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THE WATER CURE

IN

SCOTLAND:

FIVE LETTERS FROM DUNOON,

ORIGINALLY PUBLISHED IN THE "ABERDEEN HERALD," NOW
REPRINTED.

BY J. S. BLACKIE, Esq.,

PROFESSOR OF HUMANITY, MARISCHAL COLLEGE, ABERDEEN.

Ἄριστον μὲν ὕδωρ.

"Water is best."

PINDAR.

ABERDEEN: GEORGE DAVIDSON.
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ABERDEEN:
PRINTED AT THE HERALD OFFICE,
BY JOHN FINLAYSON.

PREFATORY NOTE.

IN reprinting these Letters for more general circulation, I have not had time or opportunity to attempt removing any of those very obvious imperfections which, from the circumstances under which they were composed, must necessarily cling to them. This the literary critic will kindly take into his equitable consideration ; as for the matter, I have no apology to make, nor ought any to be received. A person, who undertakes to put his thoughts on grave matters into a permanent shape by printing, is bound to guarantee his facts and his authorities. Some things there may be in the following pages stated strongly ; there is nothing, certainly, said lightly, or without due deliberation.

J. S. B.

DUNOON, *July*, 1849.

LETTERS FROM DUNOON.

No. I.

DEAR MR. EDITOR,—When I left your good city, on a trip to Dunoon, in search of health by help of hydropathy, I promised you an occasional bulletin of my proceedings, for the edification of such of your readers as might be willing to make an experiment of the same kind. But hitherto the do-nothing genius of the place has been so potent with me, that I have never been able to seize a pen with any deliberate determination to write more than two coherent sentences. Now, however, in the fifth week of treatment, having passed through the initiatory stages of alternate excitement and depression, and looking on myself as fairly entered on the high road to steady health, I find myself possessed with courage to look on pen and ink without horror; and proceed accordingly to attempt the fulfilment of my promise. In doing so, however, it is not my intention to trouble you with any details of my own particular case. I wish to keep my mind altogether unbiassed by personal feelings, and to write rather from what I have seen and known in the case of others, than what I have as yet fully experienced in myself. How I got out of the “Slough of Despond” at the outset of my hydropathic progress, I may, perhaps, tell you; but “the Hill of Difficulty” is yet before me, and I bear a burden on my back which would render all inference from my own case premature and unsatisfactory. Persons who have been fairly and fully cured of long-vexing maladies by hydropathy are as apt to over-trumpet their laudations, as disappointed expectants are to depreciate the merits of the system. No therapeutic procedure can cure every one; and I shall endeavour so to state the features of the treatment that your readers may be able to judge of its merits from general facts and principles patent to the whole world, rather than from the solitary and, it may be, capricious experience of an individual.

How shall I commence? Perhaps I had better start by answering a few vulgar objections; for, notwithstanding the well-known cases of Dr. Clark and other respectable denizens of your city, there are no doubt persons benorth the Don not a few, who, whether from ignorance, interest, or cowardice, are

ready to denounce the new hygienic treatment of Priessnitz as a foolish or even a dangerous system of quackery. Aberdeen, as we may well conceive, possesses its own share of those practical Sadducees who believe neither in angel nor spirit, but only in themselves and the old opinions which grew with their skin, and who are ready to meet every new gospel that is preached with that question which the old Athenian philosophers jerked into the face of the great Apostle of the Gentiles, "*What will this babbler say?*" For the sake of these gentlemen, and those more modest, though not more ignorant persons, who may be misled by their pretenceful prating, I venture to state the matter thus—

In the first place, I enter a stout protest against the maxim which leads the opinions of many on this subject—that medical men only are capable of giving a correct opinion on the merits of any therapeutic system. Medical men, or, at least, the overwhelming majority of medical men, it is said, disallow the medicinal virtues of cold water; and it betrays a most contemptible conceit in us, the unskilful laity, to pretend to an opinion in the face of such an array of learned authority. This consideration moves many persons, who are either timid in their temperament, or shallow in their habits of thinking; but a moment's reflection will teach us to discriminate. No doubt, a lawyer is the fittest man to draw out a deed of entail, and none but a fool or a madman will attempt to build up a rampart of clauses, irritant and resolute, in due legal form, without professional training or advice. So, also, none but a regular physician will consider himself justified in tempting the human body with such perilous irritants as arsenic or antimony. So far, my respect for professional skill is unbounded. But whether deeds of entail ought to be made at all—whether such drugs as arsenic and antimony are, in any case, to be used, these are questions entirely different—questions, the solution of which is to be found, not in the special sciences of law and medicine, but in that grand philosophy of human nature, which is the judge of all sciences, and the master of all trades. So, also, in theology, I ask a Professor of Divinity what is the meaning of a certain clause in the Nicene Creed, or of a certain chapter in the Confession of Faith; but whether Nicene Creeds and Westminster Confessions being made, are to be received as a theological ultimatum—whether they ought to have been made at all, is a question which orthodox theologians, from their very position, are forbidden to entertain, and, with regard to which, therefore, I must betake myself directly to the Gospels, with the assistance of my own mother wit, and whatever acquired learning I may possess.

You see, therefore, sir, how little a sensible layman, in his judgment of the merits of different systems of medical treatment, needs stand in awe of the Faculty. He is not only not an incompetent judge of such matters, but he possesses certain conditions of a sound judgment, which, as things are constituted, the professional man, in the great majority of cases, may not enjoy. As the theologian to his creed, so the medical practitioner is tied to the therapeutic doctrines on which his practice proceeds. By the doings of many years, he has committed himself to certain rules, and is not in a position suddenly to cast off all his old principles, and embrace a course of practice founded on principles entirely opposite. But the intelligent layman possesses, from his mere position, the first condition of every sound judgment—he is free. If he has less learning than the academically trained M.D. he may have more wisdom; if he has less skill, and less experience, he may have a surer glance to discover where skill is applicable, and how experience may be made available.

But I go a point farther. Not only is the professional physician not entitled generally to exclude the intelligent laity from passing a judgment on medical matters, but, in this particular question of hydropathy, the strife, though started by a layman, has already passed into, and now divides, to a certain extent, the camp of the regular practitioners; all the great hydropathists in this country, at least Doctors Wilson and Gully at Malvern, Dr. E. Johnstone at Umberslade Hall, and Mr. East of this place, being regularly trained medical men of acknowledged talent and character. This alters the question to the public view, it must be confessed, considerably. A layman is thus not merely entitled, he is forced to choose between Hydropathist and Pharmacopathist. So in the domain of religion, Whately has somewhere strongly shown the absolute necessity a thinking man is placed under, of being, to a certain extent, a Protestant, of exercising more or less the right of private judgment. One must, at least, examine on what foundations the claims of Popish and Puseyite churchmen to infallibility rest. Were there only one undivided front of a Catholic Church in the world, this necessity of sifting sacerdotal claims might be readily blinked; but when church stands against church, and priest denounces priest, the perplexed conscience of the layman has no refuge but the vulgar and too much despised court of sound reason and common sense. Thus, also, in medicine; only much worse. The teachers of medical doctrines are divided amongst themselves to a much greater extent than the inculcators of theological creeds. Hippocrates—once a revered name—and Paulus Ægineta stand no longer to the medical

world of this country in the same relation that St. Augustine and John Calvin do to our Confession of Faith. The theologians stand upon a broad foundation of uninterrupted tradition, and, without cumbrous excavations with Greek and Hebrew pickaxes, are not easily shaken; their roots strike through centuries; but cod-liver oil is a thing of yesterday, and the use of prussic acid in medicine dates not later than the beginning of the present century. The fact of the matter is, and Pereira's *Materia Medica* will prove the fact to any one who will read it, that, except a woman's temper (according to Virgil) and a woman's dress (according to the Parisian milliners) there is nothing in the mighty mundane machine which we inhabit more mutable than medicine. A great part of the professional art of healing consists, and has consisted, according to the testimony of the most honest practitioners, in making experiments in the dark; and when "the blind lead the blind" 'tis nothing strange, if, on occasion, "both should fall into the ditch." Amidst this general obfuscation of ideas, if an intelligent layman chooses to light a rush candle, and help his brother through the mist, what argument, except, perhaps, that stale one from the breeches pocket, can the regular practitioner advance why advantage should not be taken of the chance? especially if the said regular practitioner, giving his petty candle out for the sunlight, has proved an *ignis fatuus*, and, after whisking about in all directions through one maze of misery into another, has left me, at length, worse than he found me—

All bruised and bleeding, sprawling in a bog.

I could say much more on this subject. I believe that, though the practice of medicine is delicate and difficult, and demands all the knowledge that combined science and experience can afford, its principles are obvious and patent to all men who, being accustomed to pass sound judgments on the ordinary affairs of human life, will apply their minds with common attention to the phenomena of this particular art. I could illustrate this by many practices of the healing art familiar to every mother of a family. But I pass on to another objection. Hydropathy, it is said, comes before the world with the common device and heraldry of quackery graven legibly on its face—it treats all diseases indiscriminately by the same nostrum. Its boasted simplicity is with the discerning mind alone sufficient to prove its inefficiency. This objection looks very wise; but, like many very wise-looking propositions, not being applicable to the facts, it fails on scrutiny. It is a common practice, with all loud denouncers of new gospels, to suppose and to pervert facts rather than to investigate them. If the

definition of quack medical practice be this, that one drug, professing to cure all the ills that human flesh is heir to by some mystical virtue, is applied, with a blind indiscrimination, to every morbid temper of the body, then there is no system of therapeutics to which this charge is less applicable than to hydropathy. The hydropathist does not profess to cure all diseases. Even in cases of great promise, he knows that the event of the curative process lies fundamentally with nature and with God; but, in certain cases, his diagnosis tells him that, if the common drug-treatment is bad, water is nothing better; therefore, he wisely lets the case alone, and tells the patient to keep himself quiet, and let nature work and God rule. As little is it true that, in the cases which his diagnosis allows him to undertake, the hydropathist treats all cases indiscriminately. To be sure, in all cases he applies water more or less in some shape; but the shapes in which this single element of water may be applied are sufficiently various, and its effects, when applied, in the same shape, to persons of different temperaments, and suffering from different ailments, are equally so. But, with what conscience can the regular practitioner object to the alleged promiscuous use of water in the treatment of various and opposite diseases, when he himself uses mercury and one or two other favourite specifics in almost every ill that can shake the compact human body from its propriety? Sir Astley Cooper, as his words are reported (see Johnstone's *Domestic Hydropathy*, just published), was willing to march the length and breadth of the land with opium in one hand, and calomel in the other, and do battle with death and disease victoriously, throwing the various pharmacopœias, and the 1417 pages of Pereira, into the fire. If these two drugs be of such universal thaumaturgic virtue, why not hot and cold water? Are they to be despised merely because they are not dug out of Styrian rocks, or drained out of Turkish poppies? merely because they are common? Shall we say with the old Syrian captain (2 Kings v. 12), "Are not Abana and Pharpar rivers of Damascus; may not a man wash in them and be clean"? It is not to be doubted that there is a good deal of this feeling lurking at the bottom of many objections to hydropathy, which please themselves in taking a different dress. The thing is too simple, too patent, not sufficiently mysterious. One cannot imagine how so common an element as water should produce such extraordinary effects. Herein the most interested part of the professional world, and the most ignorant part of the public, instinctively agree. Both are lovers of complexity and mystery. The lawyer loves complex forms of deeds; the divine anxiously-compiled creeds; and the medical man a copious

and curious catalogue of drugs. So, on the other hand, the layman would not be saved too readily from hell or from hiccup; he loves to mount to heaven painfully, climbing the sacred stairs on his bare knees, as they do on the slope of the Capitol at Rome; he will not be cured without bleeding; he must have pills, were it mere bread pills (as are sometimes given) to amuse the fancy. So neither will the lawyer's client be apt to think his case well pled, if nothing is said but what he thinks he might have said himself. The sound of technical words is imposing, and the authority of learned names is weighty. So the multitude are led. But a reflecting mind will perceive that simplicity of machinery, producing great results, so far from justifying a suspicion as to the reality of these results, is, on the contrary, the most legitimate ground of the highest species of admiration. Very different from such an intelligent admiration is that staring stupor with which the ignorant regard the mysterious bulk of that complex machinery which clumsy practitioners bring to bear on their prostration. The highest praise of a human artist is to attain to a little of that excellent wisdom of God in the creation, which, always aiming at the noblest ends, never expends a cumbrous strength where a slight exertion of power is sufficient. Let not, therefore, hydropathists be charged with the simplicity of their great curative agent, but let the grand inquiry be, in the first place, the certainty of their cures. If the unclean spirit is once fairly driven out of a man's body, surely it is a very unreasonable thing for one to complain that the process of exorcism has been too easy. In such cases, the less labour, one is apt to think, the better.

In these remarks, I hope I have, at least, made out a fair case for the hydropathists, to the effect that, with reasonable men, they shall be admitted to a full hearing, and not, in the very threshold, be confounded with the vulgar herd of dealers in universal purges and concoctors of miraculous lotions. Other objections to the hydropathic practice that I have heard are so puerile or old wivish—running away reasonless with the fragment of a fact, or the bare imagination of a fact, that I cannot find it in my heart to honour them with a serious confutation. Some people, for instance, are possessed with a sacred horror of lying in a wet sheet, and getting rheumatism into their loins or inflammation into their lungs. These sapient persons never, for a moment, think of considering that *lying* in wet sheets is one thing, and being *packed* in a wet sheet another, and in its operation quite the opposite thing. The one produces cold, the other produces heat. The one invites rheumatism, the other draws it away. Is it so strange a thing, in this strange world, for causes to beget effects quite the reverse of what was

to have been expected from their direct and obvious operation? If the venting of a confined storm be often the speediest, and sometimes the only efficient way of producing a calm, why should not the application of a cold sheet, under wise scientific direction, be often the best, and sometimes the only way of inducing a certain, salutary action of caloric on that important organ the skin? Again, some persons have a terror of cold water taken internally, and prefer port wine, especially when they are a little "out of sorts," as the phrase is; for which very natural preference they can even quote the authority of St. Paul, writing to the dyspeptic Timothy—"Take a little wine for thy stomach's sake, and for thy many infirmities." Such persons are apt to imagine that water "thins the blood," and deprives the face of its natural jolly rubicundity. But 'tis a mere imagination. Let them come to Dunoon and see. We, who rise every morning at six o'clock, and jump into a trough of cold water immediately after we jump out of bed, and drink four tumblers of the same "best beverage" ("ἀριστον μεν ὕδωρ") cold from the hillside, before breakfast—we, hydropathists, I say, who expose ourselves in all the high-ways and by-ways about Dunoon to public inspection, are not remarkable for any preternatural pallor of complexion, or for any watery feebleness of the vital fluid, but rather display a purple glory of physiognomy that would shame any ancient Bacchus, or any modern Man of the Moon, looking through a dense atmosphere of Glasgow smoke. I hope, therefore, to hear no more of such puerile prating and senile hallucinations. And now, having chased away the rubbish that I found blocking my way, and blown off the bubbles, I shall endeavour, in my next letter, to state the therapeutic merits of hydropathy in the most popular and intelligible way that I can, premising only here, that I write, with no inspiration of hostility to the "regular practitioners," who never did any harm to me that I know, but always good, as often as I had unfortunate occasion to make use of their skill; and this I must also take the liberty of saying in their praise, that none of them ever, in my hearing, gave deliverance to any of those vague blasts of invective against hydropathy which are reported against some of them, and which it is only too natural to believe that a great many of them cherish. On the contrary, of three medical gentlemen of talent and character, whom I consulted in Edinburgh, two of them gave it as their decided opinion that the hydropathic treatment was the best possible thing for me, and the third, while he indicated a different treatment which he should consider preferable, had nevertheless no hesitation in saying that the water discipline could not possibly do me any harm, and might in all likelihood

operate a perfect cure. The fact of the matter is, Mr. Editor, that in these latter days, heresies of all kinds, physical and metaphysical, are everywhere so rank and prosperous, that even those who relish them least are afraid to act the orthodox tiger so rabidly as was once fashionable.

I am, my dear sir, yours sincerely,

T. T. ABERDONENSIS.

KIRN-PIER, DUNOON, June 1, 1849.

No. II.

