings we practise. "The *neglect* of copious blood-lettings," quoth Hawkins, "is the great error of the continental Hospitals!" Let us laugh, then, at the do-little "médecine expectante" of the French, ridicule the do-nothing homœopathy of the Germans, and turn up our lip in derision at the counter-stimulant doctrines of the Italians. What are the greatest medical professors of the Continent, in comparison with our own meanest apothecaries even—to say nothing of our leading surgeons and physicians—presidents and vice-presidents of learned societies? Only look at the number of scientific bodies to which these little great men belong—you will find their names enrolled in every (so called!) *Literary* and *Scientific* institution throughout the country—Astronomical—Botanical—Geological—Antiquarian—Royal! Amiable and respectable persons! worthy of the carriages in which you ride, and the arms you bear; you are gentlemen—friendly and disinterested gentlemen; you owe your elevation to your own industry; you preserve your position by your incorruptible honesty; you recommend yourselves, and *each other*, neither by letter nor affection, but upon the score of talent and integrity solely; you are all honourable men. Unlike the "honourable members" of a certain honourable place, who *have been* purchased, *you*, the members of an equally "honourable" profession, are unpurchaseable! This, your colleges and coteries declare—this, the discriminating world believes and echoes. Who but the reptiles—the few that never think, never reflect—would answer, ALL IS NOT GOLD THAT GLITTERS! Gentlemen, what is the difference betwixt a guinea and its counterfeit? Do not both sparkle with equal brightness? Have they not the same form, the same exterior impress? Can the eye detect the imposture? No! it is only by a comparative *trial* of their respective weight and ring that you can make out the difference.

Do you think mankind are to be judged in any other way than this? Is it not as necessary, for a person to be a successful cheat, that he should borrow the exterior of worth and integrity, as it is for the counterfeit guinea to bear the name and livery of the coin it purposes to be, before it can pass for genuine? Be not, then, satisfied with fine names and appearances only; do not take men for what they pretend to be solely by their manner or title—because they are doctors of this college, or professors of that university. What is a professorship but a *Place?* "He who has the best talents for *getting* the office, has most commonly the least for *filling* it; and men are made moral [medical] and mathematical teachers by the same trick and filthiness with which they are made tide-waiters and clerks of the kitchen."—*Sydney Smith.* Depend upon it, professors thus elected will always stand by each other—right or wrong, they will always support the same system. In this, they do no more than the members of the swell-mob, who work together by coterie and collusion. Like these professors, too, they are all very respectable in their appearance, some of them doing business in a carriage even!

Where is the individual that has not his moral as well as his physical weakness? Upon this point, at least, we are all liable to be overreached. Here we are every one of us imbecile as the infant; for we are placed as completely at the mercy of the Charlatan, as the child is at the disposal of the parent, whose mental ascendency he acknowledges. Speak to the prattler of the "haunted chamber," his countenance instantly falls. With the adult, assume an air of mystery, mutter darkly and indefinitely, and mark how his brain will reel. Is he sane? he becomes your tool. Has he come to you in his sickness? you gull him and guide him at your pleasure. But how can you wonder at the effect of this kind of agency on *individuals,* when you have seen a whole nation similarly hook-winked by a coterie of doctors? I allude to what was done when the Cholera first appeared in England. The influence of *Fear,* in disposing to spread an epidemic, you know; the effect of Confidence in strengthening the body against its attacks, you also know. What was the conduct of the College of Physicians when the Cholera broke out? Did they try to allay the alarm of the masses? did they endeavour to inspire them with confidence and hope, that their bodies might be strengthened through their minds? No! they publicly, and by proclamation declared the disease to be *Contagious;* without a particle of proof, or the shadow of a shade of evidence, they solemnly announced that, like the small-pox, it was communicable from man to man! That was the signal to get up their Cholera Boards; and Cholera bulletins, forsooth, must be published. I had just then returned from India, where, though I had seen more cases of Cholera than all the Fellows of the College put together, I never heard of Cholera-Contagion; no, nor Cholera-Boards. In the far East, the authorities, civil, military, and medical, acted with firmness; what they could not arrest they awaited with fortitude; they placed themselves and those committed to their care at the mercy of the great Disposer of events; while in England, enlightened England, the leading law-givers, under the influence of the leading medical men, introduced acts that disgrace the Statute Book, and permitted medical jobs to be got up that did anything but honour to the medical profession. A new tax was actually levied to defray the salaries of their Cholera-Boards! The consequences of these measures might have been foreseen. Throughout the country universal panic was spread, and universal gloom prevailed. The rich shut themselves up in their houses, each in terror of his neighbour's touch; the middling classes suffered from the general stagnation which ensued in consequence; every trade, but the drug trade, languished or stood still; and the poor, when taken ill—for the disease was chiefly confined to that class—were, by act of Parliament, dragged from their homes, and conveyed to Cholera Hospitals,—where, if they did not perish of the prostration induced by their removal, they had *salt* and *water* injected into their *veins* by the medical madmen in charge! Debarred the society of their nearest and dearest relatives, and tortured in

every possible way by their pedantic doctors, how few of these unfortunates escaped from the pest-houses in which they were so inhumanly immured! All this, the leading men of the country, Peers, Judges, and Members of Parliament, saw and permitted, from a puerile dread of the phantom *Contagion* which the ignorance or cupidity of the College of Physicians had conjured up. To what miseries will not the feeble submit, when under the influence of intimidation, if

> Even the wisest and the hardiest quail
> To any goblin hid behind a veil!

Is not this a subject for deep reflection? To some it may suggest a feeling like shame. Let me speak of SHAME. Generally speaking, this is a depressing passion, and under its influence men *sometimes*, and women *daily*, commit suicide. I will give you an instance where it had the reverse effect. The girls of Miletus, a town in Greece, were seized with a mania that led them to believe self-destruction an act of heroism; and many accordingly, destroyed themselves. Physic and argument having been alike ineffectually tried, the authorities, to prevent the spread of this fatal rage, ordered the bodies of the suicides to be dragged *naked* through the streets of the city. From that moment the mania ceased. But everything depends upon a contingency, whether a particular passion act as a depressant or a tonic in disease. In the case of Shame, the past and the future make a great deal of difference.

Some of you may, perhaps, feel inclined to remind me of the efficacy of Fear in the *Cure* of diseases; but in this case the fear induced must neither be a dread of the disease nor its event, but a dread of some circumstance completely unconnected with it. Thus, Sir John Malcolm, in his History of Persia, tells us of a certain Hakeem who cured ague by the bastinado. In this case the Persian doctor availed himself of the double influence of fear and pain, neither of which was contingent upon the disease. The effect of Terror in removing tooth-ache is familiar to many who have knocked at a dentist's door. The gout, too, has been cured and caused by every passion you can name. There does not pass a day but we hear of people being *frightened* into epileptic fits; yet Boerhaave terrified away an epilepsy from a school where it prevailed, by threatening to burn with a red-hot poker the first boy that should have another paroxysm. I have known asthma cured by Rage, and also by Grief; yet, if we may believe what we hear, people occasionally *choke* of both! Few medical men will dispute the influence of a passion in the cure of Ague. Mention any mental impression, such as Faith, Fear, Rage, or Joy, as having succeeded in this affection, and they doubt it not; but superadd to the patient's state a palpable change of volume, or structure, such as an enlarged gland or ulcer, and they smile in derision at the efficacy of a charm. Extremes in scepticism and credulity are equally diseases of the mind. The healthy brain is ever open to conviction; and he who can believe that the Obi-charm, or the magic of a monarch's touch, can so operate on the nervous system as to interrupt or avert the mutations of motion and temperature constituting an ague-fit, should pause before he deny their influence over an ulcer or a tumor, which can only be developed or removed by or with change of temperature. Indeed, from what we have already said, it is impossible for any individual to be the subject of any mental impression without experiencing a chill or a heat, a tremor or a spasm, with a greater or less change in the atomic relations of every organ and secretion. Baron Alibert gives the case of a Parisian lady, who had a large wen in the neck—a *goître*—which, from its deformity, occasioned her much annoyance. That tumor, which had resisted every variety of medical treatment, disappeared during the Reign of Terror—a period when this lady, like many others of her rank, experienced the greatest mental agony and suspense. The agony and suspense in that case referred to a contingency altogether unconnected with her disease. The mere act of dwelling upon sickness will keep it up; while whatever withdraws the mind from it is beneficial. In my own experience, abscesses of considerable magnitude have been cured both by fear and joy. Few surgeons in much practice have been without the opportunity of

satisfying themselves that purulent swellings may recede under the influence of fear. They have assured themselves of the presence of matter—they propose to open the tumor—the frightened patient begs another day, but on the morrow it has vanished.

Akin to Terror is DISGUST, or that feeling which a person naturally entertains when, for the first time, he handles a toad or an asp. This passion has worked wonders in disease. The older physicians took advantage of it in their prescriptions; for they were very particular in their directions how to make broth of the flesh of puppies, vipers, snails, and milipedes! The celebrated Mohawk Chief, Joseph Brandt, while on a march, cured himself of a tertian ague, by eating broth made from the flesh of a rattle-snake! Here the cure must have been altogether the effect of disgust, for in reality, the flesh of a rattle-snake is as perfectly innocuous, and quite as nutritious as the flesh of an eel. Mr. Catlin, in his Letters and Notes *on the North American Indians*, tells us that when properly broiled and dressed he found the rattle-snake to be "the most delicious food of the land." But when you come to think of the living reptile and the venom of his fang, who among you could at first feed upon such fare without shuddering, shivering, shaking—without, in a word, experiencing the horrors and horripulations of ague! Spider-web, soot, moss from the dead man's skull, the touch of a dead malefactor's hand, are at this very hour remedies with the English vulgar for many diseases. With the Romans the yet warm blood of the newly-slain gladiator was esteemed for its virtues in epilepsy. Even at this day, in some countries of Europe, the lower orders cure the same disorder by drinking the blood as it flows from the neck of the decapitated criminal. In the last century, a live toad hung round the neck was much esteemed, by the same class of people, for its efficacy in stopping bleeding at the nose. Now that the toad is known to be free from venom, it might not be so successful as it once was in this instance. Any temporary benefit, real or supposed, which has accrued from the employment of the *Leech*, has appeared to me to be in many instances the effect of the *Horror* the patient very naturally entertained for the reptile.

A consideration of the power by which the Passions cure and cause diseases, affords at once the best refutation of medical error, and the most perfect test of medical truth. By this test, I am willing that my doctrines should stand or fall. What are the Passions? Cerebral movements—actions of the internal BRAIN, produced by external causes—which, by influencing its atomic revolutions, influence every right or wrong action of the body. Take the influence of *Fear* simply—what disease has not this Passion caused?—what has it not cured?—inducing right motions in one case, wrong in another. The mode of action of a passion, then, establishes beyond cavil not only the unity of disease, but the unity of action of remedy and cause. What does the proper treatment of all diseases come to at last, but to the common principle of *reversing* the existing motion and temperature of various parts of the body? Do this in a diseased body, and you have health—do the same in health, and you reproduce disease. Whatever will alter the movements of a living being, will cure or cause disease. This, then, is the mode in which all our remedies act. Just observe the effect of

BATHS.

In what disease have not Baths been recommended?—and in what manner can they cure or ameliorate, but by change of temperature—by change of motion? Put your hand into ice-water—does it not shrink and become diminished in size? Place it in water as hot as you can bear—how it swells and enlarges! You see, then, that change of temperature necessarily implies change of motion;—and that change of motion produces change of temperature, you have only to run a certain distance to be satisfied; or you may save yourself the trouble, by looking out of your window in a winter morning, when you will see the hackney coachmen striking their breasts with their arms to warm themselves. Depend upon it, they would not do that for nothing. *Heat*, then, so far from being itself a material sub-

stance, as Black and other chemists assert, is a mere condition of matter in *motion*—it is no more a substance than *colour*, *sound*, or *fluidity*. What can be greater nonsense than an "imponderable" substance—as Heat and Light have been sometimes called? That only is MATTER or SUBSTANCE which can be weighed and measured—and this may be done with *invisible* as well as visible things,—in the case of a *Gas* for example;—however attenuated, a gas can both be weighed and measured.

I am often asked, what Baths are safest, as if every thing by its fitness or unfitness is not safe, or the reverse. The value of all Baths depends upon their fitness; and that, in many instances, can only be known by trial. It depends upon constitution, more than upon the name of a disease, whether particular patients shall be benefited by one Bath or another. Generally speaking, when the skin is hot and dry, a Cold Bath will do good; and when chilly, a Hot Bath. But the reverse sometimes happens. The cold stage of Ague, may at once be cut short by a cold bath. I have seen a shivering hypochondriac dash into the cold plunge bath, and come out in a minute or two, perfectly cured of all his aches and whimsies. But in cases of this nature, every thing depends upon the *glow* or *reaction*, which the Bath produces; and that has as much to do with surprise or shock as with the temperature of the bath. I have seen a person, with a hot dry skin, go into a warm bath, and come out just as refreshed as if he had taken a cold one. In that case, the perspiration which it excited must have been the principal means of relief.

So far as my own experience goes, I prefer the cold and tepid shower-baths, and the cold plunge-bath, to any other; but there are cases in which these disagree, and I, therefore, occasionally order the warm or vapour bath instead.

In diseases termed "inflammatory," what measure so ready or so efficacious as to dash a pitcher or two of cold water over the patient —*Cold Affusion*, as it is called? Whilst serving in the Army, I cured hundreds of inflammatory fevers in this manner—fevers, that, in the higher ranks of society, under the bleeding and starving systems, would have kept an apothecary and physician—to say nothing of nurses and cuppers—visiting the patient twice or thrice a-day for a month,—if he happened to live so long.

Gentlemen, with the cold dash you may easily,

> "While others meanly take whole months to slay,"
> Produce a cure in half a summer's day.

That being the case, do you wonder that prejudices should still continue to be artfully fostered against so unprofitable a mode of practice? Why do not the gullible public examine for themselves? Why will they continue to bribe their medical men to keep them ill? *In* their shops and *out* of their shops, people generally enact two very different characters. Behind their counters they take advantage of their customers in every possible way; but the moment they get out of doors, the same persons drop the knave and become the dupe. The merchant and tradesman, who buy cheap and sell dear—the landowner and farmer, who keep up the corn laws by every possible sophistry—the barrister and attorney, who rejoice and grow fat on the imperfections and mazes of the law—the clergyman and his clerk, whose gospel knowledge and psalm-singing, are too often in juxta-position with tithes and burial fees—become all perfect lambs when they leave their respective vocations,—each giving the others credit for a probity and disinterestedness in their particular line, which himself would laugh at as sheer weakness, were any body to practise it in his own! With the most childish simplicity, people ask their doctor what he thinks of this practice, and what he thinks of the other—never for a moment dreaming that the man of medicine's answer, like the answer of every other man in business, will be sure to square with his own interests. Instead of using the *Eyes* that God has given them, they shut them in the most determined manner, that their *Ears* may be the more surely abused. "What a delightful person Dr. Such-a-one is," you will hear persons say; "he is so *very* kind, so *very* anxious about me." Just as if all that affected solicitude, all that pretty manner of his, were not part and parcel of the good doctor's stock

in trade. Silly, simple John Bull! why will you pin your faith to fallible or fallacious Authority, when you may get the truth so easily by a little personal Examination! To be able to discriminate in the choice of a physician, and to guard against medical imposture, would not cost you half the time, nor anything like the trouble, of mastering the inflections of τυπτω, verbero, or *Amo, amare!* Which kind of knowledge is of most use in life I leave to pedants and philosophers to settle between them. Meantime, I shall beg your attention to the subject of

Exercise.

The effects of mere motion upon the body are sometimes very surprising. Only think of *Horse*-exercise curing people of consumption! A case of this kind, you remember, I gave you, on the authority of Darwin. I knew a gentleman, who was affected with habitual asthma, but who breathed freely when in his gig. I know, at this moment, another, afflicted with giddiness, who is immediately "himself again," when on horseback. A dropsical female, who came many miles to consult me, not only felt corporeally better when she got into the coach, but her kidneys acted so powerfully as to be a source of much inconvenience to her during the journey. This corporeal change she experienced every time she came to see me. The motion of the circular swing has cured mania and epilepsy. But what, as we have repeatedly shown, is good for one patient is bad for another. You will not, therefore, be astonished to find cases of all these various diseases, where aggravation may have been the result of horse exercise, and the other motions we have mentioned.

Exercise of the muscles, in any manner calculated to occupy the patient's whole attention, will often greatly alleviate every kind of chronic disease. Dr. Cheyne was not above taking a useful hint on this point from an Irish charlatan. "This person," says Dr. Cheyne, "ordered his (epileptic) patients to walk, those who were not enfeebled, twelve, fifteen, or even twenty miles a-day. They were to begin walking a moderate distance, and they were gradually to extend their walks, according to their ability. In some of the patients, a great improvement took place, both with respect to digestion and muscular strength; and this was so apparent in a short time, that ever since this luminary shone upon the metropolis of Ireland, most of our patients affected with epilepsy, have been with our advice peripatetics." Exercise, then, is one of our best remedial means. Moreover, it may be turned to very great advantage in our common domestic matters. Were I to tell you all at once, that you might keep yourselves warm by a *single log* of wood all the winter over, you would think I was jesting, but really the thing may be done. I believe we owe the discovery to our friends across the water, the Americans; and I may as well give you the recipe:—"Take a log of wood of moderate size, carry it to the upper garret, and throw it from the window into the street, taking care, of course, not to knock any body on the head; this done, run down stairs as fast as you can; take it up again to the garret and do as before. Repeat the process until you are sufficiently warm—*when*—you may lay by the log for another occasion!"