DEAR MR. EDITOR,—Though there are few subjects more delicate to theorize on than life and disease—both in their inner kernal inscrutable mysteries—and, though old Doctor Gregory is reported to have said, in his rough Johnsonian style, that “all medical doctrines are stark-staring nonsense,” yet a man must, in virtue of his rational nature, be tempted, on all serious occasions, to look into the causes as well as the results of things ; and medicine, notwithstanding the many perplexities that entangle it, is, no doubt, to a certain extent, a well-reasoned science, as much as, in some of its branches, it is unquestionably an empirical art. Why arsenic should check the formation of leprous scales on a man’s skin, or quinine help one to shake off the ague, or lemon juice cure scurvy, no man knows ; and the art of healing exercised in such cases is no science, that is to say, no collection of facts subordinated to a principle, and capable of being reasoned on, but a mere art or trade, founded on chance observation, and leading to no conclusions beyond the event of the individual case that may happen to be under treatment. But, on the other hand, if a man’s brain be inflamed, and you apply a jet of cold water, or a bladder of ice, to counteract the unnatural development of heat in the cerebral region ; or, if his windpipe be touched with the same excessive sanguineous action (as in bronchitis), and you clap a blister on his chest to draw off the superabundant heat from the internal organ to the external coating of the body ; in these, and in a hundred such cases, common sense discerns the principle on which the case proceeds, just as naturally as we understand how a force-pump should put out fire, or a drain cut in one direction cause a drain in another direction, previously well fed, to run dry. Proceeding, therefore, on the assumption, warranted by a thousand facts, that every therapeu-

tic system, which is not mere quackery, proceeds on some principles that can be made intelligible to a reasoning man, I shall endeavour, in the present letter, to state the main principles of the hydropathic art of healing, shortly as follows :—

The curative agents of the Hydropathists are four—

- 1.—HEAT and COLD applied to the human body, both externally and internally, principally, though not exclusively, in the form of water.
- 2.—AIR.
- 3.—EXERCISE.
- 4.—DIET.

On the other hand, the curative agents principally employed by the Pharmacopathists are—

- 1.—As the name which we have given them denotes—
DRUGS.
- 2.—BLEEDING and BLISTERING.
- 3.—DIET.

This articulate statement shows, in the outset, how much they are mistaken who run off with the idea that hydropathists use water in the therapeutic art for the sake of any extraordinary virtues residing, or imagined to reside, in that ancient beverage. No doubt Priessnitz and Weiss assert, that water is a good drink and the best drink for a human being, and that cold spring water is, in fact, as salutary to a man's stomachic and intestinal machinery as fresh mountain air is to his lungs. But this nutritive virtue is a part, and a very small part, of the power of water in the hydropathic practice—the pure element, in fact, when applied externally to the human frame, being valuable, apart from the benefit of mere cleanliness, as a generator of heat in the body, or a conductor of heat from it, as the case in hand may require. A moment's consideration of the matter will show to the intelligent, how far this single statement goes to remove from the face of hydropathic practice, the charge of quackery so ignorantly brought against it. The water-doctor does not vaunt water as the pill-doctor vaunts his pills. Water is not his instrument but his medium. If he achieves wonders by this medium, he achieves them as the chemist does, who, without heat and solution, mingles his nice and curious atoms in the alembic vainly. But, more than this, hydropathy is not a mere system of water drinking or of bathing, however curiously diversified from the soothing envelopment of the wet (actually *hot*) sheet to the rude dash of the

douche ; it is a combination of such a system with those grand hygienic agents—*air, exercise, and diet*. Let those who are hasty to abuse hydropathy consider the natural potency of these things first. But, farther—

It is by no means necessary to the therapeutics of the water-doctor, that he should confine himself exclusively to water, with its three grand natural adjuncts of air, exercise, and diet. Sufficient that these hygienic agents have a marked prominence and a decided preponderance in his practice. There is no reason why he should not use drugs also, provided these be drugs of gentle virtue and innocent operation, and be used only occasionally in certain special, thoroughly understood, and easily controlled cases, and for the attainment of a merely temporary purpose. Priessnitz, to be sure, uses no drugs—as little does his disciple, my excellent landlord, Mr. East—but Dr. Johnstone of Umberslade Hall does sparingly ; and with perfect consistency as a hydropathist. The main features of his practice are borrowed from Priessnitz, and identical with our practice here on the Clyde. 'Twere, indeed, a futile pedantry to attempt the exclusion of all drugs from the practice of the healing art ; for, amid the multiplicity of things convenient for the human system, which Nature brings forth plentifully, it is not always easy to say what a drug is. Strictly speaking, everything is a drug beyond plain water, plain milk, plain bread, and fresh meat. Salt, the grand antiseptic of Nature's own laboratory, is a drug—a drug of extraordinary virtue, wherewith the floods of the untainted ocean have been medicated from eternity. And does Mr. East, think you, anxiously exhort his convalescent patients to avoid the deep and briny plunge-bath that lashes this picturesque coast, choosing his private shallow trough of well water in preference ? The hydropathists, truly, are no such anxious pedants. Mrs. East, the most nimble-handed of hydropathic landladies, deals out to our voracious hydropathic appetites, large allotments of pasteless rhubarb, three times a-week, or every day, if we will ; and rhubarb is surely a drug. The hydropathic philosophy teaches the physician to suspect rather than to denounce drugs—to subordinate, not to banish them—to keep them as a reserve in desperate cases, rather than to palter with them in every little derangement of the system. On the other hand, a man may richly deserve the title of a drug-practitioner, though he now and then apply a cool bandage to the head, or cold immersion to the hips. So the Englishman is a beef-eater, the Hindoo a rice-eater, and the Neapolitan a muncher of maccaroni, not by exclusion of all other kinds of food, but by strongly manifested preference.

These things being premised, the hydropathist, when charged by the discriminating pathologist with undiscerning empiricism, may state the scientific reasons of his practice thus—

I. Of all the influences that act upon the human body as causes of disease there are none at once more powerful and more general than heat and cold, humidity and dryness ; and, if their regular and abnormal action of these influences produces disease, it is most reasonable to suppose that their regular and well-tempered action shall promote health. This is a proposition which, when put in this general form, no pharmacopathist will venture directly to dispute. The fact that, in the frozen regions, the palm trees and mango groves of the south degenerate into mere creeping crusts of vegetation, scarcely discernible from the grey rock to which they cling, points out a connection between life and heat—between cold and death—which a philosophic physician may develop into most curious and important consequences. So, on the other hand, the excessive heat of the tropics generates pestilential miasmata from the moist places of the earth ; these miasmata produce putrid and infectious fevers ; and fevers, consisting in an excessive and fretful action of the vital fluid, the blood, work the system out violently and produce death. I refer to these facts, because they are familiar and known to every one. But mark the consequences ! By the judicious application of hot and cold water, the hydropathist has the temperature of the living frame completely under command. Whatever change can be effected on the body by the influence of heat and cold, that the practiser of the water-cure can effect in a manner of which the mere drug-practitioner has no conception. Cold water seems a simple and a common thing—not naturally adapted, one should think, for working therapeutic miracles, such as famous ointments, lotions, electuaries, and preparations of all sorts, are vaunted to perform. But, however simple and common the watery element may be, the cold which exists with it in a state of consubstantiation (to take Luther's phrase) is one of the most startling potencies in nature. Cold conquered Napoleon at Moscow, and daily conquers delicate young ladies in consumption, and stout gentlemen of middle age in the shape of rheumatism and ague. Why, then, says the hydropathist, may we not take this so dreaded agent into our pay, as we have taken gunpowder and steam, and so many other powers of nature seemingly uncontrollable ? Shall we shrink into a corner before this harsh minister of Death, wrapping ourselves in flannels, and fretting ourselves with feverish drugs, or shall we not

more wisely learn to make a sure friend of him, and even an obedient servant? The attempt surely is deserving of being made; and while your orthodox practitioner combats a feverish fit by depletion and drainage of all kinds, and by that pharmaceutical factotum, mercury, why should not the hydropathic heretic boast the virtue of wet sheets and cold affusion? Your nice gentlemen with the lancet takes the overheated blood away altogether; our rude administrator of the sheet contents himself with taking the heat out of it. You may say what you like about the practical results of the appliance—there is certainly no absurdity in the theory. On the contrary, nothing appears more obvious than to temper heat by cold—to squirt spring water in the face of flushed fever, and make it look blue. But of this more anon. Meanwhile, let not that system of therapeutics be charged with quackery which sets itself to do the work of healing, not by perilous experimenting with slippery specifics and nostrums not easily reined, but rather in the wisely graduated and scientifically calculated application of those grand natural influences, the proper equipoise of which is the necessary condition of health, as a disturbance of their just equilibrium is at once the most general cause, and the most common symptom of disease.

II. Again, there is a large class of diseases which the human being brings upon himself by over-culture, over-civilization, and over-excitement of all kinds. A great proportion of these diseases are commonly covered by the comprehensive name of Dyspepsia or Indigestion—a name which includes various ill-defined and ill-understood varieties of intestinal and nervous derangement; while, at the same time, it expresses the æcret root of various other diseases which show themselves on the surface of the skin, on the extreme joints of the limbs, at the greatest possible distance from their grand centre of action, the stomach. So a spring may break out in a thousand places, but its grand reservoir in the womb of the rock is one. Now, with regard to the long and, it is to be feared, not decreasing catalogue of diseases of this kind, the hydropathist acts with a manly consistency, on a therapeutic principle, the virtue of which is plain to the most shallow understading. Has the farmer over-manured his field this year—let him contract the supply next year, and he may expect a more healthy crop. Has the “fine old country gentleman” over-irrigated his stomach with alcoholic dews, and over-irritated the ganglionic net-work of nerves, on the sober tone of which the digestive function depends—let him diminish the daily dose of stout Port, by which this unhealthy excitement is produced, and the

red nose and the inflamed toe will forthwith disappear. So of a thousand ills which aristocratic blood and fashionable flesh in this beef-eating, wine-swilling England, is specially heir to. "There is no need of starvation," as Dr. James Gregory used to say to his students, exhibiting with a broad complacency his own robust form and fresh complexion from the academical pulpit; "you will allow that *I*, at least, am no starvling, and yet it is only by keeping my body, or at least my appetite, to a certain extent under, that I keep the hereditary evil genius of our family, that is to say the gout, at a distance." Gout, though it loves the great toe, is, in fact, according to the best pathologists, a disease which draws its nourishment from a deranged stomach; so to cure it, the doctor sets up an acrid irritation in the duodenum, by a vile poisonous vegetable drug, famous for killing dogs, called colchicum, which creates what military men call a strong diversion in another quarter, and thus the aristocratic toe is relieved for the nonce. But if you wish not merely to relieve the gouty fit, but to eradicate the gouty tendency, there is only one plan known or possible—a plan described at once by Nature and by the Gospel, by Dr. Gregory and by the Hydropathists, and that is, **TEMPERANCE**. Remove all the artificial stimulants, whether wine, porter, or pepper—whether over-anxiety about moneymaking, or over-excitement about intellectual distinction, which are the constant producers of disease in a high state of civilization—and the disease, of course, goes. The "regular practitioner" sees this obvious truth, no doubt, as easily as you, Mr. Editor, or I do, but he does not—and, in many cases, cannot—adopt means to make his knowledge tell by turning it into a deed. His gouty patient sits at the family fireside, with the key of the old ancestral wine-cellar hanging up on the old peg of the well-known corner of the cupboard, full in view. 'Tis a difficult thing to cure gout under such circumstances. So a student in the midst of his papers, and a diner-out in the midst of his invitation-cards, is hard to deal with. Colocynth or colchicum may clear off the immediate inconvenient results, but the ultimate consequences of intellectual or physical excess can be cured only by Nature's great regulator, **MODERATION**; and by her great high priest, the **HYDROPATHIST**. Let the plain truth be understood plainly, without vain talk; there is no method of learning to be healthy but by giving up unhealthy practices. This is more than half the secret of the water cure, in nine cases out of ten where it has proved most efficacious. Whosoever leaves his indolent fireside, or his feverish routine of dinner parties, or his anxious desk, and takes up his dwelling in a hydropathic establishment, at once snaps the chain that

binds him to the thousand-and-one unnatural habits which are the product of self-indulgence, false refinement, and unreined excitement, and is submitted forcibly to a calculated series of those powerful natural influences by which God meant that man should live and be happy. Hydropathic therapeutics consist in the systematic establishment of habits of living agreeable to Nature. Drugs may have virtues; but that such a system of pure, natural hygiene should not produce health is impossible.

III. The hydropathist—the practiser of an art not merely palliative of disease but creative of health—is of opinion generally, that the present system of drug practice deals too much with the diseased body, as if each disease were a distinct and separate thing, to be treated by itself, irrespective of the great vital organism, of whose condition what we call distinct diseases are generally only symptoms. The disciple of Priessnitz not only denies the doctrine of specific nostrums—with a very few singular and familiar exceptions—in the gross; but even where a morbid manifestation can be certainly met and counteracted by a healthful antidote, he refuses to employ that antidote while there is any danger—as there too often is in drug practice—of its subduing the particular disease only at the expense of the general health. This is a most important point. A drug-doctor, with arsenic, antimony, mercury, opium, strychnia, colchicum, prussic acid, and a whole armory of potent poisons at his command, will often cure you of the particular malady for which you called him in; your fit of dysentery, or your rheumatic twitch is gone, and the doctor goes with it, bearing your guinea in his pocket, and your gratulation in his ear; but though the particular morbid symptom has disappeared, by the power of the drug, your general morbid condition may remain; this you will soon discover, and your friends read it in your face. You are at peace for a season, but you are not sound. Be not deceived; the cat has merely hunted the rat into another corner, whence, if you wait a little, you will hear the scratch and see the snout of the invasive creature again. Now, the hydropathist boasts that he cures all diseases, in such wise only as to restore and preserve the general health—nay, he seems even to go farther, and say that the greater number of diseases are curable simply *by* restoring and maintaining a general sound state of the system. The blood, as the Old Testament teaches, is the life of the beast; and, while the orthodox dispenser of iodine and arsenic removes an external tumour or blotch only by the help of means which go to poison the rich flood that is the source of all life, the hydro-

pathic physician, with Liebig for his witness, sets a series of healthful processes in action, which "create and distribute more sound blood in three weeks than would happen in the ordinary course of nature in three years." This deserves consideration surely. A man of pith will rather choose to die at once than be cured in such a fashion by drug or lancet, as that he must creep through the world on crutches and in a flannel jacket, more than half dead while alive, and the sure mark of the first arrow that Death may commission the East wind to ruffle his skin withal. The hydropathist, on the other hand, professes to cure by strengthening, or not at all.

IV. *Lastly*—for I see my letter is like to become a lecture—it is not the smallest praise of the water-cure, that it draws off morbid matter from the system by the rough outward skin chiefly, and not by the delicate internal tissues that line the stomach, and the other internal organs of digestion. The wet sheet, the hot blanket, the abdominal or other wet bandage, in familiar use by the hydropathist, are all appliances to the skin; and how operative they are is indicated by the fact, that mercury, iodine, and many other pernicious substances that have been insinuated into the living system by continued drugging, have been brought out again bodily from their internal lurking-places by the simple appliance of cold water to the skin. This part of the philosophy of the hydropathic art of healing is what I never can sufficiently admire. Why disturb the curious internal machinery of our wonderful bodies—a divine workmanship—by a bungling mortal hand, when we have a more clear and a more safe way of achieving the same object in the surface of the skin? Why drive off rheumatism by colchicum, tearing and tormenting the delicate and all-important intestinal tissues, when a wet sheet or a hot blanket applied to our work-day coating can triumphantly do the need? With these questions, the plain water doctor plies the curious compounder of pills; and, taking the facts as alleged by the most creditable testimony, it is really hard to imagine how a satisfactory reply can be given. We do not examine the facts at present, but we give both parties credit for common honesty; and, in the meantime, we must say again, as was said already, the theory of hydropathy looks fair enough; not at all like quackery; very much like common sense.

And now, Sir, I have not done, but I must cease. I have not said everything that might have been said, but some things I hope to the point. I have given you reasons, as Dr. Johnson used to say; an understanding you are bound to have for yourself; and if you want facts, I can only say—*come to Dunoon*

and see. Our doors are open, and you are perfectly welcome to enter, and safe to witness, or to make experiments. If we can do you no good, you may rely upon it we shall do you no harm. There is nothing more safe than hydropathy. Under the discreet superintendence of Mr. East, the most cautious Aberdonian has no reason to shrink even from the *douche*.

In my next letter I shall state more particularly the different shapes of disease, in controlling which the water cure is most efficacious.

And am, meanwhile, yours sincerely,

T. T.

DUNOON, June 8, 1849.

No. III.

DEAR MR. EDITOR,—When an important discovery, originating with an independent thinking layman, begins to make head against the closely-banded prejudices of an ancient and interested professional corporation, there are two grand methods of talking which the members of the profession can adopt in order to support their own dignity and to thrust the voluntary intruder back into contempt. They can say that the whole discovery is a pretty bubble with which children will delight to play for an hour till the wind puff it into inanity; or they can allege that it is no discovery at all, but, in fact, only a magnified and multiplied distortion of things already well known to the regular practice of the profession. These two methods of speaking, you will observe, are incompatible with one another; if the one be true the other must be false; the absolute rejection implied in the former cannot co-exist with the qualified acceptance conveyed in the latter. Now, with regard to the water cure, a phenomenon so essentially laic and unprofessional in its origin, the regular practitioner, who does not take it under his patronage, has no course left—unless he be a pure dunce—but to accept the system in its fundamental principles, and deny stoutly that there is anything new in it, except the exaggeration and caricature with which it is now for the first time exhibited. It shall be my object, in the present letter, to prove to you, Mr. Editor, and your shrewd northern readers, that the principles of the hydropathic art of healing stand allowed and even lauded in the journals of the most reputable drug doctors; and that the disciples of the Silesian peasants

cure no diseases by cold water in which the application of that powerful fluid has not already been recommended by most authoritative members of the regular profession. I shall be able, without the slightest difficulty, to show you that hydropathy, like many other of the greatest discoveries, is both old and new—old in the recognition which the wise of all ages have given to its principles—new in the more curious adaptation and more extended application of which these principles have at length been made capable. Those who wish to see more in detail, that hydropathy is not a new thing, may read the admirable article, by Dr. John Forbes, in the *British and Foreign Medical Review* for October, 1846 (an article which, coming from such a quarter, must stop the mouths of all but absolute fools); for the present I must content myself with citing the authority of well-known medical writers in support of the water-treatment in the case of those diseases to which, so far as my present light goes, it seems to me most applicable. For the sake of conciseness, I shall again take the liberty of dividing my letter—somewhat too much like a sermon, it must be confessed—into heads; and the heads of the discourse shall be, as in my previous communication, four.

In the *first* place, if there be any truth in the views advanced in my previous letters, it is to be inferred that cold water should be the most powerful therapeutic antagonist in all cases of febrile and inflammatory disturbance, to which the healthy temperament of the human body is liable. Now, the fact here is exactly as we should presume. "Priessnitz," said Mr. East, in my hearing, "laughs at a fever." Fever is, in fact, the favourite battle-field of hydropathists; and here, amid the keen arrows of swiftest death it is, that he would wish to try his mettle in the fight, alongside of the pharmacopathist, armed with his lancet in the right hand, and his mercurial pill in the left. 'Tis a common notion, indeed, that the water-treatment shows its powers chiefly in chronic ailments—a notion which a rash inference from the title of Dr. Gully's masterly work seems to justify. But the truth is that, as hydropathic establishments have hitherto existed, persons labouring under chronic diseases were the only sheep that could conveniently be brought into the fold; and, besides, this sort of invalids consisted, for the most part, of persons whose malady had, for years, been assailed by all the appliances of the common drug practice in vain. In acute inflammatory and febrile attacks, no man could deny the virtue of the lancet; and mercury could never make the gums sore, as the indication of a super-induced diseased action, without giving rise to a correspondent alleviation of the original complaint. Two violent abnormal actions cannot

readily exist in the body at the same time ; but chronic ailments having their root generally in an evil habit of body, demanded a treatment of an essentially hygienic character, for which mercury and the lancet are little suitable. These are the causes that seem to have given rise to the common idea that the water treatment was fit only for such creeping cases of discomfort as the metropolitan physician had generally remitted to Harrogate and Scarborough, in the hope that air, exercise, change of scene, and so forth, might effect a salutary change, where all the armoury of druggists and cuppers had been exhausted. But Mr. East wishes for nothing more than to have the control of a fever ward in Glasgow or Manchester. There, he knows that the efficacy of his favourite element will be proved to the public eye in a manner more decisive and more impressive than is possible in the languid and unnoticed course of protracted ailments. In this department he knows, also, that the pharmacopathists have long ago paved the way, by special precedent, for that better system of treating fevers "which must one day become universal." Witness the following eulogy of cool air and cold water from the article "Fever," in *Copland's Cyclopædia of Practical Medicine*, vol. II., p. 251 :—

A more effectual mode of reducing the morbid heat is by the free application of cold. The admission of cool air is of much importance in all acute diseases, but more especially in fever. Those who are conversant with the treatment of fever among the poor are well aware of the favourable changes in the symptoms which are often rapidly produced after patients are removed from their filthy abode to a well-ventilated chamber, or to the ward of an hospital. The whole complexion of the disease is frequently altered in a few hours. In every case of fever, the temperature of the apartment should be duly regulated—the air renewed from time to time, the linen (both of the bed and the patient) should also be frequently changed (once a-day if practicable), and the bed-clothes adapted to the heat of the skin and feelings of the patient.

A more direct mode of applying cold, in the treatment of fever, is the application of cold water. Though this practice appears to have been known to the ancients, and to have been occasionally employed in modern times, it was not generally adopted, as a remedy in the treatment of fevers, till Dr. William Wright, formerly of the island of Jamaica, published an account, in the *London Medical Journal* for 1786, of the "successful treatment of some cases of fever, by the ablution of the patient with cold water." He first adopted this treatment in his own case, and states that he was encouraged to try it from personal experience of the effect of cool air in mitigating his pains. He succeeded in arresting the progress of the fever after twice applying the cold affusion. The successful issue of this case induced other physicians to give the plan a fair trial. To the late Dr. Currie of Liverpool, however, is due the merit of having first attempted to regulate this practice from accurate observation of its effects. When the cold affusion is to be employed, it is proper to ascertain, with accuracy, the temperature of the patient. The instrument best adapted for this purpose is the mercurial thermometer with a small bulb, and carved at the end. The bulb is to be introduced

under the tongue, with the lips close, or under the armpit—the heat in these two situations being found, by experiments, to correspond exactly with, and to give a just indication of, the heat of the surface of the body.

The mode of applying the cold affusion is to have the patient stripped naked, and three to five gallons of water, at the temperature of 40° to 60° (Fahrenheit), thrown over him. The temperature of the water, however, must depend on the season of the year. The average temperature of water may be taken from 40° to 50° —during the summer months it varies from 60° to 70° . The degree of cold, however, is of less consequence in abating the symptoms than is generally supposed. The effect of the cold affusion, when it is applied with due precaution, is to diminish the morbid heat of the skin, lower the pulse, and to induce perspiration and sleep.

As a general rule, the sooner the affusion is applied, after the irregular chills of the first stage are over, the better, provided the heat of skin is steadily above the natural standard. According to Dr. Currie, the safest and most advantageous time is when the exacerbation is at its height, or immediately after its declination is begun. The heat at this period rises one or two degrees in the central parts of the body, and still more on the extremities, above the average heat. Dr. Currie, therefore, generally directed its employment from six to nine in the evening, though it may be safely used at any time of the day, under proper regulations.

Here, Mr. Editor, I think you have evidence of the most orthodox kind, that the water-treatment, at least in cases of fever, is no novelty, and no quackery. But why, you will ask, “if the benefit of cold affusion in the inflammatory forms of fever (I quote the words of the same article) has been acknowledged by almost every writer or practitioner who has adopted the practice”—why, you aptly demand, has not the practice become general? The answer is best given in the words of the same writer—“we freely confess, however, that there are few patients who can be induced to submit to a remedy so inconvenient and so repugnant to their feelings; and, unless the practitioner can show urgent reasons for its adoption, he will generally find both the patient and the relatives resist the practice.” Mighty is truth! and out it comes, sometimes in strange ways and in strange places, like water through a dam, by its own weight, when no man is forcing it. The cold water treatment must be abandoned, not because it is bad, but because the sleek medical adviser of the family has not courage to plant a rough truth down where it ought to stand, but sneaks cowardly off from crossing the wayward humour of the peevish patient, and the silly fancies of his nervous relatives! This will never do. A doctor ought to be a despot, or there is no need of despots in the world. But, if the “regular practitioners” failed in their duty here, and neglected the cold water applications altogether, or dwarfed them down to ineffective, dribbling ablutions, Priessnitz was no coward, but marched up to meet the hot enemy with a relay of wet sheets on his arm, and the business, at least so Mr. East says, was done. But there is some one else than

Mr. East who says this. Mark what comes. In looking over the new arrivals among our landlord's medical books, the other morning, I found a series of eight green volumes, entitled, "Half-yearly Abstract of the Medical Sciences; edited by W. H. Ranking, M.D., Cantab.; London, 1848;" and, in the sixth volume of the series, on the first page, I found a review of a work entitled, "On the Treatment of Fever by Cold Water; by Wm. Gill, M.D., Physician to the Nottingham Dispensary;" in the second page of which review I find it thus written—

Dr. Currie of Liverpool was the first scientific English physician who enlisted cold water as an external remedial agent in the treatment of fevers. Successful as the practice was under his direction, it has been little followed in later times. It is only within the last few years that the prejudice which existed against the internal and external use of water has begun to subside. "Perhaps," observes the author, "the prominence of the sanitary question, and the many evils proved to arise from the want of a due supply of pure water, have had much to do in removing this groundless prejudice, and may have produced an undue reaction in its favour, causing it to be considered *not only* as necessary to a healthy condition, but as a *curative* agent of universal efficacy. Hence, perhaps, the public mind has been somewhat prepared to receive the hydropathic theory with much more favour than its intrinsic merits demand. An universal remedy will ever find many advocates, and, in a numerous profession like ours, there are ever men to be found who, from selfish motives, will pander to this diseased taste of the public mind. We, as an association, must ever protest against such exclusive theories as prevail in our days, being, in our opinion, unscientific, opposed to experience, and calculated to lead to incorrect views respecting the power of many known and valued medicinal agents. In making this protest against any exclusive theory for the cure of diseases, we must not rush into the opposite extreme, and, from disbelief of their universal efficacy, deny their particular efficacy, when the touchstone of experience speaks to the contrary." The plan the author has adopted for the cure of fever has been a modification of Dr. Currie's. Instead of pouring buckets of cold water over the body, he has it enveloped in a wetted sheet, an instrument more effective than Currie's in reducing the temperature of the body, and producing a warm and comfortable perspiration, which did not uniformly follow *his* plan. The fear of evil consequences from this treatment is groundless. He gives no opinion as to its utility, except in cases of fever. Here, however, he states that he can speak with confidence. When the skin is burning hot, and the mouth and tongue parched, the application of a sheet wrung out of cold water, and applied closely to the whole surface of the body, and evaporation prevented by the application of three or four blankets placed over it, produces a most grateful feeling of refreshment, which is soon followed by a more or less warm perspiration. In young people this perspiration breaks out in from five to ten minutes after its application. In middle-aged people the period is longer. Many uncomfortable sensations are soon relieved by its use, such as the muscular pains in the back, thighs, and legs, and the sense of aching and heaviness. The thirst often becomes less, and even the dry tongue sympathises with the relaxing influence induced on the cutaneous surface. He has seen the low moaning delirium subside while under its use, and some patients, who have not slept before, do so, especially if the hair has previously been cut short,

and a flannel nightcap, wetted with vinegar and water, been applied to the head.

The simple plan he followed has been this—On a flock-bed he has placed from three to five blankets, superimposed over these, a sheet wrung out of cold water, on which the patient, stripped, is placed, with legs outstretched, and arms to the side; the sheet is then drawn tightly around, up to the neck, and enclosing the feet; first one blanket, then another, and so on to the whole number are tightly drawn over the sheet, so as to have the *whole body well and closely packed*. In this state the patient lies from a quarter of an hour to one or two hours, and feels very comfortable. As soon as the gentle perspiration commences, a wine glassful of water is given frequently. At the commencement of this treatment, in a case of fever, he has generally ordered its use for an hour. After that time the wet things are removed, and the sick person is placed in bed, well wrapped in three blankets, and allowed to perspire for three hours; afterwards, the blankets are to be carefully removed, one at a time, so as to allow the perspiration to subside gradually, and the patient is then placed in bed, between the sheets. During the whole of this period small quantities of water should be given. In the summer during this process, a free ventilation may be allowed in the chamber. In winter, it is necessary to have a good fire, and to have one blanket, well warmed, to apply round the body, as soon as removed from the wet sheet. Several cases of incipient fever have lost all traces of disease after the first application. If the fever be not reduced, the next day the same plan must be repeated, keeping the patient in the wetted sheet from half an hour to an hour, according to the intensity of the symptoms, and in the blankets from one to two hours. This may be repeated every day, till indications of a cool skin arise, then it must be immediately discontinued. During some period of this treatment, the temperature of the atmosphere being very high (75° to 78° in shade), the author has not found it advisable to keep the patient as long as two hours sweating; from half an hour to an hour was sufficient. A longer period caused the pulse to be accelerated instead of lowered, which latter is the usual effect of the treatment. In very hot weather, when a free perspiration has been induced at the commencement of the fever, he has adopted the following plan—To wrap the sick person for half an hour in the wet sheet, covered lightly with one blanket—to be then washed all over, with a towel wetted with tepid water, then rubbed dry, and placed in bed between the sheets. He has not found it necessary to make use of the treatment more than five times to the same individual; generally, after the third or fourth application, the skin becomes cooler, and the other signs of fever gradually subside. When the skin becomes cool, and the tongue less dry, he has instantly discontinued all water remedies, and given bark, wine, and broths, and it was surprising how soon convalescence and strength became established. During the whole course of the fever, milk and water, or weak broths, were allowed *ad libitum*. In one person, twice in the course of the same day, owing to the intensity of the fever, it was found necessary to repeat the sheet, using it at the second time for only half the period of the first; a comfortable night ensued. Without doubt this is a most effective mode of *quickly* reducing the temperature of the body. An equilibrium is soon established between the cold of the water and the heat of the body, and the patient becomes bathed in a natural vapour bath, as may be felt by placing the hand under the bedclothes. Where the fever runs high, and the delirium is violent, the wet sheet may be safely applied for short periods (two minutes) in the course of the day. This will be found a more effectual mode of reducing the cerebral excitement than any other means with which we are acquainted.

What say you to this? First a grave sneer of broad professional dignity against hydropathy, and then, without farther ceremony, the "envelopment in a wetted sheet," or, according to the phraseology which we use here, the "wet sheet packing?" There is no praise of Priessnitz here, the inventor of this application, as there ought to have been. But the established professional man is seldom generous to the voluntary intruder; besides, the Reviewer in the present case may have been in a hurry, and wished to be concise. But the result stands firm. After this, if I find any "professional man" speak slightly of the efficacy of cold water in cases of fever, I shall set him down for a half-educated druggist, and treat him accordingly. I do not presume, as a mere layman, to say whether, in such cases, the wet sheet ought to supersede the lancet; but I see enough to enable me to say that it is a most powerful auxiliary in doing battle against the febrile foe; and I am quite certain that the medical man who, in the exercise of a sound discretion, chooses to treat fever by cold water alone, without blood-letting, purging, or mercury, cannot, in the licence of any language used by gentlemen, be denounced as a *quack*.

It was my intention, Mr. Editor, in the present letter, to have set before you under four heads, as I said, the complete classification, so far as I know, of the various diseases to which the cold water treatment is most applicable. But the strong professional testimony to the virtue of hydropathy in fever which I have been led to cite seems to me of such vast importance, that I have judged it better to set it forth at length, and leave it to make its natural impression on the minds of your intelligent readers. Before I came to peep into these matters, I confess I looked on hydropathy as something monstrous and unheard of; but this arose only from my own gross ignorance; and, after a few weeks dipping into the most obvious medical volumes in Mr. East's library, I now see without surprise, that the best way to prove the truth of hydropathy is that adopted by the most dexterous lawyers to prove their case in court, viz.—from the admissions of the witnesses called by the opposite party. I don't know much of political economy, but I think not the weakest argument in favour of the repeal of the Corn-laws is to be found in the circumstance that this reform was carried by Sir Robert Peel, a Conservative, and the head of the Conservative party in Parliament. In the same way, after what I have found about the treatment of fever in the works of erudite Cantabrigian physicians, am I to be blamed for suspecting seriously that there is something substantial in this new German gospel of Therapeutics, and that there may be in the bath

prepared by Priessnitz a virtue for the body, more efficacious than what there is for the soul, in any laver of regeneration that the sacerdotal hands of Papist or Puseyite ever blessed? A corporation of grave, bearded men denouncing quackery and armed with blue pills is mighty; and a physician feeling your pulse looks serious; but if cold water cures me, or has cured my brother, I shall take the liberty to sit in my tub, without leeches, a hydropathic Diogenes, requesting the regular practitioner not to stand betwixt me and the sun.