"One of our reverend bishops (who, Sydenham tells us, was) famous for prudence and learning, having studied too hard a long while, fell at length into a Hypochondriacal disease; which afflicted him a long time, vitiated all the ferments of the body, and wholly subverted the concoctions. [Such, Gentlemen, was the jargon of the eminents of Sydenham's time.] He (the bishop) had passed through long steel courses more than once, and had tried almost all sorts of mineral waters, with often-repeated purges and antiscorbutics of all kinds, and a great many testacious powders which are reckoned proper to *sweeten the Blood* (!) and so being in a manner worn out, partly by the disease, *and partly by Physic* used continually for so many years, he was at last seized with a colliquative looseness which is wont to be the forerunner of death in consumption and other chronical diseases when the digestions are wholly destroyed. At length he consulted me; I presently considered that there was no more room for medicine, he having taken so much already without any benefit;

for which reason I advised him to ride on horseback, and that first he should take such a small journey as was agreeable to his weak condition. Had he not been a judicious man, and one that considered things well, he would not have been persuaded so much as to try such a kind of exercise. I entreated him to persist in it daily, till in his own opinion he was well, going daily farther and farther, till at length he went so many miles, as prudent and moderate travellers that go a long journey upon business use to do, without any regard to meat or drink, or the weather, but that he should take everything as it happens like a traveller. To be short, he continued this method, increasing his journey by degrees, till at length he rode twenty or thirty miles daily, and when he found he was much better in a few days, being encouraged by such a wonderful success, he followed this course for a pretty many months, in which, as he told me, he rode many thousand miles; so that at length he not only recovered, but also regained a strong and brisk habit of body. Nor is this kind of exercise more beneficial to hypochondriacal people than to those that are in a *Consumption;* whereof some of my relations have been cured by riding long journeys by my advice; for I knew I could not cure them better by medicines of what value soever, or by any other method. Nor is this remedy proper only in small indispositions, accompanied with a frequent cough and leanness, but also in consumptions that are almost deplorable when the looseness above mentioned accompanies the night sweats, which are wont to be the forerunners of death in those that die of a consumption. To be short, how deadly soever a consumption is, and is said to be—two-thirds of it dying who are spoiled by chronical diseases—yet I sincerely assert that mercury in the French pox, and the Jesuits' bark in agues, are not more effectual than the exercise above mentioned in curing a consumption, if the patient be careful and the sheets be well aired, and that his journeys are long enough. But this must be noted, that those who are past the flower of their age, must use this exercise much longer than those that have not yet arrived at it; and this I have learned by long experience which scarce ever failed me. And though riding on horseback is chiefly beneficial to people that have a consumption, yet riding journeys in a *Coach* is sometimes very beneficial." *

The poet Coleridge, while at Malta, was in the habit of attending much to those about him, and particularly those who were sent there for pulmonary complaints. "He frequently observed how much the invalid, at first landing, was relieved by the climate, and the stimulus of change, but when the *novelty* arising from that change had ceased, the monotonous sameness of the blue sky, accompanied by the summer heat of the clime, acted powerfully as a sedative, ending in speedy dissolution." Is not this a proof of the correctness of my previous observation, that in chronic disorder remedies require to be frequently changed? The benefit to be derived from Travelling, often great in chronic disorders, is partly to be ascribed to the change of motion, and partly to change of air and scene. Like every mode of treatment presenting frequent novelty, travelling therefore offers many advantages to the invalid in every kind of chronic or habitual disease. How often, alas! do we find it recommended, as a last resource, under circumstances where it must inevitably hasten the fatal catastrophe! The breath that might otherwise have fanned the flame, now only contributes to its more rapid dissolution. How much the success of a measure depends upon time and season!

I must say a few words about

Plasters, Blisters, Ointments, &c.

The beneficial influence obtained from all such local applications depends upon the change of temperature they are capable of producing. Their results will vary with constitutions. Most patients, who suffer from chronic disease, point to a particular spot as the locality where they are most incommoded with "cold chills." This is the point for the application of the galbanum or other "warm plaster." A

* Two Swedish Physicians, Messrs. Erenhoff, and Inde Betou, now settled in London, successfully treat numerous chronic diseases solely by the use of well-directed mechanical means.

plaster of this kind to the loins has enabled me to cure a host of diseases that had previously resisted every other mode of treatment. The same application to the chest, when the patient complained of chilliness in that particular part, has materially aided me in the treatment of many cases of phthisis. In both instances, where *heat* was the more general complaint, cold sponging has been followed by an equally beneficial effect.

The ingredients of Plasters, Blisters, Ointments, Lotions, &c.—what are they but combinations of the agents with which we combat Fever? Their beneficial influence depends upon the change of motion and temperature which they produce by their electrical or chemical action on the nerves of the part to which they are directed. Cantharides will not blister the dead—they have very little effect even on a dying man! Every one of the chrono-thermal and other agents may be locally employed in certain cases,—sometimes with more and sometimes with less advantage than when given internally.

Gentlemen, I shall employ what remains of our time to-day in a brief notice of the doctrines of Hahnemann, the founder of the Homœopathic School. His pamphlet, entitled, "The Spirit of the Homœopathic Doctrine," commences thus:—"To know the *essence* of Diseases, and the hidden changes which they effect in the body, is beyond the reach of the human understanding."—Which proposition he contradicts by the following paragraph: "It is necessary that our senses should be able clearly to discern what it is in each malady that must be *removed* in order to restore health, and that each medicine should express, in a distinct and appreciable manner, what it can cure with certainty, before we can be in a condition to employ it against any disease whatever." From this you perceive that Hahnemann, like Dr. Holland and the *humoral* schoolmen, looks upon disease as a fanciful something to be "removed," instead of a state to change; and as he uses the phrase, "to *expel* disease" in another part of his work, it is evident he does not know in what Disorder consists. Again, "The material substances of which the human organism is composed, no longer follow, in their living combination, the laws to which matter is subject in the state of non-life; and they acknowledge only the laws proper to vitality—they are then animated and living, as the whole is animated and living. In the organism reigns a fundamental power, indefinable yet every where dominant, which destroys every tendency in the constituent parts of the body to conform themselves to the laws of pressure, of concussion, of *vis inertiæ*, of fermentation, of putrefaction, &c., which subjects them exclusively to the wonderful laws of life, that is to say, maintains them in the state of sensibility and activity necessary to the conservation of the living whole—in a dynamic, almost spiritual state." Gentlemen, what is the sum of all this? Nothing more nor less than that if you press the soft parts of the body, they will not yield to a resisting substance—that you cannot be shaken by concussion, or have the bone of the leg or arm broken by external agency—that you are in a "*dynamic* state"—a state "almost *spiritual!*" What is the meaning of the word *dynamic?* It signifies "moving power." This you can understand; but when our author, apparently dissatisfied with his own term, would further explain it by the words "almost spiritual," a phrase perfectly indefinite, you see he has only a vague conception that the various parts of the body are in motion. But that the material atoms of the living frame do follow the laws to which all MATTER is subject, under the *particular circumstances* in which the matter composing them *is placed*, is undoubted. A piece of amber or sealing-wax, when rubbed, first attracts silk, then repels it; producing alternate motion altogether independent of mechanics. Though not Life, this phenomenon is at least, a type of it; for the organic and other motions of an organism termed Life, even in the highest grade of animals, when analysed, will be found to be mere periodic repetitions of alternate Attraction and Repulsion. What are the successive conversion of the food into blood, of the blood into the matter of tissue and secretions, but so many instances illustrative of this proposition?—what the alternate inspiration and expiration of the lungs?—the

equally alternate contraction and dilatation of the heart—sleep and wakefulness, love and hate, ambition and worldly disgust, but so many modifications or effects of attractive and repulsive influences! When the magnet attracts iron, it does so, not in contrariety to the law of Gravitation, but in obedience to the more comprehensive law of which gravitation is a part—namely, Electricity or Galvanism. But Electricity, like Electrive Attraction, is only a *fragment* of the great doctrine of LIFE. The word LIFE, when applied to animals in their healthy condition, is an abstract term expressive of the *sum total* of harmonious movements produced by the *principal forces* in nature, when acting together with perfect Periodicity, in one body. LIFE, then, is Electricity in its highest sense, even as the attraction of gravitation is Electricity in its lowest sense. The attraction of the magnet is an electrical step in advance of gravitation,—chemical change one step more,—the alternate attraction and repulsion of amber is a still higher link in the electrical chain. Galvanism and Electricity, strictly so called, embrace all the subordinate links, while LIFE or VITAL ELECTRICITY comprehends the whole. Mere mechanical motion, though it belongs to all animal life, in reality only grows out of it. There is no mechanical movement in the fœtal germ, nor is such movement necessary to the life of the plant. VITAL ELECTRICITY, then, produces changes in every way *analogous* to the changes that take place in inorganic bodies, but *not* the same changes,—for no Electricity short of the highest or VITAL kind can produce the electrical and chemical changes constantly going on in a living body, any more than the power of gravitation or the magnet could produce the higher movements of common chemistry. The chemist who, like Liebig, expects by the destructive chemical analysis of dead organs in his laboratory, to be able to produce or explain the very opposite transformations that take place in the organs of the living, will no more improve medicine than the mere anatomist who separates them tissue by tissue with his scalpel. However similar *his* chemistry and *his* electricity may be to vital electricity and vital chemistry, however analogous the results of both be to the attractive and repulsive motions that constitute vitality, yet are the transformations not identical,—curiously resembling them certainly, but still so different that they never even approach to organism. The electricity and chemistry of man no more could produce a worm, or a leaf even, than the inferior intellectual power of the dog or the elephant could produce the Iliad. The same harmony of motion that we behold in animal life we equally find in the life of the *vegetable;* but the forces employed are fewer in number, and more feeble in their action. The extremes of vegetable and animal life approach each other. In the zoophyte or *plant*-animal we have the connecting link of both. Both are made up of inorganic matter,—metals, minerals, air, earth, and every other material thing successively becoming atomically organised and living in their turn. Man, who stands highest in the scale of animated beings, is a microcosm or little world in himself; yet what is he but a *Parasite* on the globe's surface—the Globe itself but an *Atom* in the LIFE of the UNIVERSE! But listen to Hahnemann: "The *Life* of man, and its two conditions, Health and Sickness, cannot be explained by any of the principles which serve to explain other objects. Life cannot be COMPARED to any thing in the world except itself—no relation subsists between it and an *hydraulic* or other *machine*—a *chemical* operation—a decomposition and production of *gas*, or a *galvanic battery*. In a word, it resembles nothing which does not live. Human life, in no respect obeys laws which are purely physical, which are of force only with inorganic substances." We apprehend, Gentlemen, that the whole, or nearly the whole, of this statement is assumption, and if there be truth in nature, that this assumption is a fallacy. If you COMPARE the ossification of the skull with mechanical inventions, you will find it to be an exemplification of the most perfect *Carpentry*. The joints of the body embrace every principle of the *Hinge;*—the muscles, tendons, and bones are so many *Ropes, Pulleys*, and *Levers;* the lungs act in *Bellows*-fashion, alternately taking in and giving out *Gas;*—the intestine canal is a containing *Tube*. Then, in regard to the vas-

cular system, the heart and blood-vessels are to a great extent a *Hydraulic* apparatus, as you may prove, by tying an artery or compressing a vein; the blood, in the first instance, being arrested in its course *from* the left chamber of the heart; in the second, being stopped in its progress *to* the right side of it. What are assimilation, secretion, absorption, the change of the matter of one organ into another —of the fluids into the solids, and *vice versâ* but operations of Vital *Chemistry*, and the Brain and Nervous System but the Vito-*Galvanic* or Vito-*Electric* apparatus by which these operations are effected? That the human body obeys laws purely physical, is still further exemplified by the fracture of a bone or the rupture of a tendon—and the reunion of both is the result of secretion under the influence of this Vital *Electricity* acting through the nerves supplying those parts. If, during childhood, the great nerve of a limb be paralysed, the growth of that limb becomes arrested, not only in its breadth, but length. The nerves, then, are the moving powers, and if you cut or divide them, neither a broken bone nor a ruptured tendon can reunite, so as to become useful. And do we not see analogous effects taking place in every kind of matter under the influence of the galvanic wire? By that we produce the decomposition and recomposition of bodies—various changes of motion and temperature—of attraction and repulsion of atoms—which, if we break the chain of the wire's continuity, immediately cease to take place, but which recommence the moment the wires are again brought into contact. That a living man can in an oven defy a degree of heat that would broil a piece of dead flesh, is perfectly true; but to what is this owing, but to the greater power of attraction which the particles of his body maintain to themselves in their living than dead state? Nevertheless, the degree of heat may be so raised as to decompose portions even of the living body, and finally reduce the whole to a state incompatible with life. And may not the electric state of all bodies, gold and silver for example, be similarly influenced and altered? How, then, can the phenomena embraced by the term LIFE be said to "resemble nothing which does not live?" They resemble everything of which our senses can take cognisance—we can destroy, but we cannot imitate them. "There is no agent or power in nature," says Hahnemann, "capable of morbidly affecting man in health, which does not, at the same time, possess the power of curing certain morbid states." But what is this but another mode of expressing Shakspeare's words, "In poison there is physic?" "Now," continues Hahnemann, "since the power of curing a disease and that of producing a morbid affection in persons in health are inseparable from each other in all medicines, and that these two powers proceed manifestly from one and the same source, that is to say, from the property which medicines have of modifying dynamically the state of man and that, consequently, also, these cannot act on the diseased after any other inherent natural law than that which presides over their action on individuals in health; it follows from this, that the power of the medicine which cures the disease in the sick is the same as that which causes it to excite morbid symptoms in the healthy." That the strictly Medicinal substances all kill and cure upon one and the same principle, few will dispute who have listened to these Lectures. But "the property which medicines have of modifying *dynamically* the state of man" is merely a Greek expression, signifying that they possess a moving principle. In this there is nothing new, for Shakspeare, as we have seen, said the same thing in good English two centuries before Hahnemann was born. In the course of my next lecture, Gentlemen, I shall have the pleasure of demonstrating to you that medicinal substances can only disturb the existing temperature and motion of an organ or atom of the body, by the Electrical or Galvanic Force which they exert upon it through a nervous medium. Of this truth Shakspeare and Hahnemann were equally ignorant.

"As soon," proceeds Hahnemann, "as we have under our eyes the table of the particular morbid symptoms produced in a healthy man by different medicinal substances, it only remains to us to have recourse to pure experiments, which alone are capable of determining what are the medicinal symptoms (or the

symptoms produced by the medicine in the healthy subject) which ALWAYS arrest and cure certain morbid symptoms (*i. e.* diseases) in a rapid and durable manner, in order to know beforehand which of those medicines, the particular symptoms of which have been studied, is the surest method of cure in each given case of disease."

So here we have over again the exploded doctrine of SPECIFICS, or remedies "which ALWAYS arrest and cure" certain morbid symptoms! The whole sentence is somewhat confused and parenthetical; but from it and other passages you may, nevertheless, see that while Hahnemann obtained a glimpse, and a glimpse only, of the principle of unity upon which remedies act, not only was he ignorant of the real nature of their power, but also of the utter impossibility of predicating in any one case of disease, what remedy would *certainly* achieve amelioration, far less a cure. This sentence he never could have written, had he known that every medicinal power, being a Repulsive Force in one individual and an Attractive Force in another, may act *inversely* in any two cases of the same disease. If there be a truth more sure than another in physic, it is this, that until we have absolutely tried a medicinal agent in any given case, we cannot possibly tell whether it shall be a remedy or an aggravant in that particular case. No, Gentlemen, the ague-patient may come before you; but whether arsenic or bark, opium or prussic acid, shall arrest his disease, you can no more with certainty predicate, than you can determine beforehand whether harsh or soft measures, or either, will reclaim a refractory child, or subdue an ungovernable steed. Trial and experience are your only guides. This much, however, you may, in the majority of cases of any given disease, predict, that such agents as have generally a definite power for good or for evil over definite parts of the body, are the class from which you are to expect most benefit in a disease of such parts —but which of them, the experience of that case itself can only tell you; for how can you know without such individual experience that opium will vomit, rhubarb excite epilepsy, or ipecacuan cause asthma in particular cases? all of which you are aware they sometimes do. When you order cold bathing, can you tell beforehand whether your patient shall come out all in a glow, happy and comfortable; or chilly and shivering, and not to be comforted? Till you can do this, you cannot with certainty tell by what given means you are to achieve a cure in any given case of disease. So far the art of physic is, and ever will, I fear, remain imperfect.

The principle, *Similia similibus curentur*, or *Like* cures *like*, which Hahnemann assumes as his own discovery, was known not only to medical men long before his day, but was acted upon by the vulgar time immemorial. A passage which Shakspeare puts in the mouth of Benvolio in *Romeo and Juliet*, is a proof that it was practised at the period he wrote.

> Tut, man! one fire burns out another's burning,
> One pain is lessened by another's anguish,
> Turn *giddy*, and be holped by *backward turning*,
> One desperate grief cures with another's languish;
> Take thou some new infection to thine Eye,
> And the rank poison of the old will die.

To the same purpose he says in Hamlet:—

> ——————— Diseases desperate grown,
> By desperate appliances are relieved.