I am, Mr. Editor, yours sincerely,

T. T.

DUNOON, June 16, 1849.

No. IV.

I THINK, Mr. Editor, you will allow, after the evidence adduced in my previous letter, the hydropathists have made out a pretty fair case for Fever. I find, indeed, in the preface to Dr. E. Johnstone's "Domestic Hydropathy," a notice of a Dutch work by Dr. Weiz, a Dutch physician practising in Batavia, in which it is reported that, out of fifty-two cases of fever treated hydropathically, there were only three deaths—a pretty fair proportion on the right side, especially in that tropical climate. And Mr. East—as I mentioned in my last letter—is equally strong on this point, as you may satisfy yourself in detail from his pamphlet, entitled "How Water cures Typhus Fever when Drugs fail," published at Glasgow (Gallie, Buchanan Street) in the year 1847. If this point alone be established, the world has just cause to be grateful to Priessnitz, and even to honour him with a little of that "hero-worship" which, at the present moment, is made to serve not a few doubting souls in place of a religion. But febrile diseases, as a base of operations being once secured, it is not at all likely that hydropathic practice will stop, nay it is rather certain that they cannot stop there. Consider, in this view, the practice of the pharmacopathists. Their "anti-phlogistic treatment," as they term it—that is to say, the combination of blood-letting, drugs, and low diet, with which they combat fever, is not confined to fever, but sweeps freely over that vast field of disease in which extravagant sanguineous action of any kind is developed—all kinds of inflammation, at least where that morbid state is not the indication, as it sometimes is, of a habit of body, in respect of the vital fluid, considerably below rather than above the

healthy average. If I am not very far wrong—and I have taken some pains to guard myself from error—in all the diseases which end in *itis* (*phrenitis*, *laryngitis*, *tonsillitis*, *carditis*, *peritonitis*, and I don't know how many more), the doctors are in the custom of applying the leech or the lancet, more or less vigorously. These diseases, however learnedly they are paraded with various Greek names, are, in fact, but one disease affecting different parts of the body—they are all inflammations—and the treatment proper to antagonize the one, will, with a few very slight modifications, be demanded to neutralize the other. Into this extensive domain, therefore, the hydropathist, after conquering the cognate kingdom of fever, enters with no rash and uncalculated step, but with the just glow of achieved success, and the fair flush of hoped-for victory. With what right soever the regular practitioner carries his lancet from the fever to the inflammation, with the same right Priessnitz transfers the wet sheet and the tub of cold water. Nay, here also, the pharmacopathist shows the hydropathist the way. “In inflammation of the brain,” says Dr. Elliotson (*Principles and Practice of Medicine*, p. 455), “a bladder of ice laid upon the head, or a stream of cold water allowed to run upon it, are both very serviceable.” After this, surely, no man can quarrel with Weiss for saying (*Handbook of Hydropathy*, second edition, p. 123), “For inflammation of the brain, the hair should be immediately shaven from the spot afflicted, and cold water laid over the whole head, and frequently changed. Several large napkins should be placed in cold water, in readiness to be applied to the head in rapid succession.” So, also, with regard to inflammation of the lungs, a most critical disease, the same writer, after reproving in his cool, sensible way, “the miraculous tales emanating from Graefenberg, of which there is no lack,” goes on to say that, though “true inflammation of the lungs has occurred extremely rarely in Freiwaldau and Graefenberg since hydropathy has flourished there, yet every case which did occur, was successfully treated by cold water only.” And I, myself, have seen a young boy, from Glasgow, in this establishment, whom Mr. East enabled to weather successfully a violent attack of this complaint, by wet sheets and cold water only. ’Twere strange, truly, if medical analogy be worth anything, that a bladder of ice and a cold jet should be profitable to an overheated brain, while a damp sheet and a wet bandage should prove less potent than mercury to relieve the lungs. Gout in the great toe of the right foot demands no other treatment than gout in the great toe of the left foot. Colchicum, says the pharmacopathist, is mighty in both cases. In the same way, water, says the hydropathist, which,

you admit, cools a fevered brain, I assert cools also, and by the same virtue, fevered lungs or a fevered stomach. It is difficult to call the water-doctor a quack when he argues thus.

In farther illustration of this comprehensive chapter of inflammation, I shall take one other instance, and that is the case of a disease more apt to become chronic, viz.—*Rheumatism*. Here, also, the hydropathist claps his hands, and feels that he is playing a sure game. Here, also, his practice can plead famous precedents—can quote authorities in the medical profession as great in their day as any that now lead the fashion in the changeful art of pharmacopathy. “No one remedy,” says Dr. Gregory (*Theory of Medicine*, c. 15) is of such general application in the treatment of chronic rheumatism as warm bathing, general and topical.” Now, the hydropathist with his “wet sheet” as a promoter of general perspiration, and his “hot blanket” as a powerful sudorific, takes up Dr. Gregory’s remedy of very general application, and, after intensifying its power, makes it universal. In this instance, as in so many others, it is instructive to observe how that which, on its first appearance, is violently denounced as a pernicious innovation, turns out, on inspection, to be only the revival of a very salutary old practice. “The cure of rheumatism, by profuse perspiration,” says Dr. Barlow in the *Medical Cyclopædia*, “has fallen so much into disuse that it can hardly be necessary to notice it. Yet it was held in high estimation not many years back, and very generally deemed the most effectual mode of treatment.” Fashions change. The disuse of perspiration in the treatment of rheumatism by the drug-doctor of the present day is a fashion; the cure of the same disease by acting upon the skin only, in the practice of hydropathists is a fact. He who doubts this may refer to the very remarkable cure which occurred at Malvern, recorded in Dr. Gully’s work, p. 394.

I, myself, have seen, during the short time I have resided at this establishment, two cases of chronic rheumatism both ameliorated, and now in the fair way of cure, by the local application of cold water, and the general cutaneous action of the wet sheet and hot blanket. One of these was a case of neuralgic rheumatism in the scalp, where the sufferer, for three months previous to his entry into our establishment, had been hardly a day free from violent paroxysms of the most acute pain in the cranial region. The curative influence of arsenic, and other most potent appliances of the drug school, had been appealed to in vain. No, sooner, however, was plain cold water brought into action, than the malignant malady, after one terrible convulsive struggle, made a distinct retreat; and the

gentleman, under the salutary working of the wet sheet, is now seen pacing our strand or boating it over our billows with that air of careless confidence which belongs to health, and that tinge of fresh rosy beauty on the cheek which it is the peculiar boast of hydropathy to educe.

So much for fevers and inflammations. The second great class of diseases in which the water cure is, by universal admission, pre-eminently applicable, I had occasion to allude to already in my second letter—I mean that motley complexity of ill-defined feelings of discomfort arising from general intestinal derangement without any distinctly pronounced complaint, comprehended under the name of *DYSPEPSY* or *INDIGESTION*. This is a disease of civilization, of which your fine North American Indian, or other good specimen of the savage—

The Stoic of the woods, the man without a tear—

knows nothing. For why? The well-conditioned savage—for we must not talk of the lowest races—neither over-vexes his brain with study and cogitation, nor over-frets his heart with the petty anxieties incidental to money-making, nor over-loads his stomach with superfluous dainties, calculated to stimulate rather than to nourish. He is, moreover, much in the open air, and is continually exercising his limbs, and keeping every sense in action, after a fashion the most agreeable to nature. So far as the body is concerned, he lives, in every respect, a more healthy life than the civilized man; and, therefore, his stomach is free from qualms, and his head from aching; he has a lusty blood and a clear eye; his breath is sweet, without aid from Arabia; and, without the help of the dentist, his teeth are beautiful. Now, plainly, a dyspeptic person, in these over-civilized times, if he wishes to regain the comfortable habit of digesting his dinner unconsciously—must begin by throwing off certain vicious civilized habits—must take a leaf from Jean Jacques Rousseau, and not be ashamed to become, in some things, a bit of a savage. He must go to bed early, and rise early; drink water and not alcohol; never eat before a natural appetite is created, nor after it is appeased; be much in the open air; move his arms and legs violently, rather than shake the heart and rack the brain; never shrink from cold water in any shape; but rather rub himself freely with the element till he has learned to look the east wind in the face without shrinking; to rejoice, as ducks do, in every fresh patter of rain; and to laugh at a cold. All this, however, is but what hydropathy actually achieves in those who become its disciples; only it proceeds in a decent sort of a way by a wise graduation, not

startling, too rudely, the nerves of weak people at first ; and in all this there is no mention of drugs ; not one blue pill, not a grain of iron, not the germ of a drop of prussic acid. But in this case, also, the hydropathist may choose a Coryphæus to state his case, from the foremost ranks of the distributors of drugs. Hear Dr. Elliotson—and Dr. Elliotson, as every page of his book testifies, is both a shrewd and honest man in no common degree. “ Much (says he) may be done in the way of curing diseases of the digestive organs, without any medicine at all, simply by discovering the cause, and removing it ; and this cause is very frequently some bad habit. It is absurd, in every case of affection of the stomach, immediately to order something. You should sit down and learn the history of the case ; ascertain if the cause is beyond the stomach ; if it has its seat in any other organ ; what is the state of the intestines ; what is the condition of the mind ; whether the patient has been fasting too long, or eating too much. If it arise from any of these causes, you may cure the disease without any medicine ; may put the patient in possession of a plan which will put a stop to his ailments.” So far Dr. Elliotson, agreeing, in this case, literally with Priessnitz ; only he does not mention the precise “ plan which will put a stop to his ailments,” no doubt because that they may be different in different cases ; but, in nine cases out of ten, I am not rash to say that, as the usages of society now are, that plan is to live for a month or six weeks in a hydropathic establishment, and not to forget, through life, the useful hygienic lessons that, during that brief period, one has learned there. I assure you, Sir, we possess a few valuable secrets in this place, which are worth paying for. I have seen stiff old gentlemen moved in a marvellous way, by sitting, for a quarter of an hour at a time, for four, or, it may be, fourteen days, up to the navel in a tub of cold water, and drawing a wet bandage round their abdomen. I will set these two therapeutic instruments, from what I know, against colocynth and calomel any day. If you are sluggish in your habit, come and try. Even for curiosity’s sake, as a philosopher, you may wish to know how far a man may prove himself kindred to a frog, by which animal, I believe, the Great Unknown of the “ Vestiges ” thinks that we are all originally fathered. But I don’t jest. If you wish any witness more weighty than what I have already cited, in favour of the hydropathic treatment of indigestion, consult, I beseech you, the *British and Foreign Medical Review* for October, 1846, p. 455, the article already quoted. Argue the matter with Dr. John Forbes, M.D. and leave me, a plain untitled layman, out of the question. He will teach you how, according to the “ legitimate treatment ” of dyspepsy, by the

“Heroic School of London,” a man’s health is supported, “like a shuttlecock between two battledores, by the alternate impulse of senna and sherry, of calomel and coffee, of jalap and gentian.” This I do not exactly understand, happily, because I have no experience of it; but whosoever the poor wretch be whom the Faculty has thus handled, let him be transported here as soon as possible, and I think, between the tub from below and the douche from above, we shall enable him to preserve the just equipoise of existence, a little more comfortably. But I must leave this point. There are two heads of my discourse yet remaining.

The third great class of diseases to which hydropathic treatment more peculiarly belongs, are cutaneous affections. This is nothing new, also, as you may see in Dr. Erasmus Wilson’s book, or much farther back—as far back as the Old Testament—for the prophet Elisha surely had a divine presentiment of hydropathy when he gave the famous prescription to the Syrian leper, “WASH THEE SEVEN TIMES IN THE RIVER JORDAN, AND MAKE THEE CLEAN!” Say *seventy times seven times*, and this old chapter of the law is turned into Gospel, and you have a good half of the practice of Priessnitz in all diseased conditions of the skin—which, as you may happen to know, are very obstinate in their way, a standing reproach of medicine, and yielding only for a season, after the most desperate resistance, to the united onslaughts of mercury and arsenic, iodine and kreosote. On this subject, as I have been quoting in this and the preceding letter so largely, from the spokesmen of the “legitimate treatment,” it may serve as a variety to give the distinct and decided testimony of Dr. E. Johnson. In p. 424 of the “Domestic Hydropathy” you find it thus written—

For chronic skin diseases of all kinds, the wet sheet packing and the vapour bath alternately, followed immediately by the tepid washdown, or shallow bath, or dripping sheet, or plunge bath, or by the douche, will constitute the proper treatment. The frequency with which the packing and the vapour bath are to be repeated must depend upon the patient’s strength, and the effect they produce upon it. At first they may be taken every day, that is, the sheet one day, the vapour the next. Few persons, however, can bear this for very long, but some can. In proportion as they affect the strength, the frequency of their use must be diminished. *I have cured vast numbers of all kinds of skin diseases by this method.* Sometimes, however, when this has failed, I have succeeded perfectly, especially in psoriasis and eczema, by washing the patient’s body very well all over, before a fire, with hot water and yellow soap, three times a-day.

Almost all skin diseases, except the itch, are notoriously incurable by the drug treatment. The hydropathic treatment will not cure every case; but it will certainly cure the majority of instances. The slightest glance at the nature of that treatment, addressed as it is especially and immediately to the skin, will be sufficient to account for this. There seems to be a notion abroad that water treatment is calculated to repel

eruptions—to drive them in. Nothing but total ignorance could have given rise to such a notion. All the tendencies of the hydropathic treatment are to determine to the surface—to bring latent eruptions out—and to increase, at first, those which are already out. It constantly happens that persons begin the treatment with skins as clear as possible, which skins become, in the course of it, covered with eruptions. This is one of the common modes in which hydropathy exercises its remarkable influence in purifying the blood. It purges the body through the skin.

As for diet, the cutaneous patient should live on plain food. Sometimes a very rigid and scanty diet becomes necessary. Exercise, also, is required—as much of every kind as can be well taken.

The last class of diseases to which I refer are those connected with the brain and the nervous system. In this very curious and interesting department of pathology the virtue of the hydropathic treatment is not to be doubted. You may have seen a delicate young lady in a fit of what is called hysterics—the disease is of a peculiar nature, being sometimes real sometimes feigned—in either case the remedy is not far distant; a pail of cold water—so Dr. Elliotson testifies—dashed freely on the fair sufferer will rein the fit and restore the nerves to a healthy tone. This is a familiar illustration of an important fact, that in obstinate affections of the brain and nerves that have defied all the armory of drugs, the hydropathic treatment has proved most successful. The case of your own talented academician Dr. Clark, will instantly occur to your readers in this place, so I will not insist upon it. In cases of cerebral congestion of every sort, a protracted session in the cold water tub acts as a most potent sedative; but it is chiefly as a stimulant of the most agreeable kind that the working of cold water on the nerves is generally manifested in the common run of patients. To persons of a nervous and susceptible temperament there is something very exhilarating in almost all the hydropathic processes. You heathen druggists, or proselytes of the gate, make yourselves drunk with wine; I have seen some of our true hydropathic Hebrews here drunk with water. You will scarcely believe it, but some of us, after a week or two of vigorous treatment, are certainly not sober in any sense; nay, some give plain indications of incipient insanity—leaping, and laughing, and jumping about in no sound fashion. Some of us about the end of the fourth week, or so, to get rid of our superfluous store of nervous activity, become pugilistic, and fall to buffeting our neighbours; others become puerile and can only, with the greatest difficulty, be refrained from joining in leap frog, and other undignified juvenile sports, with the boys; while a third set spout copious blank verse from the close mummy-bandagement of the wet sheet, and jingle hydropathic rhymes beneath the douche. All this, of course, Mr. Editor, like a cautious

Aberdonian, you will be slow to believe; and, indeed, in this scepticism I can scarcely blame you, or any other person brought up with that last-century idea, that exhilaration of spirits is to be sought for only in a pint of old port or a tumbler of strong toddy; but for my single self, what I see I know, and what I feel I am. Meanwhile, I can only wish your over-zealous editorial exertions, in these fretful times, may work you into some Slough of nervous or dyspeptic Despond, whence when you are hydropathically rescued, you will have attained an insight into many mysteries to which your eyes, by the limited range of your experience, are now necessarily closed.

I am, my dear Mr. Editor,

Yours sincerely,

T. T.

KIRN-PIER, DUNOON, July, 1849.