What is all this but *similia similibus curentur?* You see, then, that Hahnemann, instead of being a great discoverer, as he wishes to make out, is only at the most a *Reviver* of an old principle. Yet upon this principle, strange to say, neither he nor his followers act! They say one thing and do another; for while they declare their readiness to cure by powers having precisely the same action as the causes, how can they reconcile with that statement their practice of treating *grave* disease—disease proceeding from a grave agency, by the *dissimilar* agency of infinitesimal physic! What is "infinitesimal" Physic? It is the division of a grain of opium, not into quarters, sixteenths, or sixtieths,—no, nor into hundreds or thousands even,—but into millions and ten millions! And rules and regulations for its proper division into such parts are actually given in Homœopathic books! A grain of opium, or the common dose of this drug, is to be converted, forsooth, into medicine enough for ten

thousand men; and upon the same principle, doubtless, a loaf of bread may be made a dinner for an army! Gravely to argue the case—if grave disease could be *caused* by the millionth or decillionth part of a grain of our common medicinal substances, what apothecary's apprentice, who must be constantly rubbing, shaking, and inhaling medicines in this comminuted state, could possibly enjoy a day's health?—and yet it is by such *doses*—if opaque matter reduced to invisible minuteness can be termed such—that diseases are to be cured! Where, then, is the *Similarity* of remedy to cause in the Homœopathic treatment?

In his "Organon," Hahnemann tells us, that almost all chronic diseases are the result of a morbific miasm, which he calls the *Psoric*, or the itch principle; and this, he says, and two other evil miasms, the *Syphilitic* and the *Scrofulous*, may be looked upon as the parents of all the diseases of man!—Mere phantoms, Gentlemen, of an excited imagination—mere crotchets of a mind clouded with the ghosts and goblins of those nurseries for grown-up children,—the German Universities. Of his utter ignorance of the true motions and changes of the organic matter of the body, whether in health or disease, and of the thousand morbific causes visible and invisible that daily occur in life, there could be no greater proof than this announcement; you who are no longer in the dark have only to hold up the torch of truth to dash his day-dream to the dust!

When I first heard of the Homœopathic doctrine of infinitesimal physic, I felt tempted to believe that the whole was a weak invention of those enemies to medical truth, the medical reviewers,—knowing, as I do, the trickery and misrepresentation in which these gentry indulge when acting on behalf of the professional tradesmen whose mercenaries they are. His own volume has, however, undeceived me; his own Organon developes the number of shakes and rubs by which the *millionth* part of a grain of quinine may become one of the deadliest poisons, and the ten millionth part of a grain of opium, a medicine to cause you to sleep your last sleep! But Hahnemann is a disciple of Mesmer,—and he tells you to watch the miracles effected by Animal Magnetism. Do that, he says, and you will no longer doubt the cures which may be achieved by infinitesimal physic. Now, so perfectly ready am I to believe what he or his disciples may tell me upon this point, that it is a medical maxim of mine, "Anything may do anything, and anything may not do anything," according to the ignorance and credulity of the patient, if it be a charm;—or according to the constitution and exigencies of the case, if it be a physical agent. In which light infinitesimal physic is to be viewed, you, Gentlemen, may decide at your leisure.

What but *Faith* or a *Fancy* to try could induce people to put themselves under the hands of a homœopathic practitioner? The influence which Confidence, simply, may produce on the body, we have proved by what took place at Breda, in 1625. During the siege of that city, three or four drops of a hocuspocus medicine were said to be sufficiently powerful to impart a healing virtue to a gallon of water! The thing was *believed*, and the sick immediately took up their beds and walked. To tell the sensible part of mankind that you can cure any disease with the millionth or decillionth part of a grain of opium, bark, or aconite, would only excite their ridicule; but you know how little will influence the minds of the multitude, who, being ignorant, are naturally weak and credulous. You remember what I told you at my last lecture. The same reparative power of nature by which a cut finger is healed, will cure nineteen out of twenty cases of most diseases, without the assistance of any physic at all. Such cases, when treated homœopathically, that is, with hope and humbug, are of course set down as wonderful cures; and wonderful they are, indeed, when compared with the results of the apothecary-system,—a system by which every similar disorder, for the most part, is aggravated through the interference of the routinists, who, partly by playing on the fears of the patient, and partly by making his stomach an apothecary's shop, generally contrive to prolong the case so long as the subject of it will continue to act according to their rules. Here the homœopathic

doctor may safely retort on the old practitioner. With the mass of mankind the homœopathist has only to affect a superior knowledge of the visible and invisible world, speak confidently of the cures, real or supposed, effected by his treatment, and talk mysteriously of the rubs and shakes by which he imparts a magical or magnetic virtue to his infinitesimal physic. Should a doubt remain, he may hint at the wonders of Electricity or Galvanism; for a little mixture of truth will make his mummery go down better—just as a little apparent candour will make you more readily give credence to a calumny or a scandal. In both cases a complete want of principle is the chief element of success on the part of the impostor—and faith the weakness or strength of the dupe. If the former only get the latter to listen to him, he may inoculate him with a fancy to try—that of itself implies faith. However small at first, it will be sure to increase by thinking and talking about the *new* method. A little opposition is a good thing sometimes—the patient gets heated up by it. If he has a tendency to improve, he will improve the faster—if he finds himself deceived, he will conceal the fact, as he would be sorry that others should not be as great fools as himself. Patients of the class who consult Homœopathic practitioners, generally collect together, talk, discuss, and theorise till they work themselves into a kind of Fever—such fever, or *rage*, by exciting and animating them, will, in many cases, be infinitely more beneficial to their constitution, than the draughts and mixtures usually inflicted,—not, remark, so much on account of the necessities of the patient as the needy condition of the routine practitioner. Having once become partisans and disciples, they next find a pleasure in making converts. With this object before them, they work body and mind in the cause. Can you wonder they should, in many cases, get well by the new mode of life to which they have taken? This, Gentlemen, is the secret of any success obtained in the course of the Homœopathic treatment. Like the French "médecine expectante," it is a system of placebo. What is new in it is not true; what is true is not new. Savage Landor says rightly, "most disputants drive by truth or over it." In the case of *similia similibus*, Hahnemann has done both—he adopts it as his motto, but practises on a principle the reverse. What does it mean? Power *opposes* power. Did we require to be told this by Hahnemann? The doctrine, *Like* cures *like*, was so obvious as to be a popular axiom in every age—but it is only the minor of a major proposition, a fragment of the great Abstract Law—ANY GIVEN POWER, APPLIED IN A PARTICULAR DEGREE AND AT PARTICULAR PERIODS, MAY CAUSE, CURE, AGGRAVATE, OR ALLEVIATE ANY GIVEN FORM OF DISEASE, ACCORDING TO THE CONSTITUTION OF THE PARTICULAR PATIENT.

[On the publication of the first edition of this work, the Homœopathists accused me of not *understanding* their principles. My answer to that was, that I had at least read their own books, and if I was such a fool as not to be able to understand their writings, they were greater fools not to write more intelligibly.

"Your true *no*-meaning puzzles more than sense!"

Since the publication of the second edition they have changed their tune, and say I have borrowed from Hahnemann—to which I reply,—rich men seldom borrow, and never steal. If the homœopathists will be so good as to put in print the instances in which I have neglected to acknowledge anything I have borrowed from them or others, I will very much thank them for reminding me of what is right.]

LECTURE IX.

PHYSIC AND POISON IDENTICAL—REMEDIAL MEANS INCLUDE EVERY THING IN NATURE—ACTION OF MEDICINAL SUBSTANCES PROVED TO BE ELECTRICAL—PARTICULAR REMEDIES, AND WHY THEY AFFECT PARTICULAR PARTS.

GENTLEMEN,

From the History of Medicine we learn, that after Charms came Simples. To the list of our remedial means, chance and experience successively added Poisons.

"Wherefore," asked Pliny, "has our mother, the Earth, brought forth so many deadly drugs, but that, when wearied with suffering, we may employ them for suicide?" If such was the opinion of the polished Roman, can you wonder at the belief of the rude Carib, and the still ruder Boschman, that poisons were sent them for the destruction of their national enemies? The friends of the Chronothermal System see the matter in another light. In common with the believers of the Christian creed, they assume, that the beneficent Creator of all things sent nothing into the world for the destruction of his creatures. By the motion of men's hands the Pyramids were produced. The same motion, acting *reversely*, might make them vanish from the plains where they have stood the wonder of centuries. If the identical power, then, which may render a temple or a tower a heap of ruins, applied in another fashion to the materials composing it, first erected the fabric—why may not the *motive* power of a physical agent, which, wrongly administered, has destroyed the life of man, be employed, in a right direction, to preserve his existence?

"Philosophy, wisdom, and liberty, support each other;—he who *will not* reason is a bigot—he who *cannot* is a fool—and he who *dares not* is a slave!"—[Sir William Drummond.] The base and selfish, of all ages, have ruled mankind by terror. By this the priest has trampled down reason; the despot, the rights of a people. To this passion the charlatan appeals, when he sneeringly speaks of particular substances as poisons, the better to distinguish them from his own nostrum of universal and absolute safety! What is the real meaning of the word poison? In its popular sense, it signifies anything in nature, that, in a comparatively small quantity, can shorten, or otherwise prove injurious to life. It is, then, a term of relation—a term depending entirely on degree, volume, or scale. But what is there under heaven, when tried by this test, that may not become a poison? Food—fire—water—air—are these absolutely innocuous? The glutton dies of the meal that gorged him; is that a reason why we should never eat? The child is accidentally involved in the flames of a furnace; must we, on that account, deny ourselves the warmth of the winter-hearth?—Air has chilled, and water drowned; must we, therefore, abandon air and water?—Yet, this is the mode in which certain wiseacres *reason* on medicine! We must cease, according to these praters, to use opium medicinally—opium which, in *one degree*, has so often given relief to suffering; because the suicide, in *another*, has settled his earthly account with it! We must repudiate the curative effects of arsenic in Ague; because, with a *thousand times the quantity* adequate to that desirable end, the cut-throat and the poisoner have despatched their victims by arsenic!—We must linger life away in the agonies of gout and rheumatism, instead of resorting to colchicum, which has so often cured both; because people have been accidentally destroyed by colchicum in a volume *never* given for either of these diseases! How many distressing complaints has not prussic acid cured or alleviated; yet, we must abjure its benign influence in this way, forsooth; because love-sick maidens, and men maddened by misfortune, have ended their lives with prussic acid, in a *quantity* which nobody ever dreamt of giving for *any disease whatever!* By the same enlightened Philosophy, we must not pat a child's head, because a blow might knock it down! Gentlemen, need I tell you, that the whole of these agents, in their *medicinal doses*, are as safe as rhubarb in its medicinal dose; and safer than wine to some people, in the quantity usually taken at table. But granting that, even in their medicinal doses, each and all of these substances, in common with everything in existence, occasionally produce the *temporary* inconvenience of disagreeable feeling,—is that any reason why we should abandon their use, in the cure of diseases attended with feelings for the most part more sensibly disagreeable! What on earth, worth accomplishing, was ever accomplished without a similar risk?—We cannot cross a thoroughfare without the risk of being jostled—ergo, we must never cross a thoroughfare! Gentlemen, *ubi virus ibi virtus*, is as true in most things as in medicine. Poison and Physic are, in truth, ONE and IDENTICAL, for any earthly agent may

become both, by turns, according as it is *used* or *abused*. A German poet rightly observes—

> Divide the THUNDER into *single* notes,
> And it is but a lullaby for children;
> But, pour it in *one volume* on the air,
> And the intensity makes heaven to shake.

The same rule holds good in physic. Every thing depends on the scale or degree in which you apply a given substance to the body, and the particular circumstances and condition of the body at the time, whether such substance be a remedy or a poison. What is there that pertains to earth or air, that we may not usefully employ? If Man, in his ignorance or depravity, turn a particular power to evil account instead of to good, shall blame be imputed to the Almighty, who bestowed it on him as a boon? Let babblers beware how they commit themselves in this matter;—let them fully understand, that when they decry any agent in nature as being, in the *abstract*, a dangerous medicine, or a poison, they not only arraign God for his goodness; but expose, at the same time, their utter ignorance of his laws. Where men have not *examined*, surely it were only policy to be silent. Do medical practitioners ever prate in this language of imbecility? Too frequently, Gentlemen;—but in their case, it generally proceeds less from a want of knowledge of the subject, than from a wish to disparage a professional competitor. Sordid practitioners know that there is no readier mode of influencing the sick, than by playing upon their fears. Not a week passes, but I am told by some patient—"Oh, I showed your prescription to Dr. So-and-so, and he said it contains *poison!*"—Bless my life! I generally answer, what a wonderful thing! Why, then, does not Dr. So-and-so get the College of Physicians indicted for the introduction of such substances into their *medicinal* pharmacopeia? Why does he not gravely arraign them for the processes which *they* have devised for the preparation of "medicinal" arsenic, "medicinal" opium, "medicinal" prussic acid, —and tell them boldly and at once that these are all so many concentrated essences of death and destruction, which no skill can render valuable, no scale of diminution adapt to the relief or cure of their suffering fellow-creatures? Only let Dr. So-and-so put down, in writing, that any of these substances ever poisoned any body, in the *dose* and at the *age* for which I and others prescribe it, and I shall have the pleasure of publishing the FACT (!) to the professional world, for their future edification. To whisper away an honourable man's reputation in a corner where he has no opportunity of reply, though a pitiful thing to do, is nevertheless a thing very often and very successfully done;—to write or reason down the same man's character unfairly, on paper, is more difficult. Cautions—doubts—insinuations—these are the weapons by which you will be secretly supplanted in practice. Yes, Gentlemen, individuals who call themselves physicians, and who, without a scruple, would pour out a pint of your heart's blood at a time, will affect to start at the sixteenth part of a grain of strychnine, and shrug their shoulders significantly, at two drops of prussic acid! "How easy to put such men down!" I have been told. "You have only to ask them, if they ever knew an adult die of either medicine in these doses?—and dare them to say, that they have not themselves killed hundreds, by taking away a less quantity of blood than a pint!" Both of these I have certainly done—but *cui bono?*—Reason and sense were on my side, it is true!—but what will either reason or sense avail him who stands, as I stand, ALONE,—when his enemies have a party to back them, with the patients' prejudices and fears in their favour besides? The practitioners of whom I speak, are all so many links of an extensive chain of secret and systematic collusion; they are all bound to support and keep by each other;—they have signs and counter-signs, and a common story to tell: these men, like false dicers, do deeds "never dreamt of in your philosophy." In a word, so far as medicine and medical practice are concerned, the English public are, at this moment, very much in the same blissful state of ignorance as the Emperor Constantine was with the doings of his guards.—"But still—but still," said Sebastes of Mytilene, "were the Emperor to discover—" "Ass!" replied Harpax, "he cannot discover, if he had all the eyes of Argus's tail! Here are TWELVE of us, sworn, according to the rules of our watch, to

abide in the SAME STORY."—[*Count Robert of Paris.*] If such, and similarly constituted, be the medical coteries of England, what honourable physician can hope to rise in his profession until the eyes of the public be opened? Sir James Mackintosh was not the only man of talent who left it in disgust.—Locke, Crabbe, Sir Humphrey Davy, Lord Langdale, (now Master of the Rolls,) and hundreds of others, have done the same. Depend upon it, in these days, it is only the quack and the unprincipled practitioner who make fortunes by physic.

But to return to medicines and their doses.—What substance in the Materia Medica would be worth a rush, if it were absolutely innocuous in every dose and degree? You all know that Rhubarb and Magnesia may each be given medicinally, to the extent of many grains;—but, may not both be so advanced in the scale of quantity, as to become equally fatal as Strychnine or Arsenic—were strychnine or arsenic to be taken in the usual dose of rhubarb or magnesia? May not our deadliest drugs, on the other hand, be so reduced in volume as to become as innocuous, to an adult at least, as a grain of rhubarb would be to an infant? Surely, there is not one of you, whether sick or well, who would object to an infinitesimal dose of arsenic—the millionth or decillionth part of a grain, for example! Ah, these homœopathists! I question if they always keep to such doses; for, when a man makes up his own medicines, he may gull his patients as he pleases. But, be that as it may, there can be no surer test of imposture, than to be told you may take any medicine, in any quantity. Can food itself be thus taken? If it could, where would be the necessity of cautioning gluttons about their diet? In truth, you can scarcely mention any one edible substance, that will agree, even in a moderate quantity, with all patients. One person cannot eat oysters, without becoming the subject of a rash. Another, the moment he eats poultry or veal, gets sick at stomach, though mutton and beef have no such effect on him. See, then, the truth of the old proverb,—"*What is one man's meat is another man's poison.*" Chesterfield says it is vulgar to quote proverbs; but Chesterfield was a lord, and a man of fashion,—and as I have no ambition to be either, you will pardon me for preferring, with Cervantes, to strengthen my argument with their pith and point—not only because there is no proverb that is not true, but, because they are all sentences drawn from Experience, the mother of the sciences.

In further illustration of this subject, I pass to the lower animals; and here again you will find that no earthly agent has been given us for absolute evil, inasmuch as substances which, in comparatively small quantities, may poison one class of beings, are food to another, in a volume comparatively large. The sweet almond, for example, so nutritious to man, is deleterious to the fox, the dog, and domestic fowl. The hog may be poisoned by pepper, the parrot by parsley; stramonium, or thorn-apple, which, when we prescribe it in physic, we do cautiously, and in small quantities, is greedily devoured by the pheasant with impunity; fowls enjoy the darnel—hogs, the deadly night-shade. The water hemlock, which is poison to all three, in common with man, is a most nutritious food to the stork, sheep, and goat. And the wolf is reported to take without inconvenience, a quantity of arsenic which would destroy the horse. You see, then, how completely the word poison is a term of relation.

The infinity of substances which have been successfully applied to remedial purposes, whether derived from the animal, vegetable, or mineral kingdom, like the various CAUSES of the diseases for which we administer them, will all, upon investigation, be found to have the most perfect unity in their mode of action. Their influence relates solely to their *motive power*, differing from each other, where they do differ, merely in their capability of changing, in this way, the atomic relations of a particular locality or tissue rather than another; but in no other way presenting a doubt or difficulty as to their *modus operandi*. What John Hunter said of poisons, applies of course to remedies; they "take their place in the body as if allotted to them." Thus, Mercury and Iodine, in whatever manner introduced into the system, will still manifest their action, chiefly by

changes in the motion of the glands and their secretions; while Strychnine and Brucine, on the other hand, will as constantly produce their effects on the motive condition of the muscles. Through the medium of the *nerves* of a part, the greater number of medicinal substances, even when directly introduced into the veins, will produce their particular effects, good or bad, *according to circumstances*, upon that part. When thus administered, Antimony will prove equally emetic, as when introduced into the stomach, Rhubarb equally purgative, and Opium as certainly soporific. Is not this the best of all proofs, how surely these agents were intended by the Deity for the use of man?

If you ask a teacher of medicine, why opium sets you to sleep, his answer will be—"from its *Narcotic* power." What can be more satisfactory? Nineteen out of twenty students at least, are satisfied with it—they are delighted when told in Greek, that it does set them to sleep! Why does rhubarb purge? "From its *Cathartic* power," you will be told; what does that mean? simply that it purges! Again you demand how does antimony vomit—again you get the Greek reply, "from its *Emetic* power;" in plain English, it vomits! Such is the mode in which the schoolmen juggle: instead of an answer they give you an echo! Had these logomachists—these word-mongers, been as well acquainted with the motions of *living* things as with the inflections of *dead* languages, and the anatomy of *dead* bodies, they would long ago have preferred reasoning to mystification. But for the last ten centuries, at least, Professors have been doing little else but splitting straws, blowing bubbles, and giving a mighty great degree of gravity to feathers! Yes, Gentlemen—

——— in the same dull round we see them creep,
Profoundly trifling—profitlessly deep,
Treading the paths their sires before them trod—
The Past their heaven—Antiquity their God!

We shall endeavour to develope what their answers show they are utterly ignorant of—the UNITY of ACTION of all Remedies.

What are the FORCES which, by their harmonious movement in a material body, make the *sum total* of the economy of the LIFE of that body? Vital chemistry, vital electricity, vital magnetism, vital mechanics. By these Forces are all the *Internal* movements of man periodically produced, and by the analogous *External* Forces only, can the material of all animal life be sustained and otherwise influenced from *without*. When rightly considered, every force in nature will be found to resolve itself into a CAUSE of MOTION simply—motion forward, or motion backward—motion outward, or motion inward. Chemistry, Electricity, Magnetism, Mechanics, can each of them do no more than, by their Attractive Force, bring things or their atoms into closer proximity; or place them, by the Force of Repulsion, at a greater distance from each other. Attraction and Repulsion, then, are the two grand FORCES by which, not the motions of Man only, but the motions of the Universe, are kept in control; and by these Forces, and no other, can animal life be influenced either for good or for evil, whatever be the nature of the material agent by which they may be called into play.

REMEDIAL MEANS

may include every description of Force: The Bandage, Splint, and Tooth-forceps are familiar examples of the Mechanical kind; while to Chemistry, among other things, medical men owe the Alkalis and Earths they use as palliatives in the treatment of Acidity of the stomach. But the purely MEDICINAL agents—what is the mode of action of these? How do Opium, Strychnine, Arsenic, and Prussic Acid act? *Chemically* it cannot be,—for they produce no chemical change,—no visible decomposition of the various parts of the body over which they exert their respective influences. What, then, is their action? no man in his senses would suppose it to be *Mechanical*. One of two things it must be, then, *Electrical* or *Magnetic*—for these are the only other Forces in nature to which we can apply for an explanation. But, Gentlemen, are not these *two* Forces One? nay, under the term ELECTRICITY, do not practical philosophers include Chemistry also? No person in the least conversant with the physical sciences would

now dispute, what Mr. Faraday was the first to prove, that all *three* are in reality mere modifications of ONE great source of power. For, not only can the Electrical Force be so managed as to produce Attraction and Repulsion in all bodies, without in any way altering their constituent nature; but it can also, in most cases, be so applied to every compound body as to cause a true chemical decomposition of its ultimate principles. By the same UNIVERSAL POWER we can either make iron magnetic, or deprive it of the magnetic virtue. We can, moreover, reverse by its means the *polarity* of the needle of a ship's compass. Is Electricity, then, the source of *Medicinal* agency—the source of power by which opium and arsenic kill and cure? Before this question can be satisfactorily answered, we must first know the effect of the direct application of Electricity to animal life. What is its action when directly applied to living man? Gentlemen, it has caused, cured, and aggravated almost every disease you can name,—whether it has come in the shape of the thunder-storm, or been artificially induced by the far less energetic combinations of human invention. If, as in the case of the magnetic phenomena, it can produce, take away, and reverse the *polarity* or motive power of the needle; so also can it give, take away, and reverse every one of the particular functional motions of the various parts of the living body to which it may, under particular circumstances, be applied. It has cured palsy, and caused it also; but has not strychnia done the same? In common with arsenic, it has made the stoutest and bravest shake in every limb; and, like the same agent, it has cured the ague. In what, then, does its action differ from arsenic here? If it has set one man to sleep and kept another wakeful, opium has done both. Electricity has cured cramp and caused it; so have prussic acid and nitrate of silver. Do we not prove, then, beyond the possibility of question, that the action of these *Medicinal* substances is purely Electrical? By precisely the same power, mercury salivates, antimony vomits, and rhubarb purges. By the very same power they may all produce reverse effects. The primitive agency of the purely *Medicinal* substances, then, is one and the same,—namely, the power of Electrically *moving* the body in some of its various parts or atoms inwards or outwards, according to the previous state of the Vital Electricity of the Brain of the different individuals to whom they may be administered. For, through the medium of the Brain and Nerves, do all such substances primarily act. The ultimate and apparently unlike results of the action of different substances, depend entirely on the apparent dissimilarity of the functions of the organs they respectively influence. As already stated, the temperature of the part or organ of a living body thus *motively* influenced, becomes in every case correspondingly altered. If it be asked in what manner opium or antimony can alter the temperature or motion of any organ through its nerves, I can only refer to the analogous changes which take place in chemistry, through the medium of the Electric chain or Galvanic wire. When acted upon by either, bodies which were previously cold become instantaneously heated, and *vice versâ*,—*motion* being the equally instantaneous effect in both cases. And, according to the degree and duration of the Electrical Force applied, do such bodies become simply electrified—preserving still their usual appearance and nature,—or chemically decomposed in some of their constituent principles—their atoms in either case being repelled or attracted in a novel manner. In a manner perfectly analogous, do every and all of our purely *Medicinal* substances act on the *living* organism. On the dead, if they exercise any influence at all, it can only be by preventing the putrefactive process, or by *chemically* decomposing the various parts. The old writers were right when they said "*Medicina* non agit in cadaver."*

* Arsenic, Oxymuriate of Mercury, and Alcohol in minute doses, act ELECTRICALLY on the *living* stomach, whether for good or for evil. In large doses all three act CHEMICALLY upon the same organ; for they then invariably decompose it; but the same doses applied to the *dead* stomach preserve it from (the putrefactive) decomposition. The Mineral Acids, when properly diluted, act Electrically upon the living economy. In their concentrated state they decompose every part of the body, whether living or dead, to which they may be applied. The poisons of the Cobra and Rattlesnake,

If you again demand how a given suostance shall influence one part of the system rather than another, I must again recur to chemistry. Have we not *Elective* Affinity, or a disposition in inorganic bodies to combine with, and alter the motions or *modes* of particular bodies rather than others? By an *Elective* Affinity precisely similar, do opium and strychnia, when introduced into the living system, produce their respective effects; they manifest a similar choice of parts—the *Elective* power of the one substance being shown by its influence on the nerves of sense, and that of the other by its effect on the nerves of the muscular apparatus. But here again, you may, with the most perfect propriety, ask, why the influence of opium on the Brain should set one man to sleep, and keep another from sleeping? and why strychnia, by a similar difference of cerebral action, should paralyse the nerves of motion in one case, and wake to motion the nerves of the paralytic in another? The answer is simple, and it affords a fresh illustration of the truth of this Electrical Doctrine. The atoms of the specific portion of Brain of any two individuals thus oppositely influenced in either case, must be in *opposite* conditions of Vital Electricity—*Negative* in one, and *Positive* in the other. And what but opposite results could possibly be the effect of any agent acting *Electrically* on any two similar bodies, whether living or dead, when placed under Electrical circumstances so diametrically opposite? In common with all medicinal substances, opium and strychnia may produce inverse motions—motion outward or motion inward, according to the particular Vito-Electrical condition of the body to which they may be applied. And in this instance again, they only harmonise with everything we know of the great Universal Force to which we ascribe their medicinal influence. Their ultimate agency depends on Attraction and Repulsion. Here, then, Gentlemen, you have the most satisfactory explanation of an infinity of facts which, from their supposed confliction, have, up to this hour, puzzled every teacher and professor that ever endeavoured to grapple with the subject. The merit of this explanation I exclusively claim; and I state my right to it thus distinctly, that no F.R.S., no Queen's Physician-Extraordinary, or other great official, may hereafter have any excuse for attempting to snatch it from me,—whether through ignorance or forgetfulness of my name and writings he venture to PREDICT its future discovery, or deal it out bit by bit to his readers, in the equally *novel* shape of question and *suggestion!* Yes, Gentlemen, I exclusively claim the ELECTRICAL DOCTRINE of Medicinal Agency as mine—a doctrine which affords an easy solution of the greater number of difficulties with which our art has hitherto been surrounded. By following out its principles, you see at once why colchicum, mercury, and turpentine, can all three cause and cure rheumatism—why acetate of lead can produce and relieve salivation—why cubebs and copaiba have relieved gonorrhœa in one man, and aggravated the same disease in another—why musk may excite and stop palpitation of the heart—why the *Fevers* of puberty, pregnancy, and small-pox, have each cured and caused every species of disorder incident to the respective subjects of them—and why the Passions have done the same. Now, what better proof could you have of the real nature of the Passions than this? What better evidence that Rage, Terror, Joy, Surprise, are each and all of them indubitable Fevers, than that each and all of them have cured, caused, aggravated, and alleviated almost every human disease—every ache and ailment to which man is liable, from ague to epilepsy—from toothache to the gout! Like opium and quinine, every one of these Passions has a double Electrical agency—in one case, *reversing* the particular Cerebral movements on which existing symptoms depend—in which case it alleviates or cures;—in another, *calling them up* or only adding to their *rapidity* when present—in which case it causes and aggravates simply.

But we have yet to account for certain apparently *anomalous* effects of all medicines—we have still to explain to you why opium, for

so deadly to other animals, have no visible effect upon their respective species; nor, indeed, upon any animals that want the back-bone; they have no influence on shell-fish or mollusca. What but Electricity in its various *modifications* can explain all this?

example, instead of producing its usual *somnolent* or *insomnolent* influence upon particular individuals, acts upon them in the same manner as antimony or ipecacuan—and why these particular medicines, instead of producing their usual *emetic* effect in individual cases, only purge the patient;—or (as I have occasionally found them do) set him to sleep more surely than henbane or opium. Gentlemen, did opium or antimony uniformly affect the *identical portion* of Brain in ALL persons, either medicine could never do more than one of two things,—namely, aggravate or ameliorate the particular symptoms which, in all healthy persons, it then most certainly could never fail of producing. But in common with all medicines, the *Elective* Affinity of each of these particular substances may be different in different persons, from difference of constitution. The same medicines, then, do not always influence the same cerebral parts. The usual *Elective* Affinity of opium and antimony may be quite reversed in particular patients. Now, as all medicinal agents act solely by changing the *movements* of the cerebral part over which they exercise their respective influence, antimony and opium, by changing their usual places in the system, change their respective characters accordingly. Antimony, then, either becomes a *narcotic*, or keeps the patient *wakeful*. Opium, in like manner, either becomes an *emetic*, or the *reverse* of an emetic—whatever that be. See, then, how cautious you ought to be in every new case of disease for which you may be consulted—and how necessary it is to exercise all your powers of circumspection in practice. When you prescribe medicine of any kind, you ought to feel your way with the smallest available dose—the smallest dose from which you might, from your experience, expect an appreciable effect whether for good or for evil—for, remember, not only do all medicines occasionally manifest a different *Elective* Affinity from that which they usually exercise; but, even when they act in their more ordinary course, they have still the double power of Attraction and Repulsion—the power of aggravating or alleviating the symptoms for which you prescribe. Indeed, by this duality of movement and no other—Attraction and Repulsion,—we are compelled to explain every variety of change which the body assumes, whether in health or disease. By Attraction, the fluid matter of a secretion becomes consistent and organised, again to be thrown off, by the same organ, in the fluid form of secretion by Repulsion.

Throughout all Creation we find Unity the effect of Diversity or Repetition. There can be no Symmetry without this—the most rugged line you can pourtray, when opposed to its perfect repetition, immediately becomes a *design*—a unity. Man in the abstract, is a unity of the two sexes. The unity of the individual man is made up, as we have already seen, of a duplex repetition, that pervades his entire configuration outwardly as well as inwardly. The life of man in all its functions is a thing of Periodic Repetitions. His Passions in like manner are duplex. Joy, Woe,—Confidence, Fear,—Love, Hate,—are examples. Originally the gifts of a benevolent Providence for his *use*—his preservation, and the preservation of his race,—when *abused*, they become the elements of destruction to both. To keep them in healthy subjection is wisdom; to attempt their utter annihilation, not only involves their possessor in a perpetual struggle against the laws of his nature, but actually aims at defeating the ends of Creation. All things, then, have two aspects. The Unity of Action of Medicine and Poison, is proved by the duality of Motion and Temperature, which the substances so denominated are capable of producing.

In its duality of heat and cold, what disease has not Temperature produced?—What, in the shape of the warm and cold baths, has it not cured? Look, again at the effect of heat upon the egg. Even when artificially applied, we see this apparently inert body converted, by Thermal influence, into bone, skin, and muscle, with their proper apparatus of blood-vessels and nerves! You will tell me, the egg was predisposed to such changes. True; and Temperature can only act upon all things, according to their original predisposition. Is not this the reason why a chill will produce rheumatism in one man, and

consumption in another? Through Thermal influence, the wool of the sheep and the feathers of the hen, may in successive generations be replaced with hair;—certain *viviparous* animals may even be made *oviparous* in this manner. The aphis and the wood-louse, for example, may be made to bring forth either eggs or live young, at the pleasure of the experimenter, by simply varying the temperature in which he keeps them. Then, again, look at the effects of Temperature upon the vegetable world! If in the middle of winter, you introduce the branch of a vine, which happens to grow by your window, into your warm chamber, and keep it there a few weeks, it will put forth leaves and blossom. See, then, the wide and omnipotent influence of Temperature on every living thing, from man, who only attains the maturity of his growth in the course of successive summers, to the gourd, that springs up and perishes in a night!

Having premised this much, we shall now, Gentlemen, enter upon a consideration of particular medicines. And, first, let us speak of such as have a general constitutional influence, with an affinity, more or less marked, for particular organs.—Of these, the most important are

Emetics.—When the various doctrines, which attributed all diseases to acrimonies, peccant humours, crudities, &c., prevailed in the schools, Emetics were among the principal remedies to which physicians very naturally resorted, as a preliminary means of cure. The beneficial effect observed to take place after vomiting, in the early stage of almost all disorders, was, of course, urged in confirmation of theories which, even in the present day, are not without their influence on the minds of medical men. The primary action of Emetics we hold to be *Cerebral*, and the act of vomiting, not so much a cause of the other constitutional symptoms which accompany it, as one of many effects produced by change in the atomic revolutions of the Brain. Whatever will suddenly influence the Brain, in any unusual or novel manner, by changing its temperature and atomic motion, must necessarily change the whole corporeal state, whether it be, at the time, in health or disease. Have we not this familiarly exemplified, in the motion which causes seasickness—in the sickness produced by the rotatory chair, and in the morning vomitings of early pregnancy? Anything that can withdraw the Brain's attention from the stomach, such as a passion, a blow on the head, loss of blood, or a division of the nerves that supply it, may produce vomiting. Experience every day shows us, that the shivering or shudder liable to be occasioned by one cause, may be averted or cut short by agents which, under different circumstances, can of themselves produce such muscular tremor. It is thus that the Emetic exerts its salutary influence in disease. No man can take a vomit, without every part of the body undergoing some change during its operation. A creeping sensation is immediately felt in every part—a sensation, demonstrative of the rapid revolution and change of relation of every corporeal atom. Under the influence of such an agency, you *may see* the reddened and swollen eye, or testis, become, in a few minutes, of nearly its natural appearance;—nay, a complete abatement of pain in either organ, may be an equally rapid result. Who, then, will tell me, that the same effect may not take place from the employment of an Emetic, in what are termed inflammations of the lungs or bowels? Oh, "all experience is against it!" I have been told.—All experience!—whose experience? I have asked; but I never got an answer, for nobody had ever tried!

But, for a period now of Seven years, Staff-Surgeon Hume, in his Military Hospital, has treated his pleuritic and enteritic patients in this manner: during all that time he has not bled or leeched one patient for any disease—he has used Emetics instead—and his practice has been beyond all precedent successful. Now, that I call a *Fact*—a fact worth all the hypothetical assumptions of people whose gains depend, not so much on speedy cure, as on protracted sickness! There is no part of the body that you may not influence by an Emetic;—the old physicians knew this—the physicians of an age gone by. They gave Emetics in the case of Typhus even—Typhus in a Royal patient. "Louis XIV.," says Mr. James, in his Life of that monarch, was seized with

symptoms of illness, and all the marks of Typhus Fever, of the most malignant kind, soon discovered themselves. The whole court was in consternation, the queen in despair. . . Mazarin was too much agitated and terrified to use any concealment; with fears and sighs, he acknowledged to Louis at once the danger in which he was; and the young monarch only seemed grateful to him for not having concealed his situation. A physician of great repute, however, was at length brought from Abbeville; and declaring that the king's case was by no means hopeless, he obtained permission to administer to him a remedy, which there is every reason to believe was merely antimonial wine. Louis was so much relieved by the first Emetic, that he willingly took a second dose, and, from that day, the Fever abated, and health gradually returned. Joy and satisfaction spread throughout France."