No. V.

DEAR MR. EDITOR.—After so much talk of principles and precedents, you will naturally desire to hear a little of our practice here. If a drug-doctor's *recipe* is one of the most mysterious things in the world to an uninitiated eye, the hydropathic processes are, on the contrary, of the most simple nature, and the most obvious comprehensiveness. With a short glance at these processes, and a few general remarks on hydropathic establishments, I shall conclude the present communications.

Our first and most rudimentary mode of applying water is by what is called the *dripping sheet*. This name (as hydro-pathy is not, like drug science, cumbered with Greek) is its own explanation. A sheet is taken out of a pail of water in a dripping state, and, while the patient stands in a tub, is in this condition thrown round the body. The bath attendant forthwith commences actively to rub the body with the sheet, the patient, if he is not too feeble, joining in the operation. This, you will observe, is merely a common cold bath in a modified form, and adapted for persons who, not having a sufficient amount of vital reaction, are unable to bear the chill occasioned by the application of a large quantity of the cold fluid to the whole surface of the body. The close continuity of the sheet to the skin, along with the vigorous friction of the cloth against the body, insures the bringing out of a glow on the skin in case of debility, where the application of a cold bath would have been doubtful or dangerous. Simple as this operation is, one cannot but admire the contrivance, and its efficiency is not

to be doubted. Whatever good a cold plunge bath does to the strong man, the dripping sheet does for the weaker—it is, in fact, a crutch to help him on till his own legs can bear him; and, though a crutch be merely a cheap bit of wood, the limping man is not the less indebted to the friend who kindly reaches it. This hint, therefore, many a learned physician, curious in stimulants and tonics, will wisely borrow from the hydropathist; he will, on all practicable occasions, resort to this most natural means of bracing and invigorating his patient, and esteem the tonic not the less potent, because, instead of being distilled from strange herbs brought from far countries, it is found in every house-well and on every hill-side. But the wet sheet has a virtue even for the strong man—he cannot always find a river or the sea, nor always afford a couple of guineas to buy a regular slipper bath, nor always command water enough to fill the slipper bath even when he can afford it; he can always, however, find an old tub, and an old sheet, and water enough to steep it, even in the most crazy garret of the top story of the highest houses of the Lawnmarket of Edinburgh, one should think. 'Tis a simple affair, and learned men with wigs and spectacles may smile at it, but, if you wish to steer clear of the unpleasant companionship of colds, catarrhs, bronchitis, and what may follow from them, take a timely leaf from the hydropathist, and, when you can find nothing more efficient in the same way, don't despise the dripping sheet.

Of our common shallow baths, half-baths, full baths, cold and warm, &c. I shall say nothing; for they are as well-known to all families of cleanly habits, as they are to the most scientific hydropathist; but on our special glory and boast, the sitting bath, the wet-sheet packing, the abdominal compress, and the douche, I must spend a few sentences of hearty eulogy. Concerning the sitting bath, or *sitz-bad*, as the Germans call it, I perfectly agree with Mr. East (*Results of the Water Cure*; Glasgow, 1848; p. 14), that it is a most noble invention, and not easily to be overrated by any true hydropathist. You have it, indeed, or, at least, a name for it, in the regular practice—the hip bath; but either its most remarkable virtues are not generally known, or its mighty power is feared, for the common drug-practitioners either don't use it at all, or forget to use it when they ought to use it, or use it with such feebleness that it becomes a farce. The water cure does not work its wonders like homœopathy, in infinitesimal doses. We sit in our cold hydropathic tub, with naked buttocks, not half a minute, or a minute, but a quarter of an hour, or half-an-hour, or even a whole hour, on occasions. For why? We mean, by this prolonged immersion of the hips in cold water, to effect,

indirectly, by natural reaction, what your druggists achieve, directly indeed, but in a most unnatural and violent way, by colocynth, castor oil, saline waters, and so forth, viz.—an energetic action of the blood vessels supplying those parts where the great intestinal actions, so necessary to a pleasurable vitality, are continually going on. We mean to achieve, and we actually do achieve, this important object, by cold water, in a manner which, instead of merely exciting and disturbing, excites and invigorates the intestinal machinery. The manner in which this effect is produced is sufficiently plain. The sitting bath is always followed by smart exercise; and the consequence is a vigorous reaction from within, a consequent energetic movement of all the abdominal vessels, and, generally, a heightened vitality in the vicinity of those parts to which the cold has been applied. No wonder, then, that students, and other sedentary persons, whose habits have induced torpor of the bowels, have found themselves, within a few weeks, or even days, delivered of their fretful burden of many years by a single session in the hydropathic tub. Of this, a most remarkable instance has fallen within my own knowledge; and all hydropathists speak of it as one of the most common phenomena of the water treatment. But the water-tub has mightier virtues still. Prolonged beyond the usual time, its highly tonic power becomes transmuted into sedative; it lowers the pulse (without the help of “bleeding or fox-glove,” as Dr. Gully boasts), and, by derivation, diminishes vascular congestion of the brain, of which effect remarkable instances are recorded in the experience of this establishment. In short, like the wet sheet, it is difficult to say whether it is more simple in its conceptions or more potent in its action.

Let me now say a word on the WET SHEET, or the PACKING SHEET, as it is called. This is the method of applying moisture to the skin, which has been so often alluded to already, as at once the most original invention of Priessnitz, and the most dreaded object of horror in the minds of his ignorant antagonists. You have seen, however, in my third letter, how “the profession” has already made a movement to adopt it in cases of fever, and Dr. Carpenter, in his *Manual of Physiology*, has openly lauded it, in orthodox medical language, as “one of the most powerful of all diaphoretics;” and, when once its medicinal virtue, simple application, and pleasurable action, shall be commonly known, I have no doubt it will be used in every family as a general domestic restorative, in place of the orthodox old appliances of senna and castor oil. The wet sheet packing is managed as follows:—You remove the clothes from a bed, except the mattress and a blanket, and, after having

steeped a sheet in water, and wrung it as hard as possible, you fling it, in the damp state, over the bed, and then fling your naked self on the top of it, and stretch yourself out on your back. The bathman then comes and packs you; that is to say, he wraps you closely up in this sheet—the more closely the better, for the exclusion of all air—so closely, that you can only, with the utmost difficulty, move your arms. He then wraps some half-a-dozen blankets and sheets round you in the same style, and crowns the whole envelopment with a quilt. You then feel yourself lying exactly as if you had been buried alive, and can only add dignity to your discomfort by imagining yourself to be for the time, some old Amenophis or Sesos-tris, sleeping in mummied state, within some pyramid of Karnec, or the Egyptian hall of the British Museum. This feeling, I admit, even with the help of the most sublime associations you can call up, is anything but comfortable for the first quarter of an hour—perhaps, even, for the first week, till your skin gets acclimatised; but, when you are fairly initiated into the process, your feelings and your associations change—instead of a cold clamminess, a soothing agreeable heat diffuses itself over your frame, and, instead of coffins and sepulchres, you begin to think of dinners and of dainties, and of the happy warblers of whom the famous old poet sings—

Sing a song a sixpence,
A baggie full of rye.
Four and twenty blackbirds
Bakit in a pie;
When the pie was opened,
The birds began to sing;
Wasn't that a dainty dish
To set before a king.

The feeling, indeed, which you experience in the wet sheet is exactly that of being baked very gently and soothingly in a pie. You lie in a state of delectable repose for an hour or forty minutes, your wet sheet becoming, by degrees, as soft and as warm as a bank of wild thyme at noon, and your sensations as agreeable as the hum of bees upon it. Then, when the pie is opened out you jump, and, like the blackbirds, begin to sing, and forthwith jump into a trough of cold water, wherein you rub and scrub yourself with great energy and pith, like a young trout, for five minutes or so; then out you spring, with an elastic hydropathic bound, on the floor, and a dry sheet is thrown round you, wherewith, instead of a towel, the bathman rubs you dry, or you rub yourself; and this is the mystery of the wet-sheet packing. As to its hygienic virtue, you must consult Dr. Gully's work, page 574, for it is a long story. Suffice

it for me to say that, besides its soothing effect on the skin and nerves, it acts as a most powerful derivative ; so that bilious persons (as I have known here), after lying for an hour in the envelopment, will often stain the sheet perfectly yellow. The reaction, also, which follows on the application of the cold bath, is both stimulating and exhilarating. We have a lady here, who luxuriates in the sheet with a feeling of calm delight, as Germans do over their pipes, or sentimental young gentlemen, with white waistcoats, over the poems of Lord John Manners. 'Tis a pity, indeed, when we consider all this, that Priessnitz was not, like so many of his countrymen, a learned Hellenist ; for, then the offence which certainly lies in the plain English "wet sheet," might have been covered by a sounding Greek name. But the mischief is done now, and the facts of the thing itself are, no doubt, strong enough to overcome the stumbling-block of the designation.

The ABDOMINAL COMPRESS OR WET BANDAGE wrapt closely round the abdomen is a sort of local or partial wet sheet, and acts, on a different scale, very much in the same way. Like all the other hydropathic appliances it feels strange and not without discomfort at first, but, in the course of a week, one begins to feel it almost a necessary part of dress, and I have been told that some people use it always, as military men wear a belt, without experiencing any bad consequences. There is this bad consequence, however, in making hydropathic usages part of our every-day practice, that we lose their stimulating effect when we come to be really in want of them. With regard to the virtue of the bandage, I may quote the following interesting testimony from Dr. Gully :— "that it soothes the brain and spinal cord is shown in this, that, if freshly applied when sleepless at night, it is as certain a sedative and narcotic as can be taken. Or, let a person be wearied, jaded with walking or talking, and put on the freshened compress, he will find renewed alacrity. An invalid will also quickly find the difference between walking with and without the compress, so much does it improve the walking power." This same writer mentions an instance of its power in withdrawing morbid matters from the bowels, analogous to what I have already mentioned with respect to the wet sheet. "In one case," says he, "of bad nervous headache, in a lady who had taken enormous quantities of physic for it, I saw an exudation of matter of a brownish hue, which stiffened the compress as if with starch, and gave out the unquestionable odours of colocynth and aloes. It continued for one week in varying quantity, then ceased, and broke out again in five weeks afterwards, continuing for a fortnight, and smelling of aloes, gam-

hoge, and, at times, of camphor." Here you have a very fair illustration, Mr. Editor, of what the hydropathist means, when he talks, as Dr. Johnson does in the extract given in my last, of "*purging the body by the skin.*" And not only does it bring out deleterious matters in this way, but, "when properly applied, it is a constant opiate to that constant irritation within which is the groundwork of all chronic diseases." Here, again, we may exclaim, surely the world is under a debt of gratitude to Priessnitz, were it only for this wet bandage. Surely here, as in other cases, "the foolishness of God has been wiser than man," and "out of the mouths of babes and sucklings he has perfected praise."

But I must hasten to exhaust my roll. In rheumatism, catarrhs, cutaneous and other affections, where it is desired to excite a copious perspiration, the hydropathist, in no ways finical as to the use of means, deserts his favourite element, water, and works through the medium of air. The patient who is to be sweated is enveloped in an atmosphere of hot air, either by packing him in a dry blanket, and rolling him closely up (like a dumpling) with various coverlets, and supplying him with copious potations of tepid sugar and water, or by seating him on a common chair, beneath which a spirit lamp is lighted, and enveloping him, as he sits on his hydropathic throne, with two or three blankets closely buckled round the neck, and floating freely down to the ground. The latter of these operations is the shorter and more pleasant, the former rather oppressive and purgatorial, I must confess, but both are equally delicious, when the hydropathic exudation has done its work, and out jumps the gentleman for so long quiet into a trough of cold water, and there splashes about heroically, like a Russian from his vapour bath among the wreaths of fresh-driven snow. The feeling of airy lightness and elasticity that follows on this process is not to be surpassed in the whole compass of hydropathic operations; and, though Alexander the Great, as Curtius informs us, caught a fever, and nearly prevented the battle of Issus, by plunging himself suddenly into the river Cydnus when he was fatigued and a-sweat, yet we here, who systematically induce these revulsions from hot to cold, catch neither fever nor fits of any kind, but glow with the calm modesty of a rose, and bloom on the outer surface with a hydropathic hue of health that mocks the geranium. How this comes about physiologists and pathologists will no doubt explain to your satisfaction; but, notwithstanding the narration of Curtius, there is classical authority also, of the best kind for the practice of Priessnitz, as you will see (for I find no Latin books in this place) in the article BATHS of Dr. Smith's Dictionary of Anti-

quities, written, I think, by Dr. Greenhill, a gentleman of learning and medical experience in Oxford. The last of our peculiar water processes which I shall mention, is the DOUCHE. "The Douche," says Dr. Johnson, "is the lion of a hydropathic establishment, and patients are apt to think themselves unfairly treated if they do not get it, without considering whether it be good for them or not." The Doctor speaks everywhere in his work with great timidity and abstinence about the douche, as if it were indeed a lion, not to be seen, like the old lions in the Tower, but to run from as one would from a tiger or a boa constrictor in the Bengal jungles. Mr. East, I am happy to say, dispenses the douche much more liberally—not, certainly, without a just discrimination and a due preparation, but he is not afraid of it, nor any of his patients—we like it rather, very much as wine-drinkers like champagne. One lady, indeed, said it made her feel exactly as if she had drunk that mettlesome beverage. A douche, I hope I don't require to explain, bears the same relation to a shower bath that a waterspout does to a shower of rain. The comparison may seem terrible; but, as a few creeping drops of cold liquid trickling down your back will occasion a very uncomfortable sensation of shuddering, while a tempest of big battering rain-drops, with the east wind spurring them on, if bravely fronted, excites a comfortable glow of healthy heat in the frame, so the little Niagara of the douche dashing perpendicularly down on a man's spine creates a sensation of heat where the dribbling shower-bath produces cold. No doubt, it may knock you down the first time, if you do not stand firm; but there is a pole which you may hold by, and dance a jig as the torrent comes down, which, indeed, I find to be the most pleasant way of taking it. As to the hygienic and therapeutic virtue of the douche, I must again refer you to Dr. Gully (p. 605-13), only observing, what must be obvious to every person of common intelligence, that it is an application of water, the influence of which on the nervous system, and through it on the whole body must be immense. Though not to be feared, it is not therefore to be trifled with. It is that hydropathic process, of all others, with which unskilful intermeddlers may produce the greatest amount of mischief.

So much for our processes: though I have said nothing yet, I perceive, on what appears to some the most characteristic and disagreeable process of all—that of water-drinking. Now, really, a sensible word or two is, perhaps, necessary with regard to this point, to avoid misapprehension. To assert that there is any magical medicinal virtue in a stomach deluged, the whole internal machinery swollen out, and the gastric juice

diluted by extravagant potations of cold water, looks not very like sound doctrine. That extraordinary cures of extraordinary ills have occasionally been brought about by this single remedy when all drugs failed, I have been credibly assured ; but, as a general procedure, I find it recommended by no hydropathist. 'Tis certain, indeed, that it may do no little harm in many cases, as, for instance, where there is an apoplectic tendency. Here, on the Clyde, however, and, I make no doubt, at Malvern, Ben Rhydding, and all regularly superintended hydropathic establishments, we drink water moderately, in proportion to the strength of the recipient, and in relation to other hydropathic operations. Every man of sense will see that, where serious sweating operations are to be performed, the system requires more than usual moisture to supply the loss and feed the process. 'Tis equally plain that, where an extraordinary quantity of exercise is taken, and a more rapid aeration of the lungs and oxygenation of the blood induced, as happens, more or less, at all stages of the hydropathic treatment, the system must be supplied with more of that fluid so necessary to its existence than the common waste demands. Besides all this, however, cold water, taken internally, acts not only as a useful detergent and general purifier, but as a natural stimulant to the stomach, and a refrigerant when the inward parts are irritated or inflamed. When, in addition to this, the positive nutritive qualities of water are taken into account, as the chief element in the composition of the blood (see Gully, Appendix I.) hydropathists need make no apology for using it freely, and lauding it loudly, especially when the immoderate wine, beer, and toddy-drinking usages of this age and country stand so much in need of an antagonist. When so much artificial fire is created in the stomach, 'tis no wonder that an extraordinary quantity of water is required to put it out. To speak professionally, water-drinking is not merely natural and salutary to all persons, but, to habitual wine or beer drinkers, it acts as an alterative, and the best of alteratives.