Of the value of Emetics in Apoplexy, I could give numerous cases of my own in illustration. I prefer the evidence of others. Take the case of another Royal Patient. Frederick the Great, "three days before the grand autumn manœuvres, complained of pains in his legs: on retiring to bed at eight in the evening, he made the same complaint, though he had been in high spirits the whole day, especially at table. At ten he had a violent attack of apoplexy, which must have proved fatal, but for the prompt application of heat and the administration of *Emetics* and hot tea."—[*Campbell's Life of Frederick.*]

A medical officer, of the East India Company's service, sent for me at midnight, and you may imagine the pain he was suffering, when I tell you that I heard his groans before I reached his chamber. Shortly after leaving a crowded theatre, he had imprudently taken his place on the top of one of the night coaches, where he had not been long seated before he was seized with repeated shivering, followed by fever and exquisite pain in the back and loins—in medical phrase, *lumbago.* When I saw him, he had all the symptoms which, in the Schools, are termed high inflammatory fever, and he complained of agonising pain in his back. His wish was to be bled, but I prescribed an Emetic instead, and this relieved him in the briefest space imaginable. From the moment he vomited, his back became easier, and in a few minutes he was quite free from pain—a result equally pleasing and astonishing to the patient, who, on a previous occasion, had been confined six weeks to bed with a similar attack, notwithstanding repeated bleedings, leechings, and blisters. Another gentleman, who shortly after came under my care, experienced a like relief from the use of an Emetic in nearly the same circumstances. In the first case, I followed up the Emetic with hydrocyanic acid; in the second, I prescribed quinine and sulphuric acid—the latter, my more general mode of treatment in acute disease. Cases without number could I give of the beneficial influence of this practice in acute ophthalmia, sore-throat, pleurisy, rheumatism, &c.,—diseases which, under the usual or orthodox measures, would have kept the physician in attendance for weeks, and then, perhaps, have defied both his aid and his art. With the same practice, I have had equal success in the treatment of hæmorrhages, eruptive fevers, &c.; and I might here give cases corroborative of my assertion, were I not borne out by many of the older writers, particularly Heberden and Parr, who found Emetics, followed by Bark, to be the best primary treatment of disorder generally. John Hunter says, he has seen "Buboes (collections of matter in the groin) cured by a vomit, after suppuration had been considerably advanced,"—and he has "known a large bubo, which was just ready to break, absorbed from a few days' sickness at sea." He attests the cure of "White-swelling," or knee-consumption, by emetics—and the value of the same class of medicines in pulmonary consumption has been strongly insisted upon by many writers. In physic, as in everything else, there is a fashion; but the "great men" of our day, notwithstanding their reiterated assertions to the contrary, would do well, in more instances than these, to imitate the old practice.

The principal substances used as Emetics are Antimony, Ipecacuan, Zinc, and Copper,—but a great many others might be added,—Tobacco, Squill, and Colchicum in large doses,—to say nothing of *luke-warm water,* which last, from

its relation to Temperature, will readily occur to you as the best exponent of the mode of action of all. With some people Opium will vomit, where Ipecacuan would fail. There are individuals whom no known agent can vomit, and others, in whom the common Emetics act always as Purgatives. This you cannot, of course, know before-hand; so that the experience of every individual case, is the only rule by which such case is to be treated. We must now speak of

Purgatives, or those medicines which influence the intestinal secretions. Like most remedies, these all act through the medium of the Brain—but, from ignorance of their mode of action, practitioners have too frequently converted them into a cause of disease and death. The man who proceeds day by day to purge away "morbid secretions," "peccant humours," &c., is a mere humoralist, who neither knows the manner in which his medicines operate, nor understands the nature of the wonderful machine whose disordered springs he pretends to rectify. Do not let me be understood to deprecate the use of purgative medicines.—As a remedial means they are inferior to Emetics; when combined with these, they are amongst the best medicines with which to commence the treatment of disease generally,—that is, where the patient has not been previously reduced by protracted suffering. It has been my fate to witness no inconsiderable amount of mischief induced by a mistaken perseverance in purgative measures. Will nothing open the eyes of gentlemen of the humoral school? Surely they will be staggered when told, that in an evil hour the exhibition of a Purge has been followed by a paroxysm of gout! Yet nothing is more true or better avouched. "Reasoning upon this simple fact," Dr. Parr says, "the *humoral* theory of gout is altogether untenable." And so is Dr. Holland's hypothesis of its being caused by a "morbid ingredient in the blood." When I say I have known fatal Fevers produced by medicines of this class, some may be sceptical; but few will doubt their power to produce *Dysentery*, which, in the words of Cullen, is an "inward Fever."—"A dose of Rhubarb," says Dr. Thompson, "has produced every symptom of epilepsy, and, in an instance within my own observation, the smallest dose of Calomel has caused the most alarming syncope."—Let us *use*, not abuse, purgative medicines!

Mercury.—The frequency with which Mercury and its preparation *Calomel*, enter into medical prescription—its beneficial and baneful influence in the practice of our art, render a knowledge of the true action of this metal, and the proper mode of its exhibition, matters of no ordinary importance.

What are the forms of disorder in which Mercury is supposed to be most useful? The records of the profession answer, Fevers, iritis, erysipelas, dysentery, rheumatism, cutaneous, osseous, and glandular disturbances. To the same records, I appeal for testimony to the truth of my statement, that it has too frequently produced those very maladies in all and every of their forms and variations. Its influence extends principally over the glandular and assimilative systems; it has consequently a great effect on secretion. I have known Mercury in small doses cure what is termed Scrofula hundreds of times; yet, according to Sir Charles Bell,—and I can bear him out in the fact,—when wrongly applied, mercury has set up "a Scrofulous diathesis in the very best constitutions." "I have seen a person," says Dr. Graves, "labouring under mercurial irritation, seized with common Fever, which afterwards became Typhus, and proved fatal in five days. Still you will hear persons say, that if you get a fever-patient under the influence of Mercury, you will cure the disease, and that mercurial irritation will protect a man against fever. I have known Jaundice to appear during a course of mercury"—Jaundice, for which some say it is a *specific!* When you hear a man talking of "specifics" you may well laugh at him! The value of all medicines has more or less relation to the quantity prescribed. Upon this subject, I think it material to speak regarding Mercury; for in consequence of the enormous doses which have been exhibited by certain pseudo-physicians—certain writers on Infantile and Tropical disease—this substance, instead of being a blessing to humanity, has

recently become one of the chief agents in man's destruction! You daily see medical men—men who never reflect upon the effect of any medicine—prescribing four, five, and six grains of calomel to children—to infants! Can you wonder at the frightful number of deaths that take place under seven years of age? Look at the bills of infantile mortality; and if you consider the quantity of calomel that children take, you will assuredly be compelled to declare, not how *little* medicine has done for the prolongation of life—but how *much* it has done to shorten it! Oh! you may depend upon it, there is a great deal of mischief done by the profession; that is the reason why people go to the quacks and the Homœopathists. The latter are the least mischievous, for—if they actually give their medicines in the ridiculous doses they pretend—they do little more than hocus their patients with words, while the quacks and the medical men kill them wholesale by physic—physic wrongly applied. Many years have now passed since Mr. Abernethy first advocated the employment of mercury in moderate doses. More recent writers have demonstrated the value of calomel in doses so minute as the twelfth and even sixteenth part of a grain. Combined with equally minute quantities of quinine, I have been for years in the habit of prescribing it in such doses, in all diseases of children, and I have found it invaluable in most. If, with such minute doses of mercury, then, the practitioner may obtain the most excellent effects, what shall we say to the exhibition of four and five-grain doses of calomel to infants? What language can be sufficiently strong to denounce the equally daring practice of ordering scruple-doses of the same powerful mercurial for adults? That individuals occasionally recover from serious disease, after the unsparing use of calomel in such doses, is no more an argument in favour of such a mode of treatment, than that many a man has been knocked down by a blow, and lived to laugh at a description of accident to which others have succumbed.—To reason in this manner is to argue that blows are good things. In saying this *much* I do not mean to raise objections to calomel as a Purgative,—in which case a larger dose is necessary. But how often do you see this mercurial given in enormous and repeated doses, with the view of correcting morbid secretions which inquiry might have satisfactorily traced to the previous mal-administration of calomel itself! Calomel, like every other remedial means, is a medicine or a poison, according to the quantity of the agent, and its fitness or unfitness for the constitution of the patient. This last, as we have previously hinted, depends upon the Electrical state of the individual body, and can only be known by trial. You cannot tell that a given piece of steel is magnetic or not till you try; no more can you tell the electrical state of the living body. It is only by experience you can know it. Calomel, then, has no exclusive relation to nomenclature; yet you will hear practitioners say, "It is not proper for this disease, but it is proper for that;"—"it is good for jaundice, but bad for consumption." All this is mere scholastic folly, based upon "the baseless fabric" of a hypothesis! There is no disease, however named, where the administration of Mercury, in some of its preparations, may not be advantageously employed or the reverse, according to particular doses and constitutions. How is it that the Oxymuriate of Mercury, formerly so much extolled by physicians, is now so seldom prescribed? A more effective remedy for numerous forms of disease is scarcely to be found in the Materia Medica. I have more particularly experienced its valuable aid in the treatment of dropsy, dyspepsia, paralysis, and eruptions. Very analogous to Mercury in its mode of action is

Iodine.—Its influence on glandular parts, and, consequently, upon secretion, is very remarkable. But, Gentlemen, like every other remedial agent, Iodine cuts two ways—atomically *attracting* or lessening volume and secretion in one case, atomically *repelling* or increasing both in another—according to the Electric state of the individual body for which it may be prescribed. Now, the fact that Iodine can cause as well as cure glandular diseases is not known to the profession; at least I have not seen it noticed in the course of my reading. It behoves me, therefore, to

state, that I have been frequently obliged to countermand its exhibition in the treatment of bronchocele and other enlarged glands, from the obvious increase of these tumours under its use. In such cases, patients have told me they were not so well in themselves, that they had had shivering fits, or had suffered from inward Fever; for, like mercury, Iodine has also a general febrile effect upon the system, for good in one case, for evil in another. As regards my own practice, I have found quinine more generally successful in the treatment of glandular affections than Iodine. In a case of *goître* that resisted both, a very great diminution of the swelling took place after a short trial of arsenic. But here I may observe, that a remedy which may be found to be generally well adapted to the treatment of a particular type of disorder in one locality may be found to be as generally prejudicial when applied to the sane type in another. This, to a certain extent, may account for the encomiums which individual medicines receive from the profession one day, and the contempt with which they are very often treated the next. With Iodine I have cured osseous and cutaneous complaints; and I have also found it useful in the treatment of consumption and dropsy.

Lead.—The acetate of Lead is a valuable agent in good hands, and was long celebrated as a remedy for Consumption. I have cured eruptions by it, eruptions that resisted everything else I could think of. "One effect of the continued use of acetate of lead," says Dr. A. T. Thompson, "is the excitement of ptyalism (salivation,) but notwithstanding this effect, it has been recommended by Mr. Daniels for the purpose of allaying violent salivation, in doses of ten grains to a scruple, in conjunction with ten grains of compound powder of ipecacuan: How," asks Dr. Thompson, "are these contending opinions to be reconciled?" How, but by the rule that the power which can move one way, may move the other according to the Electrical condition of the individual Brain? This question, coming from a professor of materia medica, shows you that professors have yet to learn the *Duplexity* of action of all medicinal substances.

Tar—Creosote.—From innumerable trials of Tar, and its preparation Creosote, I am enabled to speak satisfactorily of the remedial power of both. In small doses, Creosote produces a mild Fever, often beneficial in dyspeptic and hysteric cases, though in some instances, like every other agent in nature, it occasionally disagrees. I have been obliged sometimes to discontinue its use from the vomiting of which the patient complained after taking it; though, where vomiting was a previous symptom, I have succeeded in stopping it by Creosote. Generally speaking, I have found Creosote an excellent remedy in dropsy, rheumatism, and cutaneous disorders. I once cured with it a case of amaurotic blindness of both eyes, where the disease was of considerable standing. The remedy was pushed as high as twenty drops for a dose; I commenced with two drops. The efficacy of tar-water in the treatment of all kinds of disease was the universal belief of the latter half of the last century. The celebrated Bishop Berkeley wrote a treatise which contributed greatly to bring it into fashion. "From my representing tar-water," he says, "as good for so many things, some perhaps may conclude it is good for nothing; but charity obligeth me to say what I know and what I think, howsoever it may be taken. Men may censure and object as they please, but I appeal to time and experiment:—effects misimputed—cases wrong told—circumstances overlooked—perhaps, too, prejudices and partialities against Truth—may, for a time, prevail and keep her at the bottom of her well, from whence, nevertheless, she emerges sooner or later, and strikes the eyes of all who do not keep them shut." The Bishop sums up the catalogue of its virtues, by saying, "It is of admirable use in FEVERS."

Sulphur,—though now seldom used, except for diseases of the skin, was long extensively employed in physic. With the vulgar, it is still a remedy for ague. Like creosote, it produces a mild febrile effect, which may be turned to account in numerous disorders, especially in dyspepsia, hysteria; also in rheumatism, which last I have often cured with it, after every other remedy usually employed for

that distemper had successively failed. The most generally influential agent in rheumatism is

Colchicum or Meadow Saffron, the medicinal principle of which is an alkali, termed *Veratria*, or Veratrine; and an admirable medicine it is, when carefully and cautiously administered. Now Colchicum, like sulphur, has cured the ague: and its efficacy in this case depends upon the mild Febrile action, which, like Hope, or Joy, it has the power of producing. If it has relieved pain and swelling in many cases, so also can it produce both; a reason why you should watch its effects—for where it fails to improve, it commonly aggravates. Like all other medicinal agents, it is a *motive* power, and if it fail to move matter the right way, it must occasionally move it the wrong. The mildest remedial substance, when taken by a person in perfect health, if it act at all, must act prejudicially. What is the action of Colchicum, in such cases? According to the journals of the day, pains of the joints and feet were among the symptoms produced by it, when accidentally taken in poisonous quantities by previously healthy persons—the very pains for which we find it available in practice!

Squill, Digitalis.—Are physicians aware that both of these substances have the power of *suspending* as well as of increasing the secretion from the kidneys? They are often continued too long in dropsy, to the prejudice of the patient, from practitioners being ignorant of their double action. But in this respect they only harmonise with all known agents. The *Electrical* state of the body, which cannot be known but by an experience of their effects upon it, determines whether Squill or Digitalis prove aggravant or remedial.

Stramonium or Thornapple is used by the Asiatics, in their treatment of mania—a disease which it has produced. It can also produce eruptions of the skin, a fact which led me to try its effects in cutaneous disease. Combined with *belladonna*, I have cured some very obstinate eruptions with Stramonium. I have also employed the same combination advantageously in the treatment of pulmonary consumption. The general action of both remedies in small doses, is mildly febrile. Their use sometimes produces a temporary dimness of sight, which goes off when the remedies are stopped.

Tobacco, Lobelia Inflata.—Tobacco is a valuable remedy, when properly prescribed, and it may be administered internally as well as externally. I have found its internal use, in tincture, efficacious in dropsy and asthma. Heberden cured a case of epilepsy, by applying a cataplasm of Tobacco to the pit of the stomach. The *lobelia inflata*, or American Tobacco, is a good diuretic, and has cured asthma. Like the common tobacco, it produces sickness, in large doses.

The Balsams and Gums.—Copaiba, Turpentine, and Guaiac powerfully influence mucous surfaces, in one case increasing secretion, in another suspending it. Turpentine is also a Chrono-Thermal remedy. With it, I have cured cases of Iritis, which resisted mercury and quinine. Copaiba in some constitutions produces a cuticular eruption so like small-pox, that even medical men have supposed it to be that disease. Others, putting this rash down to a fanciful cause called Syphilis, have gravely proceeded to ruin their patients' constitutions with mercury, to cure what they were pleased to call "secondary symptoms!" All these medicines are useful in Rheumatism, which they can produce.

Cantharides or Spanish Fly.—This is principally used as a blister; but the tincture of Spanish Fly is an admirable internal remedy for gleet and leucorrhœa, and it is also among our best diuretics; remember, however, it can produce strangury, an opposite effect. I am in the habit of combining it with quinine and prussic acid, in the treatment of dyspeptic cases, and I find it useful also in cuticular disease; though in the case of one gentleman—a colonel of the army—a blister to the side had the effect of blistering him all over on both of two occasions in which it was tried.

The Earths and Alkalis have all particular effects upon the body, according to the mode and degree in which they are administered. Besides their constitutional influence, each has more or less affinity to special organs. Lime and Barytes influence the secretions of

the stomach; Soda and Potash those of the lungs, kidney, and bladder; Ammonia or Hartshorn affects the salivary glands—each for good or for evil, according to its dose and fitness for particular constitutions. The earth called Alum is a favourite with the common people, in the cure of ague. What is its mode of action? Its power of astringency or attraction simply—the same power by which it arrests the morbid increase of secretion, called leucorrhœa. How does it do that? By its attractive influence over the atoms of the spine and the nerves proceeding from the spine. Well, then, that is the way in which it cures the ague. The greater number of

The Acids have been usefully employed in medicine. Acetic acid, or vinegar, is an old remedy for hiccup, and might be efficacious in other spasmodic diseases. Dilute sulphuric acid has cured the ague, among other disorders. With dilute nitric acid, I have arrested and increased almost every secretion of the body, according to varying circumstances. For a gentleman who was affected with vertigo and tremor, I prescribed dilute nitric acid, which cured him; his wife, by mistake, took his medicine for her own, and in a few minutes afterwards she was affected with a tremor, that lasted for nearly an hour! You see, as a general rule, then, that whatever can move one way, can move the other.