One thing I must not omit to state, that after all the baths, exercise must be taken whenever the patient is capable of locomotion, and that, in most cases, as much as can be borne without inconvenience. It is safer, I should think, in all cases, to take too much exercise than too little ; for the muscles will accommodate themselves to a slight excess, the appetite will be increased, and sleep induced. Besides, under hydropathic treatment, the fatigue created by a fit of walking or other gymnastic exercise is forthwith counteracted by the restorative virtue of the wet sheet and the bath. Without constant exercise, the hydropathic treatment will not put forth half its power—

the hydropathic hygiene loses its peculiar boast. What St. Paul said to Timothy with respect to the moral life, that the hydropathic physician says to his patient with regard to the physical life—"Endure hardness like a good soldier." The hydropathic patient is a soldier. He cannot do his duty on a sofa. Every day has its march.

To make these communications as complete as possible in respect of outline, at least, I shall add one word on hydropathic establishments. The hydropathic physician labours under one great disadvantage at present—he gets often only the worst and the most hopeless cases. Persons whose constitutions have been worn out by the combined action of long protracted fretful ailments, and drugs efficient only for mischief, resort at length to the "water-doctor," as to a reserve of desperation, sure to cure in all cases where it does not kill. But, to compensate for this evil (founded on prejudice, however, and, therefore, daily diminishing), he has the immense advantage of having his patients constantly and completely under his own eye as much as a father has his children, or the master of a great English school has his boys, while they are, at the same time, continually placed under the most favourable curative influences of air and climate generally denied to the regular practitioner. It is not desirable, therefore, by any means, even though hydropathic practices should be generally adopted by the medical profession, that hydropathic institutions should be discontinued; on the contrary, except in cases of fever and other acute diseases, it is most certain that hydropathy can never be practised with the same efficiency in a large town as among the green mountains, the fresh breezes, and the cool streams of a secluded country district. So Dr. Gully says, and so common sense teaches. The first grand requisite, therefore, of a hydropathic establishment is a situation in the far country—not too near a large town (though in these railway days it is hard to say that one is anywhere *far* distant from a large town)—bountifully supplied with those healthy influences of air and water, which are worth all the excitants and tonics in the pharmacopœia. The air, in the first place, should, if possible, be mountain air—not mere hill air, but emphatically mountain air—Highland air, such air as we have here in Dunoon, strong-winged and puffy-cheeked, if laden with an occasional gusty blast or two of sudden showers so much the better. A hydropathic patient when overtaken by a squirt of rain can walk till he gets dry, and he will be all the better for it. Then, as for the water, it should be pure and cold, and plenty of it, both salt and fresh also, if possible, that a plunge in the briny bil-low may be given as a finishing off to the perfectly hydropa-

thised frame. This advantage we have in Dunoon, though, of course, it is not to be expected everywhere—not even at Malvern. After these two essentials, a pleasant neighbourhood, with plenty of green grassy room for walks, is above all things important; scenery also, beautiful, various, and luxuriant—to fill the outer eye with pictures and to thrill the inner sense with delight. Now, I will say nothing against Malvern (of which I have heard high praises), for I never was there, nor against Ben Rhydding, which also has been much lauded in my hearing; but I will say in praise of this delectable little Caledonian snugger, Dunoon, that, for genuine hydropathic situation and scenery, it has not its superior in Europe, certainly not in Britain. No doubt Cowall is a mere barren ridge, and our mica and chlorite slate of the rough primitive formation crops out with most uncivil sharpness at all corners, but we are not confined in our hydropathic promenades to the narrow strip of strand on our shelvy beach, nor to the inland road westward up Loch Eck to Inverary, but can multiply our strands and our strolls at pleasure by the convenient stepping-stones of steam-boats; so that, like Britannia herself in Campbell's ode, we may say

Our march is o'er the mountain waves,
Our home is on the deep.

The hydropathic excursionist sits here, in fact, like a drop of blood in the aorta or great artery, in the left ventricle of the heart, ready to be sent off on a hasty tour to any of the extremities of the body, and then to be shot back again as rapidly to the heart. East, west, north, and south, we are free to move here, whither we will; and, in whatsoever direction we move, we are sure to find, both in our passage and at our goal, the sublime and beautiful wedded together, more completely than ever the subtle imagination of Burke conceived. Ship yourselves northwards, and two hours' sail will bring you to the green seclusion of Lochgoyle Head, or Arrochar, where the little, high-perched cobbler mocks you fantastically from his rocky throne on the left, and the gray cone of Ben Lomond rears itself with a bare, desolate grandeur on the right. Fly to the south, and, in three quarters of an hour, you are in Rothesay, looking down from that fine island-hill on old Edmund Kean's secluded villa, by Loch Fad, and away as far as the peaked ridge of Goatfell, in the granite-castled isle of Arran. Take a turn to the east, and you have Gourock, the Gareloch, Dumbarton, Loch Lomond, and, by wonderful steam-boat affinity, Loch Katrine also; while, finally, westward, you have a choice of no less than four magnificent routes to Inverary; or,

if your wing be strong, there is no reason why you should not land ere evening, and find yourself sipping tea in the island-sheltered bay of Oban, ready to perch next morning on the basaltic columns of Staffa, or even on the steep top of Ben Nevis. So much for situation. The next requisite in a hydropathic establishment is, that it should be well provided with means and capabilities of amusement and recreation; for to those labouring under creeping chronic complaints, it is above all things necessary that the mind should be kept in a continued easy play, and prevented, both from the fret of intense occupation, and from being fixed with a morbid, moody regard on itself. Here I may mention that the very society of a well-frequented hydropathic establishment has a most salutary influence in amusing the mind, and drawing it away from the old and unprofitable ruts of unhealthy cogitation; and, for this reason, I should never advise single gentlemen or ladies to live alone, though those who can afford to bring with them a wife and children, and a few pretty nephews and nieces, and settle for a month or two in one of our snug marine villas, may become out-patients, I fancy, without any great harm, perhaps even with benefit if they are fidgety, and apt to fret mightily about small discomforts, real or imaginary. Then, again, with regard to amusement, it is quite plain that a fine district, with a large liberty of various excursions (such as we have here) is of itself a grand provider of hydropathic entertainment, not merely for the lovers of the picturesque, and the hunters of old castles (for which humour specially we have Rothesay Castle, and Carrick Castle, on Loch Goyle), but for scientific hydropathists, who may wish to botanise in Mr. Malcolm's glen, or geologise in any formation between the Gourock sandstone and the granite of Glen Sannox; besides all which, however, a good hydropathic establishment should be equipped, if possible, with a bowling green, with ground for cricket or archery, and within doors, with a billiard table, a bagatelle board, and plenty of battledores and shuttlecocks. There should be covered galleries, also, for skittles, racket, and other games that may be played in very wet weather; also, a gymnastic hall, with boxing gloves, foils, and all sorts of poles, ropes, and ladders, which enable a healthy hydropathic man to look on an agile cat, or a nimble monkey, without blushing. Wise people may smile, or shake their heads; but we, hydropathists, understand that there is nothing more salutary for a biped man, with whatever grave designation or serious avocation, than to endeavour to emulate his elastic brother, the ape, on occasions. In the third place, a hydropathic establishment ought to be, like an army, under the superintendence of a regularly-trained officer. Boys

are naturally pugnacious ; but it is not every full grown man, even with many years military experience, that has science enough to beat the Sikhs. In the same way, not every man that can swim in the sea, or sit in the tub with cold water, or wrap a sick brother up with a wet sheet, is fit to handle water medically as a therapeutic agent. Water and fire, though more common, are not less mighty things, when unskilfully handled, to do the work of death, than gamboge pills. The greatest danger that can happen to hydropathy, and to which, I see plainly, it is much exposed, is, that the simple character of its processes should lead simpletons to believe that a simple mind is sufficient to deal with them. But human bodies are delicate machines, and even a drop of water too much or too little can, on some occasions, affect them dangerously. Your village watchmaker may make your village timepieces with most praiseworthy skill, but he cannot, therefore, either make or mend a chronometer.

And now, Mr. Editor, let me conclude with a single caution. In these utilitarian and matter-of-fact days, let no man expect miracles, even from cold water, and upon the most favourable view of its potency. "Going to a hydropathic establishment," writes a philosophical friend to me, "I look upon as a sort of baptismal regeneration of the physical life." So it may have been in his case, and so it may be in many cases ; but regeneration is not to be lightly talked about, or, to be easily achieved in the vital experience of the body, any more than in that of the soul. For myself, in these communications I have advanced nothing so lofty. I have only maintained that hydropathy is a reasonable, a natural, a salutary, and, so far as my observation and experience go, an efficient agent in the important art of preserving or recovering health. I have not asserted that it is the only efficient agent. I have not denied the efficacy of drugs ; though I have certainly asserted that they are often unnecessary sometimes dangerous, and always to be looked upon with suspicion ; in fact, that they never ought to be used till the more simple and safe machinery of the water-cure has been tried and found wanting. I might have dilated also, without stirring a breath of contradiction, on that admirable virtue of the hydropathic treatment, in preventing, where drugs can, at best, only palliate disease. But I have not given utterance to a single word from which it might be inferred that I trumpet water as an infallible nostrum—as a universal panacea for all the ills that human flesh is heir to. I have witnessed under my own eye, in this place, the failure of the water treatment, in a case where I and Mr. East had the best reason to believe that it would prove peculiarly efficacious. It is right

that persons should come to the hydropathist as to other medical men, prepared for disappointment. A skilful leech will cure, when circumstances are fair, nine cases out of ten, but he will lose the tenth—Death only, the great destroyer, knows why. So the rude October blast will lay flat, perhaps, every tenth tree in your forest, sparing the nine. Why the tenth fell you can indeed say, generally, either it was less firmly rooted, or more exposed, or more stiffly buffeted by the breezes; but the most sharp-eyed forester would have failed to mark, with prophetic glance, yesterday, every trunk that lies flat by the gale of to-day. The general principles of the difference are intelligible; but their operation in every particular case depends upon influences that are invisible, intangible, and to every human gauge incalculable. Medical men, like other people, in this talking world, are apt to get a great deal more both of praise and blame than they are at all entitled to; for it is at bottom nature, or, to speak more philosophically, God, in all cases, and not man, that, with the doctor's help, or in the doctor's spite, cures sometimes and sometimes kills.

With my best thanks for your kind insertion of these somewhat lengthy letters,

I am, dear Mr. Editor,

Yours sincerely,

T. T.

DUNOON, 10th July, 1849.

ON
DARLINGISM,
MISNAMED ELECTRO-BIOLOGY:

AN ADDRESS

TO THE MEMBERS OF THE MEDICO-CHIRURGICAL SOCIETY
OF GLASGOW,

DELIVERED OCTOBER 14TH, 1851.

BY

ANDREW BUCHANAN, M.D.

PROFESSOR OF PHYSIOLOGY IN THE UNIVERSITY OF GLASGOW.

Moved by JAMES WILSON, Esq. M.D., and seconded by PROF. LAURIE, M.D.

"That the Medico-Chirurgical Society of Glasgow deem it to be their duty to
"endeavour to put down a system founded on Delusion, and fraught with Immorality;
"and thinking this Address well fitted to promote that important end, RESOLVE that
"the same be published at the expense of the Society."

CARRIED UNANIMOUSLY.

JAMES WATSON, M.D. *President.*

LONDON:
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MDCCCLI.

TO

THE PRESIDENT,

VICE-PRESIDENTS, COUNSELLORS, AND OTHER OFFICE-BEARERS, AND
TO THE MEMBERS OF THE MEDICO-CHIRURGICAL SOCIETY
OF GLASGOW.

GENTLEMEN,

Allow me to thank you for the honour you have done me in permitting this Address to be made public with your sanction, and under the protection of your name. To a medical man there can be no higher and more legitimate gratification than to find the opinions he may have formed on any professional subject confirmed and approved of by the only competent judges of them—those who have prosecuted the same studies, and are engaged in the same pursuits. It was to me, therefore, a signal satisfaction to find, that at an unprecedentedly numerous meeting of a Society which cannot but be regarded as a full and fair representation of the Medical Profession in Glasgow, not a single voice was raised on behalf of the delusions of Mesmerism, while each successive speaker denounced the Immorality which it fosters, and indignantly repudiated the Empiricism of which it has been made the cloak. The unanimity of your sentiments upon this subject sufficiently explains

to me how Mesmerism has never made the slightest progress among the educated and intelligent part of the public of Glasgow.

Professor Gregory has said of you reproachfully, but most truly, that "not one medical man of any note" in Glasgow has become a Mesmerist. May you long continue to merit that reproach, and to maintain over the minds of your fellow-citizens that control which your intelligence and moral worth entitle you to exercise.

I have the honour to be,

GENTLEMEN,

Yours most respectfully,

ANDREW BUCHANAN.

13 MOORE PLACE, *October 24, 1851.*

ON DARLINGISM,

MISNAMED ELECTRO-BIOLOGY.

GENTLEMEN,

In the summer of 1850 Dr. Darling was introduced to me by a respected Colleague, with the request that I would examine his experiments and peculiar doctrines, and give a candid opinion respecting them. This I readily promised to do, not merely in compliance with the wish of my Colleague, but because the subject appeared to me an important one, and to fall within my special province as a teacher of physiological science. I accordingly attended two of Dr. Darling's public Lectures, and three private meetings for the purposes of experiment and discussion, and I was myself twice experimented on by him. From these and other sources of information, and being already familiar with the processes of ordinary Mesmerism, I was enabled to form an opinion of the new system. That opinion I deemed it a part of my duty to communicate to my students in a Lecture delivered at the University last winter. I did this, not merely for their instruction in Physiology, but from a higher motive, which now prompts me to bring the subject upon a more public arena, and before judges more competent to decide upon it. I am persuaded that the cause of sound Morality is deeply involved in the opinion which the public forms

upon this subject, and the practices thence resulting. Now, there is no mode of influencing public opinion upon a subject of this kind so effectual as through the medium of the members of the medical profession. To them must at all times belong the important duty of supplying information, and directing the public mind upon all physiological subjects; and they may rest assured, that whatever opinions they as a body may form and promulgate upon such subjects will ultimately be the opinions of the intelligent part of the public, and, of course, of the masses who, having no opinion of their own, merely exhibit in their actions a reflection of that intelligence. It is, therefore, not merely as a highly interesting medical inquiry that I am now to urge upon your consideration the subject of this Address, but also as imposing upon you the responsible duty of leading the public mind, and protecting the interests of Morality.

I hope, therefore, to meet with indulgence while I offer a few suggestions to my medical brethren upon this new Mesmeric system. In doing so, I shall first classify and describe the phenomena which I witnessed at the experimental exhibitions of Dr. Darling: and I shall thereafter, with much deference, suggest what appears to me to be the true explanation of them. To complete the subject, it would be necessary also, did your time permit, to examine the operative processes employed by Dr. Darling: but as these do not in any essential respect differ from the processes of many other Mesmerists, this inquiry becomes a general one into the ascertained physiological effects resulting from the processes and manipulations of Mesmerism. In this second part of our subject we descend from causes to their ascertained effects, while in the first we ascend from effects to their causes. But it must not be supposed that these are



merely two different methods of developing the same subject: for while the inquiry first indicated belongs almost exclusively to the domain of the psychologist and the moralist, the second is a purely physiological inquiry. The former, too, ought to have the precedence, being necessary, as it were, to clear the ground, that the merely physiological part of the subject, freed from all extrinsic considerations, may be more readily understood.

I merely premise, that I give to Dr. Darling the title under which he was introduced to me, although I am not aware which of the Transatlantic Universities has the credit of having bestowed upon him "the highest honours in Medicine": and that I give the name of Darlingism to the peculiar modification of Mesmerism embraced by him and his followers,—as I believe it to differ from ordinary Mesmerism in the foundation on which it rests, and the much wider range of application of which it admits. The names of Mesmerism and Darlingism, derived from the authors of these respective systems, appear to me much superior to those of Animal Magnetism and Electro-Biology, which imply an analogy between them and the branches of physical science which we name Magnetism and Electricity, of which no satisfactory evidence has yet been produced.