Gentlemen, the medicines of which I have given you some account to-day, are the principal symptomatic medicines which I employ in my own practice, combining or alternating them, as I have already stated, with the chrono-thermal remedies. But there are thousands of other agents, which may be usefully employed in this manner, and a great number are mentioned in our books of Materia Medica. What I have said on the action of remedies generally, will apply to all. At our next lecture, I shall give you some account of the principal chrono-thermal agents—and conclude the course, by a general summary of the Chrono-Thermal Doctrine.

LECTURE X.

PRINCIPAL CHRONO-THERMAL REMEDIES—SUMMARY OF THE CHRONO-THERMAL DOCTRINE OF DISEASE.

Gentlemen,

We now come to consider the mode of action of the Chrono-Thermal agents—or those substances so generally effectual in prolonging that remission of symptom which we have proved, beyond question, is a law of all disease. Whatever be the nosological name of a distemper—Ague, Epilepsy, or Eruption—the physician will more surely accomplish his purpose of cure by taking advantage of this period of immunity than by any measures to which he may resort during the paroxysm. The more perfectly *periodic* the paroxysmal return, the more amenable will the disease for the most part be to the Chrono-Thermal medicines; but however imperfect, irregular, or brief the remissions, there is no case of disorder that may not be beneficially influenced by these remedies—whether they be alternated with baths and emetics, or be prescribed in combination with such symptomatic medicines and local measures as the features of the case, from place or prominence, may appear to demand. Let us commence the consideration of the Chrono-Thermal agents with a few observations on

The Peruvian Bark.—To the value of this Bark as a remedy for many diseases, the celebrated Cullen, among others, bears his unequivocal testimony: what does he say are the ailments in which *he* found it most useful? Rheumatism, Gout, Scrofula, Scurvy, Small-pox, Dysentery, Gangrene, Diseases of the Bones, Convulsions, Hysteria, Hypochondria, Hæmorrhages. Is not this a pretty comprehensive association of apparently different diseases, all cured or relieved by a single substance! And yet it never seemed to enter the head of any medical writer before me, that these diseases have each something in common—each some principle of continuity which, amid all their apparent *Variety*, establishes their *Unity* of type. One remedy alleviates or cures them all—and yet physicians either

cannot or will not see that the action of that remedy is one and one only, viz., *motive power*. What better evidence of the absurdity of Cullen's own Nosological System—a system that, so far from explaining the perfect continuity that pervades the chain of all morbid motion, separated the links so widely asunder, that the student could not for the life of him believe them to be anything else but so many distinct and unlike disorders, each of which, forsooth, required a separate treatise to understand it! What a beautiful piece of work for the quacks! what an admirable method of darkening the world, that bad men might the better pursue their game of imposture!

An accomplished French physician, Baron Alibert, speaks thus of the Bark and its influence in disease,—"I have been able to pursue and appreciate the salutary results of the employment of this substance in Cancerous affections, in Scrofulous tumours of the *Glands*, according to the recommendation of Fordyce; in many *Cutaneous* diseases, and principally in Lepra, Elephantiasis; and in certain cases of Jaundice, arising from diminished tone in the secretory organs of the bile—in the alterations affecting the *Osseous* system, such as Ricketts, Spina Bifida, &c. With the Bark we may also advantageously combat certain disorders of the *Nervous* system, such as Epilepsy, Hypochondria, Hysteria, &c. Many authors recommend it in Hooping-cough, and the various convulsive coughs. No remedy, according to them, is so efficacious in strengthening the organs of respiration, and in preventing the state of debility induced in the animal economy by the contractile and reiterated movement of the lungs. The most part of those who employ it in like cases are, nevertheless, of opinion, that the administration of it is imprudent without some previous preparation, according to the particular stage of disease. These practitioners [influenced, doubtless, by their hypothesis of a humour in the blood] would in some sort mitigate the ferocity of the paroxysms by sweeteners and temperants—often even by evacuants, such as emetics and bleedings. To prevent irritation, they wait until the strength has been absolutely struck down. But upon this point, the celebrated Murray differs from these practitioners *in toto*. The Peruvian Bark, according to that physician, is equally adapted to the cure of Convulsive and Periodic Coughs as to the cure of *Intermittent Fevers*. He witnessed an Epidemic in which these maladies were efficaciously met by this powerful remedy from the commencement. He has, therefore, PROVED that there is no advantage in retarding its administration: and that to permit, in the first place, so great a *waste* of the *vital powers*, only renders the symptoms *more rebellious*, and their consequences MORE FATAL!"

Gentlemen, I am not now giving you *opinions*,—I am not now dealing in hypothetic disquisitions—I state *facts* simply, facts powerfully attested; for Murray in his day was celebrated over all Europe, and Alibert, only a few years ago, was second to no physician in France. Both have now passed from the scene of life; but their writings may be still read with advantage by every one who takes any interest in medicine. The value of the Bark in all diseases, both authors distinctly state. You have also heard what they say of the sanguinary practice. Nothing can be stronger than the expression of their united evidence against this practice; yet in the teeth of that evidence—in the teeth of common sense even, which says that whatever reduces the *vitality* of the whole, must more surely confirm the hereditary or other weakness of a part,—the medical herd of this country still go on like their ignorant fathers before them, bleeding, leeching, and purging to death, or all but death, every unfortunate creature who falls into their hands. Did the disciples of Malthus only know how admirably their master's system has been carried out by the great body of English practitioners, what encomiums would they not heap upon the schools to whose regiments of lancers and leechers the world is so indebted for keeping down a surplus population! But let not people suppose that, possessed of a remedy so powerful, and, so far as nomenclature is concerned, one so almost *universally* applicable as the Bark, the physician has an infallible elixir—a remedy adapted to all constitutions. The most perfect ague-fit within my own remembrance, appeared

to me to be the effect of two grains of Quinine, prescribed for an asthmatic patient. Dr. Thomson, on the other hand, mentions the case of a patient of his, in whom this medicine brought on an attack of asthma: "When he was getting well, after seven or eight days, I again," he says, "began the sulphate of Quinine, and the same attack was the result." A lady, after taking it, became subject to intermittent fainting-fits. Now, some would be glad to lay hold of this as a reason why you should never use Quinine. But the smell of the rose has produced fainting—the smell of ipecacuan asthma;—must we, therefore, never smell a rose, or keep ipecacuan in our houses? What agent in nature is absolutely innocuous? —Rhubarb, in a very minute dose, has produced convulsions with some people,—should we, therefore, never prescribe rhubarb? When Quinine disagrees, the common complaints are tremor, faintness, headache, vertigo, nervousness, cramps, and "all-overishness." Ratier, in his Hospital Reports, among its deleterious effects mentions "nervous agitations," which, I fancy, might be as well translated "shivering-fits," — or — what say you to "ague," Gentlemen? Oh! you may depend upon it, whatever can correct a morbid motion may cause it!

Like many other medicines, the Peruvian Bark is termed by writers on Materia Medica, a *tonic*. All Medicines are tonics, when they improve the health of the patient; but when, on the contrary, weakness or nervousness is the result of using them, who will say, that in that case they are anything but debilitant? Like an emetic, or a purge, the Bark may do both one and the other. To go on, then, day after day, prescribing this substance, and what are termed "strengtheners," without manifest amelioration, or with positive retrogression, is not giving a course of "tonics," but a succession of exhausting or debilitating agents;—it is to prescribe a name for a name.

What, then, is the mode of operation of the Peruvian Bark when its action proves salutary? This I conceive to be the true explanation. Whether it be administered during the Remission or Paroxysm, like every other medicinal agent capable of influencing the corporeal *totality*, the Bark, if it act at all, must do one of two things, namely,—Being a superadded motive power, it must either, with more or less force, CONTINUE, or with more or less force REVERSE the direction of the existing order of corporeal movement, according to the Attractive or Repulsive manner in which it may exercise its motive influence. Now, as this difference of result depends upon whether the patient's Brain be *negatively* or *positively* Electric,—a thing which can only be known by trial,—it must be clear to every reflecting person, that where the chances are equal in favour of the presence of either Electrical state, it is better to prescribe the medicine during the remissional movement of body, when, so far as *continuance* goes, it must act to a certain extent at an obvious advantage. In common with every material agent capable of influencing matter in motion, the power of the Bark, under ordinary circumstances, must be more effective in continuing than in reversing existing motion. To *reverse* generally suggests opposition, difficulty, disadvantage. To *continue* what is already begun as generally implies a course of action that can be advantageously undertaken. The chances, then, being so much in *favour* of *continuance*, it no longer remains a question, which state of body should be selected for the exhibition of the Bark,—the Paroxysm or the Remission. Which of these two periods has most resemblance to Health? The term Remission at once suggests the answer; that, then, is the proper period for the administration of this particular remedy. And experience has confirmed what exact reasoning might have anticipated; for when exhibited to the patient during the Paroxysmal movement, the Bark, for the most part, not only renders that movement more intense, but prolongs with equal frequency the duration of its period. A like effect follows its administration during the movement of Remission, for not only in most instances does it prolong this period, but adding force to the existing order of movement, it brings it at last to that desirable standard which it only previously approached, namely, the standard of Health. Numerous instances, of course, have occurred where a contrary effect has followed the exhibition of the Bark,

both in the case of the paroxysm and remission. But the general result of its employment determines us in the line of practice we should, under ordinary circumstances, pursue. So long, then, as we can, by the Bark or any other agency, keep up the movement of remission in as great, or even greater force than before, so long do we secure our patient from a recurrence of the previous paroxysmal movement, involving, as the latter must do, the *identical corporeal matter* of the movement of remission. Whatever be the name or nature of the disease, the remissional movement, in most instances, though a shade or two beneath that of health, may, as we have already said, by the increase of force effected by the Bark, be brought at last to the healthy standard; nay, in some cases, by a too long continuance or an excess of the medicinal force applied, it has itself been actually converted into a new *febrile* paroxysm of more or less intensity. But in that case the paroxysm of the old disease has, with equal certainty, been prevented from recurring. Still, however mild and subdued the movement kept up by the Bark may appear, in comparison with that of the previous paroxysm, if it only be continued for a sufficient time, it generally becomes at last so *habitual* as entirely to supersede the original disease, and to destroy, as a matter of course, the *constitutional memory* upon which the recurrence of the old paroxysm depended. Such constitutional memory French writers term "mémoire machinale." It is by this that all the motions of health are periodically reproduced—and by the same law all morbid motion takes on a habit of periodical return. Whatever will put the Brain on a new course of thought or action, will confuse this memory. Hope, Joy, Faith, and Enthusiasm act in that manner. What are these—what are all passions but Fevers?—and, as no two Fevers can affect the body at one and the same time, inasmuch as no given corporeal atom can move in opposite directions at the same moment—these Fevers, however mild in themselves, are sufficiently powerful, in many cases, to avert the return of the more dangerous morbid motions.—Like the fevers of pregnancy, puberty, &c., they may cure or arrest every kind of disease you can name, from toothache to pulmonary consumption;—like the same fevers, they have *produced* all—according to constitutional predisposition.

The Chrono-Thermal medicine next in value to the Bark, is—

Prussic Acid. In its concentrated state, it is impossible to prescribe this acid. The College of Physicians have therefore given a formula for its dilution for medicinal purposes; but I prefer that of Scheele, and I believe most other practitioners do the same. "Diluted Prussic Acid," says Magendie, "is employed with success, in all cases of morbid irritability (weakness?) of the pulmonary organs. It may be advantageously used in the treatment of nervous and chronic coughs, Asthma and Hooping-cough; and in the palliative treatment of Pulmonary Consumption; indeed, a great number of observations induce the belief, that it may effect a cure in the early stage of the latter disease. In England it has been administered with success in Dyspepsia, and also in Hectic cough sympathetic of some other affection. [Why sympathetic of another affection? When a man's health is wrong *throughout*, some prominent symptom is seized upon, and considered to be the cause of all the others!] Dr. Elliotson, both in hospital and private practice, has frequently employed medicinal prussic acid, prepared after the manner of Vauquelin. He has recorded more than forty cases of Dyspepsia, with or without vomiting, and accompanied with considerable pain in the epigastric region, and with *pyrosis*, (water-brash,) which were cured by this acid. The same physician quotes a case of Colica Pictonum (spasm of the colon) in which Dr. Prout gave the acid, and procured instantaneous relief. Dr. Elliotson also administered hydrocyanic acid, in a great number of Pectoral affections; and has almost invariably succeeded in allaying the troublesome cough. [Why will people use this word "invariably?"—what agent in the Materia Medica acts invariably in the same manner?—such medicine would be, indeed, a *specific!* but that we shall never discover!] Applied externally in lotions, in different diseases of the skin, it has not, in Dr. Elliotson's practice, produced any decided

effect. Dr. Thompson, however, asserts, that he has employed it in lotions with *constant* success [here again, "constant success!"] in diminishing the itching and the heat so annoying in Cutaneous diseases, and has cured several species of herpes."

"M. J. Bouchenel has published an interesting memoir on the employment of prussic acid in the treatment of chronic Pulmonary Catarrh. He mentions four cases in which this remedy proved effectual. He concludes by urging that prussic acid, when given in a small dose, is not more inconvenient than an ordinary cough mixture. M. Bouchenel has also employed prussic acid in a case of consumption, but he only succeeded in allaying the cough for a time, which leads him to doubt the fact of its having really effected the cure of confirmed consumption. *I do, however, assert and maintain,* (continues Magendie,) *that with Prussic Acid I have* CURED *individuals, having all the symptoms of incipient* PHTHISIS; *and even those in a more advanced stage.*

"In Italy, the medicinal hydrocyanic acid has been used to allay excessive irritability of the womb, even in cases of Cancer." "Professor Brera extols its happy effects in Pneumonia: he recommends it also in Rheumatic cases, and as a worm-medicine. Since this professor has employed it in diseases of the Heart, Dr. Macleod has administered it in the same diseases. He has found it allay nervous Palpitations, especially those which seemed to depend on derangement of the digestive organs. [How common this error of accusing one symptom of being the cause of another!] He has also employed it in some cases of Aneurism of the Heart. Dr. Frisch, of Nybourg, in Denmark, has allayed the intolerable pain caused by Cancer of the Breast, which had resisted all the antispasmodics, by washing the ulcerated surface with diluted prussic acid. He has also successfully employed the remedy in several cases of Phthisis. Dr. Guérin, of Mamers, has obtained beneficial results from its employment in two cases of Brain Fever."

Thus far I have given you the experience of others with this acid, as detailed in MAGENDIE'S FORMULARY;—let me now add a few observations of my own in its favour. Combined with the tincture of *lobelia inflata,* I have found it one of the most generally effectual remedies for Asthma with which I am acquainted. The same combination has enabled me to cure *Spasmodic* Stricture of the urethra; and, generally speaking, I have obtained successful results from the administration of prussic acid in cramp and spasms wherever developed. In the low, habitual Fevers, whether misnamed dyspepsia, hysteria, or hypochondria, I have found it particulary valuable. I have also experienced its curative influence in the treatment of Dropsy; more especially when complicated with difficult breathing.

In Palsy, I have found Prussic Acid more generally successful than Strychnia. I may here again, however, mention, that it is my custom, in the treatment of DISORDER generally, to combine one or more chrono-thermal powers—Quinine, Prussic Acid, or Arsenic—with one or more *symptomatic* medicines, those medicines possessing marked local influence. Thus, one or more of the Chrono-Thermal agents may be advantageously combined with Iodine, in glandular and skin affections,—with Colchicum or Guaiac in rheumatism—Squill or Digitalis in dropsy—Cantharides or Copaiba in leucorrhœa and gleet—with Squill in catarrh—with Purgatives where costiveness is a symptom; and so in like manner, according to the most prominent feature of a case. Combined in this way with tincture of ginger, cardamoms, &c., I have found Prussic Acid extremely valuable in the treatment of flatulency and acidity of the stomach. In all these disorders, however, this and all other remedies will be found to be advantageous only in so far as they contribute to improve the temperature, and, consequently, the circulation of the subjects of them. Your patients, when obtaining their beneficial effects, will tell you, "I have not had those heats and chills which used to trouble me,"—or, "My hands and feet are not so cold or so burning as formerly." If you poison a certain number of rabbits with Prussic Acid—say a dozen, and pour cold water in a stream over six of them, these six will recover, while all the others will die. This has been done over and

over again with the same result. You see, then, how clearly the influence of this agent depends upon its power of controlling Temperature.

We have seen that Prussic Acid may be successfully employed in the most obstinate agues; yet I remember the case of an Irish barrister, who, from the same medicine, experienced severe shivering and chilliness, with cramp, pain of the stomach, and slight difficulty of breathing; the very symptoms, you will remark, Gentlemen, for which it is so often available in practice. The *Electric* condition of the cerebral part influenced, determines whether a given remedy shall produce Attractive or Repulsive motions; and this, we have repeatedly stated, can only be known by trial. From such trial, no greater harm than a little temporary inconvenience can take place when Prussic Acid disagrees, if prescribed and watched by a judicious physician. Rhubarb or magnesia may do the same, for, like Prussic Acid, both act electrically.

From Prussic Acid, I now pass to

Opium, and its salts of Morphia.—These, like the Bark, may be advantageously employed, as we have already stated, in prolonging the interval of Remission in every form of disease. Opium, indeed, like every other remedy, possesses more or less influence over the whole system, but its more obvious effect is the control which it exercises over the Nerves of the Senses. With these we associate *Memory*—and as every part of the body has, through the Brain, a power of remembrance, whatever will confuse or suspend the action of the senses, will often equally suspend and confuse Memory, and consequently conduce to the suspension or interruption of any habitual or periodic action of any part of the body. A minute dose of Opium generally heightens the perceptive powers, while a large dose as generally diminishes them. But a large dose, after all, is only a relative term—for the quantity that would poison a horse, may be a moderate dose to the habitual Opium-eater!

I do not know a disease in which I have not found Opium useful. In dropsical cases, when administered at that particular period of the day when the patients have confessed to amelioration of their feelings generally, it has, in my experience, been frequently followed by a copious flow of urine after every diuretic had completely failed. By giving it in a large dose during the remission, I have kept several consumptive patients alive for months, and some for years even, whose existence must assuredly have been shortened but for the beneficial influence of this drug. There are persons, however, whom

> Not poppy, nor mandagora,
> Nor all the drowsy syrups of the world

would medicine into slumber—but upon whom the cold affusion would instantly produce that effect. Behold again, how much all things depend on Temperature! With some people Opium, as I have already mentioned, acts like ipecacuan. Who can tell what may be the effect of any remedy till it be tried? It is only impostors who *never fail!* As a proof of the influence of Opium as a preventive against disease, we are informed by Dr. M'Pherson, of the Madras army, in his book on China, that "the peculiar active principle in Opium, the *narcotic*, has of late been employed with considerable success in Bengal, as a substitute for Quinine. It may also be mentioned, that at the time fevers prevailed so extensively among our troops at Hong-Kong, but comparatively few of the Chinese suffered, though exposed throughout to the same exciting causes." And this Dr. M'Pherson attributes to their habit of opium-smoking. Travellers, who have witnessed the effects of this drug in the East, mention tremor, fever, dropsy, delirium, and restlessness, as the consequences of the habitual use of Opium. It has, nevertheless, contributed to the cure of all these symptoms when produced by other causes. In practice, we find it give repose in one case, and preclude all sleep in another. It has caused mania, and cured it.

Very analogous to Opium in their mode of action, are

Alcohol, Wine, and Malt Liquors; but like every other medicinal agent, these act upon the body beneficially or the reverse, in no other manner than by changing the existing

temperature of the Brain. If a glass of brandy has arrested the ague-fit and its shudder, the army surgeon will bear testimony to the "horrors" and tremblings which the abuse of strong liquors too frequently induces in the previously healthy. Are not the chill, the shiver, the fever-fit, the epileptic, asthmatic, icteric, strictural, and other spasmodic paroxysms, daily produced by potation? How often have we known dropsy brought on by gin drinking;—yet is not gin daily prescribed with the best effect, for the dropsical? See how differently alcohol affects different men! One it renders joyful or gentle,—another sullen and morose,—in a third, it gives rise to wit; while a fourth, under its influence, loses the wit he previously possessed. I remember the case of a man of the First Regiment of Foot, who grew mighty religious, and took to psalm singing every time he got drunk. But this spurious kind of godliness, as you might have expected, generally evaporated with the fumes of his liquor. That excess of religious feeling or Veneration (as the Phrenologists call it) does, however, depend upon the temperature or motive condition of some cerebral part, there cannot be a doubt; and that it takes place by fits or periods, Shakspeare well knew, for he makes one of Clarence's murderers say: "I hope this holy humour of mine will change; it was wont to hold but while one would tell *twenty*."

Wine will make the brave man timid and lachrymose—the coward capable of actions, the mere thought of which, in his sober moments, would have inspired him with terror. One man will first show the effects of drunkenness in his speech—another in his diminished powers of prehension—some individuals will not betray the influence it has obtained over them until they try to walk; their limbs may then fail them, though neither hand nor tongue show any signs of inebriety. Now all this is done by the change of temperature which wine induces on various parts of the Brain of particular individuals. It throws them into a state of *Fever;* and the same phenomena may be witnessed in the course of fevers produced by cold or a blow. Dr. Jenner, in describing the effects of excessive cold on himself, says, "I had the same sensations as if I had drunk a considerable quantity of wine or brandy, and my spirits rose in proportion to this sensation. I felt, as if it were, like one intoxicated, and could not forbear singing," &c. — [*Baron's Life of Jenner.*] Take the converse of this—A man shall get as "drunk as a lord," and immediately become sober under the influence of a cold shower, or plunge bath. Does not this unity of result argue unity of mode of action? We prove, then, by every possible manner, that the effect of wine, whether for good or for evil, like that of every other power in nature, relates to the influence it exerts over the Temperature of one or more portions of the Brain.

Musk, Valerian, Camphor, Assafœtida, have each and all of them cured the ague. Were it not for its expense, Musk would doubtless be more extensively used in the practice of medicine. For myself, I place it in the same rank with quinine and arsenic in the treatment of what are termed the purely nervous affections. It is generally recommended in books to begin with ten grains;—in my hands a much smaller dose has been attended with the best effects in numerous cases. But a great deal depends upon the purity of the drug. I lately succeeded with Musk in a case of intermittent Squint, which successively resisted quinine, arsenic, prussic acid, and iron.

A married lady, who always, when pregnant, became the subject of Epilepsy, but had no fits under other circumstances, consulted me in her case: I tried every remedy I could think of without any advantage whatever; I then gave her Musk, which at once stopped the fits. The dose in this case was four grains.

We have constant disputes whether a particular remedy be stimulant or sedative. Opium, Musk, and Prussic Acid, have by turns become the subject of discussion. One theorist will take one side, another another, and each will bring you facts of equal cogency. Both are right and both are wrong. To reconcile this seeming paradox, we have only to observe that all remedies are either stimulant or sedative according to the dose and the constitution of the patient.

Strychnia can both interrupt and produce

Fever. In an experiment upon a horse suffering from "lock-jaw," a watery solution of *nux vomica*—the well-known source of the Strychnia—produced, when injected into the veins, a shivering fit of some duration. I have nevertheless, found the sulphate of Strychnia of great service in obstinate agues, and in many chronic diseases in which chilliness, vertigo, and hallucination or phantasy were symptoms. In the case of a female affected with nervous blindness, for whom I successfully prescribed sulphate of Strychnia, the remedy deprived her, for about an hour, of the use of her limbs. The recovery of her sight, under its exhibition, amply compensated for this temporary accident. I have found it confuse the vision in a similar manner when prescribed for muscular palsies. In the treatment of epilepsy and many other spasmodic affections, this substance may be advantageously combined with the sulphate of quinine. I have, notwithstanding this, on several occasions, been obliged to intermit its use, from the pains of which the patients complained while taking it;—and this led me to make trial of the remedy in rheumatism, which, in some instances, it cured.

Silver.—A consideration of the occasional beneficial influence of Nitrate of Silver in epilepsy, led me to try its effects in other disorders of the spasmodic kind, such as asthma, cramp, &c., and I am glad to have it in my power to bear testimony to its very great value in all of these affections.—It is a powerful Chronothermal medicine—and like every medicine of this class, it can produce the disease it can cure.

Tremor, spasm, palsy, we have seen, differ but in degree. In all these disorders, Silver may be advantageously substituted for bark, prussic acid, &c. While engaged in prosecuting my researches upon the medicinal effects of Silver, I found it to be one of the most powerful diuretics in the Materia Medica; a circumstance not altogether unobserved by the older authors, particularly Boerhaave, who was accustomed to prescribe it with nitre in dropsy. It has, nevertheless, the power to suspend the urinary secretion. There is an affection to which young women are remarkably subject—a periodic pain of the side—or *stitch*. This disorder has been maltreated under a variety of names, according to the notions entertained by attending practitioners, as to its origin and nature. If practitioners would only take the trouble to ask the patient whether the affected side be colder or hotter than natural, I do not think they would be so forward, as they usually are, to order leeches and cupping-glasses. In ninety cases out of a hundred, the sufferer will tell you that that side is always chilly! This at least might convince them *Inflammation* is not the "head and front of offending." Such pain is the result of spasm of one or more of the intercostal muscles—which pain, when the patient is told to inspire, will assuredly increase. Beware of adding to it by blood-letting! In numerous cases, it will yield to half-grain doses of nitrate of Silver—failing which, prussic acid, quinine, or arsenic, may be successively tried; and to one or other of these, it will prove, for the most part, amenable. In pain of stomach *after eating*—also a disease of the spasmodic kind—I have found silver particularly valuable. In all varieties of cough and catarrh, I have derived advantage from its employment; and I am sure it has, in my hands, contributed to the cure of indubitable phthisis. Let it be at the same time remembered that I do not exclusively rely upon this medicine in any one form of disease;—for, unless it be sulphur for *psora*, I do not know a specific in physic!

There is a disorder to which aged individuals and persons who have suffered much from mental anxiety are liable—a disposition to *faint* and *fall*—often mistaken, and fatally mistreated, under the name of "tendency to apoplexy." The employment of Silver in this affection has, in my practice, been very generally successful. I have found it also decidedly advantageous in vertigo, and in many cases of mental confusion.

Nitrate of Silver has great influence over the spine and spinal nerves; for, patients sometimes complain of pains like lumbago, sciatica, and rheumatism while taking it. I have occasionally known it produce shivering and fainty sensations, but these inconveniences were merely temporary, going off upon the discontinuance of the medicine. It has cured them all when produced by other causes. You are

aware that blueness of skin is an occasional effect of nitrate of Silver; and I must here explain to you the reason. Most of you have seen, doubtless, the pictures produced by *light* on paper saturated with nitrate of Silver. Before the nitrate of Silver could turn the human face blue, the skin, as in the case of the paper employed in that process, must be completely saturated with the preparation—for how otherwise could the light affect the face in that manner? Though I have myself prescribed nitrate of Silver thousands of times, I never witnessed the slightest tinge from its use—nor would any other practitioner have to complain of it in this respect, if he had not employed it in too large doses, or too continuously. Who, then, would reject a valuable remedy, because its *abuse* has produced, in rare instances, a peculiar colour of skin—seeing that *every* remedy, if improperly applied, may occasion the far greater calamity of death itself!

Copper, like Silver, is now seldom used but in epilepsy. Fordyce, nevertheless, thought so highly of it as a remedy for Ague, that he ranked it with the Peruvian Bark. Boerhaave, Brown, and others, esteemed it for its diuretic power; and accordingly they prescribed it in dropsy. In the same disease, and in asthma, I have had reason to speak well of it, and I can also bear testimony to its salutary influence in chronic dysentery—a form of disease so frequent in the East Indies, that while serving there, I had many opportunities of testing Dr. Elliotson's favourable opinion of its value. That it can produce all these disorders is equally true; for where it has been taken in poisonous doses, "it excites," according to Parr, "a pain in the stomach, and griping in the bowels, tenesmus, ulceration, bloody stools, difficult breathing, and contraction of the limbs." A universal or partial shiver will be found to precede or accompany all these symptoms. Copper was a favourite *febrifuge* with the older practitioners.

Iron is a very old remedy for ague—perhaps the oldest. Stahl particularly dilates upon its virtues in this affection. Much of the efficacy of a medicine depends upon the constitution of the season and climate—much upon the constitution of the patient. This metal, like every other remedy, has consequently had its supporters and detractors in every form of disease. It is, at present, one of the principal remedies for Hysteria, and other female disorders—disorders which we have already shown are mere variations of Remittent Fever. The water in which hot Iron had been quenched used to be prescribed by the ancient physicians as a *bath* for gout and palsy. In skin diseases and cancer, ricketts, epilepsy, urethral stricture, &c., Iron has been vaunted by numerous modern practitioners. The ancients recommended it in diarrhœa, dysentery, dropsy, hectic, vertigo, and headache. Now, in all these affections, it has served me much like other powers—ameliorating or aggravating the condition of the patient, according to peculiarity of constitution. Some pseudo-scientific physicians have amused themselves with witticisms at my expense, on the subject of Iron. Finding it in some of my prescriptions for Phthisis, they have accused me of mistaking this disease for dyspepsia. How long will men deceive themselves with such puerile absurdity? When will they learn that the human body, in disease, as well as in health, is a totality,—not a thing to be mapped into parts and portions, like a field of rice or corn! Let them take a lesson from St. Paul, who, in his first epistle to the Corinthians, has these remarkable words:—"And whether one member suffer, all the members suffer with it: or one member be honoured, all the members rejoice with it." With

Zinc, Bismuth, and their preparations, I have occasionally succeeded in prolonging the *remission* in many cases of disease, where the other principal chrono-thermal medicines had been ineffectually tried. Generally speaking, however, they are less to be relied upon for this purpose, than those I have had so frequent occasion to mention in the course of these lectures. The successful employment of

Arsenic by the natives of India, first, I believe, induced European practitioners to try its effects in ague, and also in diseases of the skin. The happy effects of this medicine were found not to be confined to these disorders. Not only has its judicious administration been attended with success in epilepsy, and numerous other forms of convulsive disorder, but

it has been advantageously employed in the treatment of structural change. Like every other remedy, Arsenic has its advantages and disadvantages. Inquire of miners, exposed to the fumes of this metal, and you will find that FEVER, tremor, spasm, palsy, and sores, compose almost the sum-total of their sufferings. In the *Edinburgh Medical and Surgical Journal*, there is an account of five cases of poisoning by arsenic. Among the symptoms mentioned by the narrator, Mr. Marshall, were vomiting, pain, and burning of the stomach, thirst, crural and abdominal spasms, purgings, headache, dimness of sight, intolerance of light, palpitation, *chills* and *flushes*, epilepsy; all of which, proceeding from other causes, I have successfully treated by Arsenic. The first case of epilepsy in which I ever derived benefit from any remedy, was cured by this metal; the disease was principally brought on by hard drinking, and the fit came on at a particular hour, every alternate night. Now it is worthy of remark, that after an attempt at suicide by Arsenic, detailed by Dr. Roget, periodic epilepsy was among the effects produced. The subject of it, a girl of nineteen, had also chills and heats, which, if you please, you may call *Intermittent* or *Remittent Fever*, or anything else you can fancy—for it is not my custom to quarrel about names!

As a remedy for skin disease, I have every reason to speak highly of Arsenic, even when complicated with much structural change. Some cases in which it had very great effect, I will detail to you. The subjects of them were sepoys, or Indian soldiers, who had suffered in the Rangoon war, from bad climate, defective food, and the usual privations of men in the field. These patients were under my care for a fortnight only; and to that period the treatment refers. All of them, be it remembered, had had "the Fever."

Case 1.—Jan Khan, havildar, (Native Sergeant,) had diseased thickening of the skin of the legs and arms. His nose was enormously enlarged, and his whole appearance unhealthy. He ate and slept badly, and his tongue was foul and clouded. After the operation of an emetic, the *liquor arsenicalis* was administered in six drops thrice a-day, and its effects at the end of a fortnight were wonderful. The nose had then become nearly of the natural size, and the disease of the skin had gradually lessened. He then slept and ate well, and expressed himself much pleased with the improvement he had received from his medicine.

Case 2.—Daud Khan, sepoy, had pains of the bones and joints, white patches all over his skin, and an irritable sore of the scrotum, from which a fungus, about the size of a chesnut, sprung up. He complained also of a burning sensation in his feet. When I first saw him, he was so weak he could not rise from the floor without assistance, and his countenance indicated extreme wretchedness and debility. Having removed the fungus, the lunar caustic was applied, and arsenic internally administered, as in the previous case. In a week, there was great amendment of the sore. The patient, since then, rapidly gained ground; of the pains of the bones he no longer complained, and the eruptions on the skin gradually disappeared; the ulcer at the same time closed, and I expected he would soon be fit for duty.

Case 3.—Setarrum, sepoy, had large sores of the leg, sloughy, ill-conditioned, and spreading in different directions. He had also eruptions, like the last-mentioned patient; and his appearance and strength, though not so wretched, were yet sufficiently miserable. Pure nitric acid was applied to the whole surface of the sores, and a poultice ordered. The arsenic was given as above. On the separation of the dead matter, the leg was supported by Baynton's bandage. The sore gradually healed —the eruptions disappeared—and the patient regained complete health and strength.

Case 4.—Subryah, sepoy, had had his leg thrice amputated, the last time in the middle of the thigh, but the bone had been left with only a covering of skin. The stump was in an ulcerated state when I first saw him—and the probe, upon being passed through one of the sores, found the bone carious, (abraded,) and denuded as far as it could reach. The patient was altogether out of health, not one function being properly performed. It was proposed to amputate at the hip-joint, as it was not believed that any other treatment

could do good. To this step, however, he would not submit. A trial was given to Arsenic, and the sores, beyond expectation, at the end of a fortnight had *nearly healed*. The patient then slept and ate well, and looked comparatively strong and healthy.

Case 5.—Vencatasawmy, sepoy, had disease of the skin, and an ill-looking sore over the breast-bone, which bone was perfectly carious, —the probe could be passed through it to the depth of three inches in the direction of the mediastinum. The patient was weak and irritable, and could neither eat nor sleep; his pulse was rapid and small, and his appearance altogether miserable. Arsenic was resorted to as before. The ring-worm, under its use, disappeared—the sore began to look clean—the probe, when he went from my hands, only passed to the depth of an inch, and the patient's health was rapidly improving.

These cases were intrusted to my care by Dr. Gibb, of the Madras Medical Staff, while he himself was on "sick-leave," and were afterwards reported by him to the Medical Board of that Presidency.