I. PHENOMENA.

At the public and private exhibitions by Dr. Darling at which I was present, all persons were submitted to experiment who came forward for the purpose. A metallic disc about an inch in diameter, and said to be composed of zinc and copper, was put into the left hand, on which the person experimented on was made to stare intently from a quarter to half an hour. On myself no effect was thus produced, except a little giddiness and

drowsiness, the latter probably from vacuity of mind, and an uneasy feeling of stiffness about the eyes from interruption of the motion of the eyelids. The operator enjoined upon the whole audience a solemn silence during this preparatory process, at the end of which he went round the persons under experiment, making certain *passes* over the face of each, and directing him in a whisper to keep his eyes shut; and soon after he asked them severally, in the same low tone, whether they could open the eyes. The great majority of them at once opened their eyes, and were declared *insusceptible*. If any one persisted that he was unable to open his eyes, the operator directed more particular attention to him, and after making certain additional passes, declared that the eyes could now be opened, which accordingly happened. After making himself quite sure that all this took place according to his wish, the operator brought the *susceptible subject* forward and repeated the experiment before the audience, making him declare in an audible voice at the end of it, that he was unable to open his eyes till permitted. In this way Dr. Darling effectually protected himself against all imposition from mere feigned assent on the part of those experimented on; for if they afterwards attempted to gainsay their own public declarations, he proved them to have spoken falsely before many witnesses—a mode of self-defence, of which I was informed that while in Glasgow he had occasion to make use.

The operator having now obtained one or more Susceptibles, as I shall hereafter name them for the sake of brevity, proceeded to assert his control over their minds and bodies by the following experiments: which I divide into four classes, according as the organs chiefly affected by them are—the voluntary muscles, the organs

of sense, the brain and general nervous system, or the organs of involuntary motion.

Control over the Muscles, and Voluntary Motions.

The control over the muscular system was shown, first, by preventing certain muscles from acting; and, second, by preventing certain muscles from ceasing to act till permission was given by the operator; and in some experiments both sets of phenomena were exhibited.

1st. To the first head belongs the experiment already mentioned, of making the Susceptible keep his eyes shut till permitted to open them; and conversely he was made to stare with his eyes wide open, till permitted to close them. He was made to place his hands on the crown of his head, or to extend them in any other position such that the two hands might be in contact, when they were made to cohere so firmly, that they could not be separated by the utmost muscular efforts made, till permission was given, when the hands were separated at once. The Susceptible was made to assume the sitting posture, and could not get up. He was made to stand rigidly upright, and could not stoop down, although tempted by a sum of money laid on the ground before him, and promised to him if he could reach it, which he vainly strove to do. One exception to this result occurred, when I was present, in the case of a little boy, who suddenly overcame the apparent rigidity of his muscles, and pounced down upon a one-pound note.

2d. As an illustration of the second mode of controlling the muscles, I may mention, that the hands were made to revolve rapidly round each other, and this motion could not be desisted from till the permission of the operator was given.

Control over the Organs of Sense, and Sensations.

The control of the operator over the organs of sense and the sensations was shown in three ways: first, by exciting sensations by the mere word of command, without the presence of any apparent exciting cause; second, by making the ordinary exciting causes produce sensations quite different from those usually produced; and, third, by depriving certain parts of the body of their sensibility, so that the ordinary exciting causes produced no effect.

1st. In the first way, I saw four well-grown lads affected from the mere words of the operator, one with a pain in the hip, another with a pain in the knee, the third with a pain in the ankle, and the fourth with a pain in the shoulder. They applied their hands to the pained parts, and exhibited the appropriate contortions of face and person, as they limped in a row across the stage, to the great amusement of the by-standers. The indications of pain which they exhibited varied from those of a transient pang to those of overpowering agony, according to the words of the experimenter.

In the same way, I saw a young man, declared by the experimenter to be cold, and he immediately began to shiver. The sensation of cold increased till he complained loudly of it, but the only comfort he received was expressed in the words, "You will be colder still, sir; you will fall down from cold:" and, accordingly, with the most pitiful complaints, and a gradual contraction and stiffening of his limbs as if benumbed with cold, the young man at length fell motionless upon his side.

The fabled power of witches and magicians over the victims whom they tormented, was never represented as more terrible and irresistible than the power of the

experimenter over his subjects appeared to be in these last experiments.

Allied to the last experiment was that of making a body, held in the hand, feel so hot that it was tossed from one hand to the other, like a red-hot ember, and finally dropped; and that of making the seat on which the Susceptibles were seated, become so hot, that they sprung up, holding and rubbing their hinder quarters as if they had been burned, with appropriate grimaces and exclamations. How merciful to these poor creatures it was in the operator not to conjoin this last experiment with that already mentioned, in which he glued them to their seats!

2d. The second mode of controlling the sensations was exhibited by making water taste like milk, wine, whisky, vinegar, or any other liquid which the operator chose to name—the Susceptible, after tasting the water, declaring it to be those liquids respectively.

3d. Last of all, the operator could deprive the skin and subjacent textures of any part of the body of their sensibility so completely, that no effect was produced by pinching, pricking, or striking the part; and the eye was declared to be insensible to a candle held right before it.

Control over the Brain, and Intellectual Faculties.

The Susceptibles, being told they were in California, imagined themselves to be there; and immediately commenced filling their pockets with gold, picking, digging, and riddling, each according to the ideas he had formed of Californian operations. Being told they were in a flower-garden, they busied themselves making up nosegays, which they smelt to the obvious gratification of their olfactory nerves; or if it was the time of fruit, they pulled apples and pears from the walls, and ate them

with all the signs of satisfaction. Being told they had taken too much wine, they immediately reeled, talked nonsense, shouted, and exhibited other marks of intoxication.

Control over the Involuntary Muscles.

It was affirmed by some, that Dr. Darling could control the frequency of the pulse, produce at will the evacuation of the bowels, and render the iris insensible to the influence of light; but I saw no evidence of his possessing any such powers, and he himself spoke to me very hesitatingly with respect to them.

II. CAUSES.

I have thus described the phenomena exhibited by Dr. Darling, his disciples, and coadjutors, as I myself observed them; for in only one or two instances have I trusted to any other evidence. I now proceed to the more difficult task of suggesting an explanation of these phenomena.

But here I am met at the threshold by certain very wise men, who say, "O! give us the facts; that is for us quite enough: we care nothing for your explanations." In so saying, they appear to me not to evince much of the spirit of that philosophy of facts, which they affect to profess and to hold in reverence. To seek for an explanation of any phenomenon, is not to penetrate into its recondite essence, but merely to observe it in a systematic way,—to compare it with other phenomena better understood—to observe how it varies with varying circumstances, and more especially in the least complicated circumstances in which we can observe it, and thus to deduce the laws which regulate its occurrence. Had Sir Isaac Newton been satisfied with accumulating proofs of the fact that apples

fall to the ground, without proceeding to examine falling bodies in special circumstances, as by experimenting on the swinging of the pendulum, he never could have deduced the general laws according to which all bodies gravitate towards each other.

“Is there no imposition in all this?” is the question which every one who witnesses a mesmeric exhibition naturally wishes to ask, and to have answered. Putting the question in a more tangible form, it may be expressed thus: “Are the manipulations and words employed by Dr. Darling and other experimenters, necessarily connected with the signal changes which immediately thereafter take place in the minds and bodies of those experimented on, so that the former of these events can be regarded as the efficient cause of the latter?” Now, setting aside the obvious effects which every one experiences, and reserving a few anomalous cases for consideration hereafter, my conviction is, that no such connection has been established; that the manipulations have, directly, nothing at all to do with the effects which ensue; and that the words of the experimenter merely indicate to the Susceptibles what they are to do, but have no direct share in making them do it. My reasons for this conviction are, first, that the whole phenomena are explicable as resulting from ordinary moral causes; and, second, that they are quite inexplicable according to any known physiological laws, but on the contrary, are in opposition to those laws: which is exactly the twofold division of the argument established at the outset.

I would first remark, that all the bodily and mental states in question, without exception, are of a kind that may be either feigned altogether, or voluntarily assumed. Of the first kind is the existence of pain in any part of

the body, which no one can declare but he who actually feels it, and who, it must be admitted, may say he feels it when he feels it not. Of the second kind is the power of calling certain muscles into action, or of restraining their action when once set agoing. None, but he to whom these muscles belong, can declare whether he has or has not the power to make them act, or to restrain their action. The whole of the phenomena, then, of both classes, rest on the testimony of the persons experimented on, as the evidence by which their validity is established; and, except in a single instance to be particularly adverted to hereafter, there is no other evidence by which their validity can be established.

There is also this important peculiarity in the evidence from testimony, that each experimental result is attested only by a single witness; and cannot, from the nature of the case, be attested by more than one: for the consciousness of each individual belongs to himself alone. However numerous, therefore, the witnesses may be, the testimony of no two among them relates to the same event, but to separate and independent events, each of which is attested only by one witness.

Seeing, then, that the whole doctrine rests upon testimony, and, except in a single instance, upon testimony alone, and that there never can be more than one witness to each supposed result, it is necessary to look well to the witnesses by whose testimony the results are established. What, then, is the character of these witnesses? The great majority of them are women and children. The reason of this, it will be said, is, that the nervous system in women and children is more mobile and impressible than in adult males. With the explanation I have at present nothing to do, but only with the fact.

If, indeed, we include under this head all males under the age of puberty, we shall have at least nine-tenths of the whole witnesses, that is, of the whole Susceptibles in any community. But there were adults of the male sex who were found susceptible; what was their character? I answer by an illustration which I myself witnessed. I saw twelve gentlemen and twelve apprentice lads ascend the stage together, to be operated upon. In giving them these names, I judged altogether from their dress and appearance, as the operator seemed also to do when he placed them in two ranges opposite to each other. Now, while he did not in any one instance succeed with the gentlemen, he succeeded completely with every one of the twelve apprentice lads, although he was obviously very anxious to succeed with the former, and gave to them almost solely his attention and manipulative efforts. How, I would ask, are we to explain this extraordinary difference of results, if it was not due to a difference of character and moral feelings in the two classes of persons experimented on, corresponding to the difference in their education, age, and position in society. Last of all, I believe it to be conformable to observation, that the most susceptible persons of both sexes are those of weak intellect, and those who have weak nerves, or some actual disease of the nervous system.

Such, then, is the character of the witnesses. It is upon the testimony of persons of immature age and unformed character, or in a state of mental imbecility, of the weakest of the weaker sex, and of the weakest and least respectable of our own, that we are asked to believe in things unheard of in any former age, and which, if true, would disturb the established relations of man to man, and shake civil society to its centre. It

would require evidence of a somewhat different character to make any physiologist believe it possible that any one man can so completely subjugate the mind and bodily organization of another, as to make him will as he wills, think, speak, and act, solely as he directs, deprive his nerves of their sensibility by a word, and inflict upon him at pleasure, and for any length of time, the most excruciating torments.

But, it will be asked, if Dr. Darling and his coadjutors had no power to subjugate the minds and bodies of those on whom they operated, how did it happen, for unquestionably it did happen, that so many individuals of both sexes and of all ages appeared subject to them, and yielded to them an implicit obedience? The question is certainly a most difficult one, but it may, I think, be resolved according to the acknowledged principles of human nature, and the lessons of experience.

Whenever a general belief prevails in the existence of some mysterious and invisible power capable of affecting the condition of the human body or mind, independent of all effects produced by the invisible power itself, supposing it to be real, the belief in its existence, whether it be real or imaginary, produces certain very remarkable effects both on body and mind, which exhibit a great degree of uniformity, and are as widely diffused as the belief in which they originate. These effects are of two perfectly distinct kinds, according as the intellectual or the moral part of our human nature is first implicated, and becomes the prime mover in the series of changes which ensue. In cases of the former kind, where the intellect is first implicated, there is invariably a genuine belief in the existence and potency of the mysterious influence supposed to predominate, and that intellectual conviction reacting on the

moral nature and bodily organization, excites fear, enthusiasm, and imitation, with their bodily concomitants. In cases of the second kind, again, the belief in the existence or power of the mysterious influence, is always to a certain extent feigned, and in so far the phenomena exhibited, bodily and mental, are under the control of volition, and originate in a deficiency of moral principle; but to the credit of human nature, it is to be remarked, that it is very rare indeed, unless it be in the case of hired impostors, that we witness the disgusting spectacle of this second element operating alone, for it is almost invariably combined with more or less of the former element, so that the basis of the whole superstructure is a half-convinced and bewildered understanding. I shall, for the sake of illustration, adduce a few instances in which these two principles, or impulses, as perhaps I should rather name them, operate sometimes separately, but much more commonly variously combined.

Of the former principle operating altogether alone, or without the latter, seasons of epidemic pestilence afford striking examples, as the present generation have twice witnessed during the visitations of malignant Cholera. Men saw friends and relatives snatched from before their eyes, whom but a few hours, or even one hour before, they might have seen in apparently perfect health. The number of deaths reported daily, and the suddenness of most of them, left no doubt in the mind of any one, of the existence of some invisible and mysterious influence inimical to human life. It mattered not what idea was entertained of that influence—whether it was thought to be a miasmatic poison emanating from the soil, a contagion arising from the bodies of the sick, a disturbed state of the Imponderables, or simply the hand of an avenging Deity.

Whatever it was, all felt that it was a power unquestionably real, and against which the strongest constitution afforded no protection. This appalling conviction overpowered the minds of many, and reacted violently on their bodily frames. Every physician was sent for to see patients, supposed to be ill of the epidemic, but who laboured only under the effects of fear; which prostrated the mind, enfeebled the muscles, rendered the pulse rapid and weak, and the extremities cold, and not unfrequently also brought on diarrhoea; thus producing a severe bodily ailment, and rendering much care often necessary to distinguish the true effects of the epidemic poison from those of the terror which it inspired.

The superstitious notions—whether resting on a real or on an imaginary foundation—which prevail in times of ignorance, afford examples of the effects of a genuine conviction becoming gradually blended with the spurious manifestations of a feigned belief. Such is the superstitious belief in ghosts, demons, and other supernatural influences.

The persuasion that the dead can revisit us, has been known to produce upon the body the most formidable effects, and even to extinguish life. It is a notion which is seldom feigned, and which is without doubt eminently congenial to the human mind; since even persons fully convinced of its vanity, and not deficient in firmness of character, when placed in circumstances fitted to awaken it, cannot banish it from their minds, or reason down its influence over their bodies.

The belief in the power of demons to enter into and take possession of the frame, if less deeply implanted in human nature than the former, and often feigned from various motives, is nevertheless capable, when fully accredited, of reacting powerfully upon the mind and bodily organization. During the dark ages, when the

belief in evil spirits taking up their abode in the bodies of men was universal, it gave rise to epidemic affections of the muscular system—convulsions and frantic gesticulations, the genuine offspring of the appalling idea that an evil spirit had gained possession of the frame. But such affections were always seen alongside of cases of a totally different kind, in which the muscular movements were more or less entirely voluntary, the manifestations of a feigned belief in the supernatural agency. Hecker's well-known history of the "Dancing Mania" shows the extent to which this delusion prevailed: but it does not enable us to estimate how much was the genuine effect of the mental delusion, and how much was spurious, in the extravagancies of those who danced at the festival of St. John, or were exorcised at the shrine of St. Vitus.

If the supernatural agency, instead of being the work of devils, is supposed to be divine, it is easy to perceive what motives will prompt many to make it be thought that they are the subjects of this divine influence, and to magnify and display ostentatiously its effects upon them. But amid the crowd of insincere votaries—of those, for instance, who celebrated the orgies of Bacchus or the mysteries of Isis—it is conformable to the principles above laid down to suppose that there were a few whose minds and bodies were in reality overpowered with devotional fervour, the offspring of their genuine belief in a present and inspiring Deity. The author above cited ably depicts the symptoms, mental and bodily, arising from religious enthusiasm.

In the preceding examples, the phenomena resulting from any widely prevalent impressions on the human mind are exhibited under a twofold character—as originating in a genuine belief, or in a feigned belief. In the examples first adduced, the former element operates alone; in those which follow, the latter element becomes

more and more predominant; and we now come to the opposite extreme, where the element of genuine belief, in its unmingled form, almost entirely disappears; and in one of the most extraordinary series of phenomena ever witnessed in a civilized age, we trace on all sides the operation of a feigned belief; although, as already stated in extenuation of human weakness, originating in almost every instance, except that of hired impostors, in a more or less excited and bewildered understanding.

In applying these principles to the subject before us, I must, in the first place, show in what respect the influence wielded by Dr. Darling and his coadjutors resembles the purely mental influences just adverted to.

There is a marked difference between ordinary Mesmerism, and the modification of it practised by Dr. Darling. In the former all direct mental influence is excluded, and all experiments are carried on according to the strict rules of a physical science, or at least under that guise; the great object of the experiments being to establish the existence of a physical principle which produces certain effects upon the person experimented on, independently of all communication through his mind, the mere suspicion of which would at once destroy all faith in the experiments. In Dr. Darling's system, again, "mind acting upon mind," is the fundamental principle of every experiment. He publicly professed himself, in my hearing, unable to produce any effect without first communicating to the Susceptible what he was about to do. The adoption of this principle is the master-stroke of Dr. Darling's system. By adopting it, he at once freed himself from the inconvenient restraint of the laws of physical investigation, and rendered his experiments successful in every mind in which ignorance, credulity, vanity, or deceitfulness had a place. Hence the wide popularity of his system.