Do I now require to tell you the principle upon which Arsenic proved so efficacious in the treatment of these various structural changes? It acted simply by its power of controlling REMITTENT FEVER, under a chronic form, of which these unfortunate sepoys were all suffering — the structural changes being mere features or developements of the general derangement.

Gentlemen, we have now established—indisputably established—even by the cases of the schoolmen themselves, that *Fear*, or any other given passion,—*Bark*, or any other given chrono-thermal medicine, has each cured a HOST OF MALADIES, which the authors of nosological systems not only put down as separate and distinct disorders, but to which the profession usually ascribe a difference of cause and nature;—some, according to their views, being diseases of debility,—some, nervous,—some, inflammatory. Now, connecting this with the fact, that the subjects of all these apparently different ailments have *Fits* and *Intermissions*, and have each a greater or less number of the symptoms or shades of symptom constituting the particular type of disorder, so well known to the vulgar by the term AGUE; for which, the same vulgar are aware, there are no powers so generally applicable, as Bark and the passion Fear;—to what other conclusion can an unprejudiced person come, than that all disorders are variations of this one type—that, *abstractedly speaking*, there is but ONE DISEASE! If this, then, be true, —and its truth may be easily tested in every hospital in Europe—am I not justified in believing that the notions (for I will not call them principles) which have hitherto guided or rather misguided physicians in their treatment of disease, are a mere romance of the schools; that their views of its causes have, for the most part, been as erroneous as their modes of cure are defective; and their nomenclature and narrations throughout, little better than an unmeaning jargon?

Gentlemen, I shall conclude these Lectures with a brief summary of the doctrines which have occupied us during the course. Their importance to the human race, if true, cannot for a moment be doubted;—if proved to be false, I shall be the first to acknowledge my error; but, as I said in the outset, I will only appeal to results—to nature. I have proved, however, I hope to the satisfaction of most of you, that—

1. The phenomena of perfect HEALTH consist in the regular repetition of *alternate* motions or events,—each, like the different revolutions of the wheels of a watch, embracing a special PERIOD of Time.

2. DISEASE, under all its modifications, is in the first place a simple *exaggeration* or *diminution* of the amount of the same motions or events, and being universally *alternative* with a PERIOD of comparative HEALTH, strictly speaking, resolves itself into FEVER,—REMITTENT OR INTERMITTENT, *Chronic* or *Acute*:—every kind of structural disorganisation, from Tooth-*Decay*, to Pulmonary *Consumption*, and that decomposition of the knee-joint, familiarly known as *White Swelling*, being merely "developements" in its course:—Tooth-consumption — Lung-consumption — Knee-consumption.

3. The tendency to disorganisation, usually denominated ACUTE or *inflammatory*, differs from the CHRONIC or *scrofulous* in the mere amount of motion and temperature:—the former being more remarkably characterised by excess of both, consequently exhibits a more rapid progress to decomposition or cure; while the latter approaches its respective terminations by more subdued, and therefore slower and less obvious alternations of the same action and temperature. In what does consumption of a tooth differ from consumption of the lungs, except in the difference of tissue involved, and the degree of danger to life, arising out of the nature of the respective offices of each?

Disease, thus simplified, will be found to be amenable to a principle of treatment equally simple. Partaking, throughout all its modifications, of the nature of Ague, it will be best met by a practice in accordance with the proper principle of treatment of that distemper. When the doctrine of the Concoction of Humours held its baneful sway over the mind of the physician, it was considered the greatest of medical errors to repel the paroxysm—each fit being supposed to be a friendly effort of nature, for the expulsion of a peccant or morbid humour from the body. Like the popular error of our own day, so prevalent in regard to "the Gout," it was deemed to be a salutary trial of the constitution. An ague in spring was said to be good for a king! That monarchs occasionally became its victims at this season, had no particular share in the revolution which has since taken place in medical opinion. So late as the time of Boerhaave, a physician asserted, that if he could produce a fever as easily as he could cure it, he should be well satisfied with his own skill! The consequence of such notions was, that the practitioner exerted his utmost to increase the heat of the body during the paroxysm, — but the fearful mortality attending the practice had no other effect upon the mass of the profession, than to make them redouble their exertions in the discovery of means of increasing this heat, that they might thereby assist the unknown process which morbid matter was supposed to undergo! One hundred years have scarcely elapsed since the fever patient was wrapped in blankets, his chamber heated by large fires, and door, window, and bed-curtain closed upon him with the most scrupulous attention. The few that escaped this terrible ordeal, were said to be cured—and these CURES, like *ignes fatui*, only served to delude and blind the practitioner to the awful mortality which followed the practice!

Like the present treatment of the symptoms still absurdly called *Syphilis*, the practice proved infinitely more destructive to life than the disease itself—but, so far from opening men's eyes, the SENIORS of the profession, when the invaluable Bark was first introduced to their notice, opposed it with a violence and a virulence only since paralleled by the resistance they successively offered to the introduction of the variolous and vaccine inoculations. To bring forward any sweeping or useful measure in Medicine, requires a moral courage and perseverance that fall to the lot of few. The man who wishes to gain a ready notoriety, has only to puff off some inert or mystical mode of treatment, and his success is certain. He must beware of coming before the public with a remedy to which the stigma of POISON can be attached. Does not the quack constantly boast of the absolute safety of his remedy?—See with what pertinacity he contrasts his *vegetable* MEDICINE with the words *mineral* POISON; which last he uses for a bugbear, as if the vegetable world was all for a blessing, and the mineral all for a bane. And the wonderful part of this is, that it answers admirably, even with what are termed the educated public—if those can be educated who would swallow opium and hemlock in any quantity because they are VEGETABLES, and who appear not to know that table salt is a MINERAL—that coal or carbon is a mineral—that iron and lime are minerals, and that all of these mineral substances actually enter more or less largely into the economy of their own living frames! To sum up the whole, every vegetable substance is the product of the earth: and if there be truth in Scripture—if there be a statement in the sacred writings more deserving of the

attention of the physician than another, it is that contained in the 38th chapter of the Book of Ecclesiasticus, namely, that "The Lord hath created *medicines* out of the EARTH, and he that is wise will not abhor them!"—Can the man be a Christian who, after this, would dare to rave against *mineral* remedies?

As *now* practised in England, MEDICINE is little better than a copy of the exploded NAVIGATION of the ancients. Taking his bearings, less by the observation of the fixed stars, than by every little eminence and prominent locality, the ancient mariner, cautiously, if not timidly, crept along shore. With the unerring compass for his guide, the seaman now steers his bark boldly upon the boundless ocean. Despising the localisms that formerly guided his sail, he now completes his voyage to the distant port in as many days as it formerly occupied him weeks or months. Keeping in view the principles here laid down, the physician may, in like manner, with a few rare exceptions, entirely dispense with the common anatomical landmarks of his art—if he be not startled with the novelty of the light by which we have endeavoured to dispel the darkness that has hitherto clouded the field of medicine. Taking corporeal Unity and Totality for his rudder and compass—the Brain and Nerves for the Ocean and Seas on which he is to act—Temperature and Remittency for his Tide and Season—constitution and habit for the rule by which he must occasionally change his tack—he may now rapidly accomplish ends which, by groping among the intricacies of nomenclature, or by a vulgar attention to mere localities, he can only imperfectly attain by the reiteration of long and painful processes; he may thus, with ease, obviate difficulties which he previously believed to be insurmountable. Let him not question whether or not the adoption of this will best *serve* his *own* interest. As physic is for the public, not the public for physic, he may rely with certainty, that notwithstanding the present over-crowded state of the profession, the supply of medical aid will, sooner or later, adjust itself to his own, as well as to the general weal.

It was one of the boasts of the eccentric Radcliffe, that he could write the practice of physic on half a sheet of paper: the whole might be comprised in half a line—ATTENTION TO TEMPERATURE! This, you may be sure, was Radcliffe's chief secret—for he was one of the earliest physicians who first introduced what is called the cooling system in fever. When the Duke of Beaufort was taken ill of the small-pox, "the doctor," says Pottis, "was sent for, and found his grace's windows shut up in such a manner, by the old lady duchess, his grandmother's order, that not a breath of air could come into the room, which almost deprived the duke of the very means of respiration. This method had been observed by the *physicians* (!) in her grace's youthful days, and this she was resolved to abide by, as the most proper in this conjuncture, being fearful that her grandson might otherwise catch cold, and, by means of it, lose a life that was so precious to her and the whole nation. She had also taken a resolution to give her attendance upon the duke in person during his sickness, and was in the most violent consternation when Radcliffe at his first visit ordered the curtains of the bed to be drawn open, and the light to be let in, as usual, into his bed-room. 'How,' said the duchess, 'have you a mind to kill my grandson?—Is this the tenderness and affection you have always expressed for his person?—'tis most certain his grandfather and I were treated after another manner, nor shall he be treated otherwise than we were, *since we recovered* [escaped, truly!] and lived to a great age without any such *dangerous experiments!*' 'All this may *be*,' replied the doctor, with his wonted plainness and sincerity, 'but I must be free with your grace, and tell you, that unless you will give me your word that you'll instantly go home to Chelsea and leave the duke wholly to my care, I shall not stir one foot for him; which, if you will do, without intermeddling with your unnecessary advice, my life for his, that he never miscarries, but will be at liberty to pay you a visit in a month's time.' When at last, with abundance of difficulty, that great lady was persuaded to acquiesce and give way to the entreaties of the duke and other noble relations, and had the satis-

faction to see her grandson, in the time limited, restored to perfect health, she had such an implicit belief of the doctor's skill afterwards, that though she was in the eighty-fifth year of her age at that very time, she declared, it was her opinion that she should never die while he lived, it being in his power to give length to her days by his never-failing medicines."

Well, Gentlemen, the proper *medical* treatment of ALL DISEASES comes, at last, to attention to Temperature, and to nothing more. What is the proper practice in Intermittent Fever? To reverse the *Cold* stage, either by the sudden shock of the cold dash, or by the administration of warming cordials; in the *Hot*, to reduce the amount of Temperature, by cold affusion and fresh air; or, for the same purpose, to exhibit, according to circumstances, an emetic, a purgative, or both in combination. With quinine, arsenic, opium, &c., the interval of comparative health—the period of medium temperature, may be prolonged to an indefinite period; and in that manner may HEALTH become established in all diseases—whether, from some special *local developement*, the disorder be denominated mania, epilepsy, croup, cynanche, the gout, the influenza! In the early stages of disease, to arrest the FEVER is, in most instances, sufficient for the reduction of every kind of local developement. A few rare cases excepted, it is only when the disorder has been of long standing and habitual, that the physician will be compelled to call to his aid the various local measures, which have a relation to the greater or less amount of the temperature of particular parts.

The Unity of Disease was first promulgated by Hippocrates, and for centuries it was the ancient belief. In modern times it found an advocate in the American physician Rush—but except in this instance of unity, betwixt the respective doctrines of both authors and my doctrines of disease there is not a single feature in common. For, while the first, from his observation of the resemblance of disorders one to another, inferred that *one* imaginary *humour* must be the cause of all complaints—the doctrine of the second was that all disorders consisted in *one* kind of *excitement*. The principle of Hippocrates led him to purge and sweat;—that of Rush, to bleed, leech, and starve. In practice and in theory I am equally opposed to both. Other physicians, doubtless, have held the idea of a unity of disease, but neither in the true theory of the nature of morbid action, nor in the principle of the practical application of medical resources have I as yet found the Chrono-Thermal System anticipated. The opponents of my doctrines, and those who embrace them by stealth, have alike searched the writings of the ancients in vain to discover a similarity to them in either respect. If it be urged against the author of the Chrono-Thermal System of Medicine, that he has availed himself of facts collected by others—and that, therefore, all is not his which his System contains—I answer, Facts when disjointed are the mere bricks or materials with which the builders of all systems must work. And to deny to any man the merit of being the architect of a great Edifice of Truth on that account, would be just as reasonable as to ascribe the merit of St. Paul's cathedral to the donkeys and other beasts of burden Sir Christopher Wren necessarily employed in fetching the marble and mortar composing it. "Merely to collect facts is an easy and mindless task, that any common being can perform; it requires eyes and hands, and almost dispenses with a brain; it is the work of a toiling wretch, who, like the miser, is incapable of using what he possesses. Mere facts lie around even the savage, but he knows not what he sees—and such, precisely such, is the case with the mere learners of the names of things, the collectors of little facts, the undiscriminating triflers, who think they are cultivating the sciences."—[*Alexander Walker.*] It is of these, nevertheless, that our medical clubs and coteries are chiefly composed, and it is with the conglomerating effusions of these that the editors of the medical press chiefly contrive to keep the daylight of medical truth from the eyes of the student. Microscopical observations, straw-splittings, and other little facts you have from their hands in abundance—but facts properly arranged and systematised into a whole or great fact, not only do you never find in their writings—but when

you present such great facts to their eyes, they either comprehend them not, or if they do, they immediately endeavour to stifle or steal the discovery. Out upon such contemptible creatures, fit only to

Suckle fools, and chronicle small beer!

How was the Chrono-Thermal System at first received by medical men? I speak not of its reception by the *canaille* of the profession—the twaddling, intriguing sycophants of country towns—I mean its reception by the medical "aristocracy," as the Court doctors call themselves. Immediately after its publication, one of these court gentry (James Johnson) misrepresented, ridiculed, and denied it — three years after that, another court physician (Holland) attempted, as you have seen, by a sidewind to steal it—three years more passed away and a third court creature (Forbes) by those meanest arts, misstatement and misquotation, first did his little endeavour to stifle it, and, finding he could not succeed in that, did what he could to give it to others. If such was the candid and gentleman-like conduct of the *town* doctors, what had the Chrono-Thermal System of Medicine to expect at the hands of the physic-selling profession in the country? What could these intriguing little gossips do but follow in the wake of their town masters, the court physicians? Now they ridiculed it—now they denied it—but all the while they had no hesitation to practise it by stealth, some in one, some in another of its fragments. This moment it was partially true, but not new;—the next, the newness was admitted, the truth denied. But, Gentlemen, up to 1836, when I first published the heads of that system, the profession to a man were utterly ignorant of the very nature of disease. Its periodicity in the case of ague, and a few other disorders, they knew—the periodicity of all animal movement, whether in health or disease, they knew nothing at all about—and of the mode in which remedies act they were just as ignorant. As to blood-letting, which the great majority of them now admit they did carry too far, the exclusion of it from the chrono-thermal system, so far from being its principal feature, as some of them pretend, is only a fragmental part that of necessity followed its discovery. I have never taken credit for being the *first* opponent of the lancet. But one thing in regard to this matter I do claim credit for—I claim credit for being the first man who, by a strong array of facts, and some force of reasoning, produced an impression on the public that all the facts and all the arguments of former opponents of the lancet never before produced on the *Profession*—namely, an impression of the dangerous nature of the remedy; and whether they like to be told of it or not, I claim to have either convinced or compelled the profession materially to alter their practice. How amusing to see the manner in which those who formerly advocated the lancet in Apoplexy, now endeavour to get out of their difficulty! Sir C. Bell, Clutterbuck, Marshall Hall, Wardrop, &c., in *recent* remarks upon its treatment, give so many doubts, *cautions*, and *reservations* as all but to amount to a complete prohibition of the lancet in this disease—not one of them, however, having the boldness to oppose it entirely in direct words, or virtue enough to acknowledge to whom he owes the new light that has so lately come upon him in this matter.—"Awful is the duel between MAN and the AGE in which he lives!" —*Bulwer*. In all the late medical reviews of my writings, the subject of blood-letting, which afforded so much mirth to my early critics, has either been kept entirely in the background, or, if noticed at all, my strictures on it are declared to be a mere echo of the present opinions of the profession!—but whether they be so or not, the astute editors of these publications determine that no merit attaches to me for my endeavours to put it down, inasmuch as it had been equally opposed and decried by somebody of some place or another in Greece, who lived before the time of the Messiah! Gentlemen, to *Say* blood-letting is a bad remedy is one thing—to *Prove* it to be bad is another—to force the world to believe and act upon your arguments against it, in the teeth of the opinion of the world, is a still greater achievement. That merit I distinctly claim. With Coriolanus, I can say,

ALONE I DID IT!

The silence and admissions of the medical press on that head equally attest the fact—while the many barefaced attempts to purloin my doctrine of the *Periodic* movement of all *Vitality*, whether in Health or Disease, is as much a compliment to the genius of its real discoverer as it is a proof of the worth of the discovery. On that discovery is based the whole Chrono-Thermal System of Medicine.

Before concluding, I will just make a remark upon the subject of the doses of all medicines. Perceiving, as you must have done by this time, the utter impossibility of foretelling, in many cases, especially of chronic disease, the particular agent by which you are to obtain amelioration or cure,—and as in almost every case where an agent does not act favourably, it does the reverse—you must see the necessity of commencing your treatment with the smallest available doses of the more potent remedies; of feeling your way, in short, *before* you venture upon *the doses prescribed by the Schools*. Let me not, for a moment, be supposed to countenance the homœopathic nonsense.—The twelfth part of a grain of calomel, for example, is a proper medicine to give to an infant; but such dose has no more relation to the millionth or decillionth part of a grain of the same substance, than the twelfth part of a bottle of wine—one glass—has to a *drop* of that liquid. The one has power to influence the whole body;—the other is utterly inappreciable beyond the taste it may impart to the tongue, the only organ it can, by any possibility, even momentarily influence.—Gentlemen, pity the Homœopathists!—shun the Pathologists and Blood-takers—and follow only that best guide of the physician—Nature! not in the confined sense of our mortal economy, but in every department of her works. —One great principle binds them together—God, in his Unity, pervades them all!

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