While the adepts in the ancient Mesmerism had the utmost difficulty, even in a large city, in finding one or two susceptible subjects, Dr. Darling finds scores of them in every crowd which assembles to witness his miracles.

But if Dr. Darling's influence be altogether mental, what is the use of the manipulations which he employs? That they are of no direct use is obvious, for he often operated without them; indeed, with all tried subjects, that is, with those who had already publicly exhibited themselves as his dupes, and could not, without discredit, draw back, he dispensed altogether with the farce of employing them. But they are, nevertheless, indirectly of the highest use, by engendering the mental delusion which is the foundation of his power with the uninitiated. During the quarter or half hour's solemn silence enjoined upon the whole audience, while those under trial stared intently on their metallic discs, a belief came to prevail, that from these discs, or from the person of the operator himself, there emanated some mysterious and irresistible power. What idea was formed of that power may be thought of little consequence; but it has been described to me as having been felt streaming down the limbs just like the current from a galvanic trough—an idea most probably arising from the internal sensations perceived in the muscles of the limb, on the mind being directed intently towards it, and which the imagination could easily fashion into that shape. But, in whatever way originating, I believe the idea generally formed of the power in question to be what most Mesmerists profess themselves to entertain, and which their manipulations and modes of speaking are obviously intended to suggest, that it resembles more or less that wonderful power which has been long known to pervade all nature, and to give its terrors to the thunderbolt; and which in our

own day has annihilated the elements of time and space in our written communications, and so given the speed of lightning to human thought: whence the minds of men are fully prepared to receive fresh discoveries without distrust, and almost to deem nothing too arduous to be achieved by it.

To some such belief, recommended to each by his own peculiar modes of thinking, the weak-minded, the timid, and the ignorant, partly from conviction, and partly through fear, confusion of mind, or mere love of the marvellous, yielded an unreserved assent; while it cannot be doubted, after the analogies above cited, that a much larger number feigned a belief of the same kind, which they employed as a cloak to gratify vanity, love of display, and similar feelings. They were not slow to perceive that these darling passions might be indulged in with impunity, since they saw others indulge in them to the uttermost without exciting either derision or indignation, but, on the contrary, calling forth universal applause, and being hailed as something marvellous and superhuman.

To those who know human nature, it will not, I believe, appear at all surprising, that if a pleasure be held out which can be indulged in not only with impunity but with applause, very many persons should so indulge themselves without analysing very nicely, or indeed caring much about the conditions implied by the indulgence.

It remains only therefore to show, that the gratification held out and sought after, is an adequate one. Now who will say that is not an object of ambition with many to be thought made of finer mould than their fellow-creatures,—to have more delicate nerves, and a nice susceptibility of impressions, not perceived by grosser natures? Who will say that there are none

who care to exhibit on a platform, to be the great object of attraction to a large audience or to a drawing-room circle, and to become the leading topic of conversation thereafter? Such indeed is the thirst for notoriety in the human mind, that every physician has met with cases in which even diseases, that is, bodily or mental infirmities, have been feigned for no other discoverable motive than the notoriety thereby attained. Of this, let the following be an example:—

In the year 1827–8, a rumour reached Glasgow of a young woman near Kilpatrick being affected with a black sweat, which dyed her whole body of a black colour. This affection, from its singularity, naturally excited much attention and speculation in medical circles, and had even become a topic of general conversation and interest in the surrounding country. Learned men found notices of similar diseases in the records of Physic, and the Greek name of *Melanhydrosis* was bestowed upon it, under which it might probably have had a place assigned to it in all succeeding systems of Nosology, but for the sequel of this history.

On the 28th of Jan. 1828, four medical gentlemen of this city, the late Dr. Young, the late Dr. Auchincloss, Dr. M'Farlane, and the narrator set out for the purpose of seeing with their own eyes this extraordinary case. Having previously communicated with the medical attendant, they met him at Kilpatrick, and accompanied him pretty high up the Kilpatrick hills, where, in a picturesquely situated cottage, they were introduced to the patient. They found that, contrary to what usually happens, rumour had greatly under-estimated the blackness of the case: for not only was the woman's skin as black as that of a blackamoor from head to foot, but the urine and stools, which the surgeon had with a praiseworthy zeal ordered to be preserved for inspection,

were as black as ink. But what astonished them most of all was that a plate of blood, which had been drawn the day before for the relief of the patient, was as black as the excretions, the serum being like ink, and the coagulum of a dusky hue.

So far every thing corresponded to or exceeded the accounts which had been received, and the new disease seemed likely to turn out a case of universal Melanosis; for not only were the excretions black, but the purple tide from which they all proceed had the same black taint. A case more complete in all its symptoms could not well be conceived. Still, however, the visitors were not satisfied; for we are proverbially a race of sceptics. So the public says of us, reproachfully; but we understand the matter better. Accustomed every day of our lives to be deceived and imposed upon, we at first arm ourselves with incredulity in self-defence; till at length it becomes with us a habit founded on the conviction, that in Medicine so far as it rests upon testimony, all true knowledge is the offspring of philosophic doubt.

It was found that the skin could be freed of its black colour by means of soap and water, and a large portion of the woman's back having been so purified, it was resolved to watch the progress of the black exudation: the visitors keeping guard over her by turns, while the rest gathered zeolites in that famed locality, or otherwise amused themselves. For some hours no change could be discovered; but at length, when the late Dr. Young was on guard, he saw the woman get up upon her hands and knees, and move about under the blankets in a way that excited his suspicion. He accordingly darted forward, and seizing the woman's hand, discovered in it a ball of dyer's blue.

The woman acknowledged the imposition, for which

no motive could be discovered but the gratification of a morbid thirst for notoriety.

There is still another form of delusion of mind, which produces many converts to Mesmerism in all its modifications; but I have purposely separated it from the rest, as it is too sacred and respectable to be mixed up with aught that can move laughter, or excite the graver feelings of contempt and indignation. To understand this delusion, we must enter the chamber not of feigned, but of real sickness, and suppose—what happens every day—that a protracted and perhaps painful disease has baffled the skill of the physician, and exhausted all the resources of his art. In such circumstances, there is nothing more natural than for the patient and his friends to try another and another physician; and if they all concur in speaking doubtfully of the result, or declare the disease to be incurable, still, it is in human nature to cling to hope; and thus, occasionally, the door is thrown open to the numerous tribe of deceivers who prey upon afflicted humanity, and among the rest, ready at the summons, comes the arch-deceiver Mesmerism. It would exceed belief, were I to tell, that there are educated men who intrust the health and lives of themselves and those dear to them to some “clear-seeing girl,” who either visits them or merely corresponds with them, and whom they in perfect seriousness believe to have the power of seeing into the interior of their bodies, and telling both what disease they labour under and what should be done to remove it. The fact, however, is, that this is done in the middle of the nineteenth century in this country, and done by educated men; for it is only in educated circles that this form of madness has hitherto shown itself. Now, it is very easy to form an abstract opinion of these and other similar delusions, the brood of Empiricism;

but it is a very different thing indeed, as all who have tried it will attest, to express that opinion in the hearing of the patient. When we try to do so for the first time, we find, to our surprise, that our hearts and our heads are at open variance; and we are constrained to acknowledge how truly pardonable those delusions must be, which our tongues would refuse their office were we to attempt to condemn. I know that I address those who have been placed in the painful predicament of being compelled to disguise matured opinions, or even to mumble out a few words of dubious commendation as to some proposed remedy or mode of treatment, rather than do what humanity recoils from—dash the cup of hope from the hands of a dying man.

To conclude my analysis of Darlingism. Some of my medical friends are disposed to adopt the view, that it may depend on a weak and disordered state of the nervous system, such as we observe in somnambulists and monomaniacs. Now, that organic alterations of the brain and nerves, and functional diseases of the nervous system from whatever cause proceeding, do actually play a most important part in producing the phenomena under consideration, I have no doubt; but I apprehend them to do this simply on the two principles above laid down, either by rendering the intellect weak and easily perplexed and stupified, or by blunting and perverting the moral feelings. But the advocates of this theory urge farther, that in certain unusual conditions of the nervous system, most commonly the result of disease, there is a susceptibility of impressions which are either not perceived at all, or are perceived quite differently by nerves organized more rudely, although more according to the healthy standard; and that in this way the gifted individuals whose nerves are so constituted, experience feelings, and become endowed with energies

both of mind and body, which cannot be judged of according to the laws which govern the nervous system in ordinary men. Now, this is obviously a purely physiological doctrine, which will be more appropriately discussed hereafter. I therefore in the meantime merely remark, that out of the total number of Susceptibles, there are not many who are known to labour under diseases of the nervous system, or who exhibit any cognizable indications of having nerves more finely organized than those of other men and women, but that for their benefit, I shall in the meantime admit the explanation proposed above. I do this, because I am anxious to leave open as many doors as possible through which an escape may be made without discredit by those who may have been foolish enough, through a misplaced love of applause or mere imitation, to exhibit themselves as Susceptibles, without duly considering how much their character as men of sense and probity might suffer thereby.

Taking then into consideration the different explanations proposed above, I think we shall not greatly err in estimating, that of one thousand Susceptibles, or persons affected under the new mesmeric system, ten, or one in a hundred, were complete impostors—a proportion much less than at the exhibitions under the old mesmeric system, where there was commonly only one Susceptible: and that one either hired and carried about by the operator; or a “wonderful girl” from some of the neighbouring factories, supported by the ingenious persons who had discovered her gifts. A much larger number, two hundred at least, must be regarded as having spoken and acted in direct opposition to their feelings and conviction; but of them a more lenient judgment will be formed, when we consider, that most of them were boys or very young persons, who looked upon the whole

exhibition in no other light than as an amusing game, in which they were privileged to join along with their seniors, and some of whom were, I believe, influenced by an amiable desire to please their parents, guardians, or teachers, who operated personally, or were at least known to the quick-sighted urchins as having a leaning towards Mesmerism. By far the larger number, estimated at seven hundred and forty, were more deceived than deceiving; they imagined that the operator had filled their bodies with animal magnetism, or some other mysterious power which they could not resist, and before they were well aware, they had committed themselves to such an extent, that to retreat was more difficult than to advance; in so far, therefore, we can impute to them nothing more than a mere error of judgment, or a want of self-possession, with consequent obfuscation or suspension of their mental faculties: but it would be carrying charity too far to say the same of those who, instead of continuing in the stolid state throughout, regained the possession of their mental faculties so completely, as to indulge in wit and repartee, see an adored object conjured up by the operator, kiss it and bow to it, sing songs, deliver speeches, and, in short, cut a decided figure upon the platform. I insist particularly upon the fundamental importance of this distinction, between those who continue in the stolid state throughout, and those who emerge from the stolid into the "lucid" state; although I am unable to assign numerically the proportions which they bear to each other and to the whole. Last of all, fifty, or five per cent., a proportion probably too high, but intentionally taken in excess, may be considered as labouring under disease of the nervous system, or as having more delicate and impressible nerves than other men. The result is therefore as follows:—

Want of Moral Principle,.....	10
Weakness of Moral Principle,.....	200
Weakness of Intellect, alone,	} 740
Weakness of Intellect, combined with Moral Weakness, ..	
Weakness of Nervous System,.....	50
Total Susceptibles,	1,000

I never witness a mesmeric exhibition without much pain, as I look upon it as a lamentable picture of human weakness. I am very far from thinking that in the preceding analysis I have over-estimated the element to which the moralist will look with most interest. That interest will not be merely of a speculative kind, when he considers the number of mesmeric exhibitions which have taken place during the last eighteen months, and are still taking place in this city, and throughout the whole country. He will then see that he has to deal with a practical question, and with practical duties arising out of it; and if he views that question as I view it, he will not withhold his more powerful influence in aid of my humble attempt to put down, by rendering disreputable, the meetings for mesmeric purposes which are now nightly held in this city and elsewhere, to the great detriment of the morals of the community.

It is needless for me to add, that with a few very narrow limitations, I regard the act of mesmerising as a grave moral offence, seeing that it tends to seduce the minds of the young, the ignorant, the weak, and the vain, from their allegiance to truth.* It is more peculiarly censurable when practised by parents upon their children, by teachers upon their pupils, by masters upon

* Although morality is one and immutable like the truth on which it rests, yet it must be admitted, so long as fallible mortals hold opinions diametrically opposed, that they may follow opposite courses of action without blame. It is scarcely necessary, therefore, for me to say, that I am far from imputing moral delinquency to all those who practise Mesmerism.

their dependants ; and, generally, by persons of superior attainments, character, rank, or position in society, who exercise a powerful sway over the minds of those beneath them. It is most of all censurable when practised by medical men, whose fancied acquirements, associated as they are in the minds of the vulgar with death and dissection, have always been regarded by them with a superstitious awe, which assists powerfully in propagating the mesmeric delusion. I myself never mesmerised any one, and would on no account attempt to do it ; but I feel confident, that if I were to proclaim myself a Mesmerist to-morrow, I should get at least a few foolish people to enact all manner of absurdities, under the pretext that I made them do it.

While I decline personally all interference with persons in the mesmeric state, I shall conclude by suggesting an experiment which will satisfactorily refute the whole doctrine, and for which the only qualifications necessary on the part of the experimenter are, that he have a muscular arm, and a thorough disbelief in Mesmerism. The experiment touches the system at the only point where it is accessible to experimental investigation. I have already pointed out that it is a peculiarity of Dr. Darling's system, that of all the conditions of body and mind which he holds himself out as capable of producing, there is only one which admits of having its existence established by any other evidence than the mere assertion of the person mesmerised. That exception becomes, therefore, most important both to the Mesmerists and their opponents, as affording the most trustworthy evidence either for or against the system. If a man affirm that he has a pain in his head, there is no mode of directly testing the truth of his assertion. If he affirm that he cannot move his arm, so long as he commands his muscles to be quiescent, no one can

impeach his veracity. But if he affirm that his hand, or any other part of his body is destitute of sensibility, that assertion can be tested by unequivocal means. Now the experiment may be conveniently made upon the back of any young lad under sixteen years of age, which answers well, as young persons of that age are the most numerous of all mesmeric subjects, and are agreed by adepts to be the best. Suppose then the young susceptible to be duly mesmerised. Let him first be made to feel very hot, and then showing him a cool and refreshing stream, let it be suggested that he should go in to bathe, when he will proceed to denude himself of his upper garments. The process of denudation is to be arrested when he is naked as far down as the middle, or the operator may employ any other artifice or means he chooses to bring him into the same condition. The preliminary arrangements being made, the young Susceptible is to have his feet mesmerised and so made fast to the floor, his mouth and organs of articulation are to be mesmerised so that he cannot cry out, and his hands are to be fastened mesmerically above his head, exactly as if he were tied up to the halberts; last of all, his back is to be most carefully mesmerised, so as to deprive it of all sensibility from the nape of the neck to the lowermost dorsal vertebra, and across the shoulders to the insertion of the deltoid muscles on either side. These preparations might seem ominous of evil to the young Susceptible, were he not fully convinced that he can feel no pain, and the same conviction will induce every believing parent or guardian to resign his son or ward to the experimental test. The result of the experiment will, however, show that there are no less than four deviations from the "straightforward path" of the "first of virtues" in this common mesmeric exhibition. It will show that the young Susceptible can draw down his hands, and that

right quickly; that though his feet be fastened to the floor, he can scamper off to the furthest corner of the room; that though his tongue be mute, he can cry out for mercy; and that though his back be insensible to pain, he will not wait long to have its sensibility tested. The only instrument required in this experiment is a hazel sapling, not more than four lines in diameter at the thickest part, but tough and flexible. Twenty-four stripes should be bargained for, but descending as they will do from an arm uplifted and nerved by a spirit of the most obstinate unbelief, they will be administered with such right good will that the twenty-fourth or twelfth part of the whole number will be all that is necessary.

Should this experiment not succeed in ninety-nine cases out of a hundred, I promise to recant publicly the errors into which I have this night fallen, and to believe in Mesmerism ever after.

POSTSCRIPT.—*The Author having finished his proposed analysis of the new Mesmeric system of “mind acting upon mind,” proceeded to give a sketch of the second part of his subject, comprehending an inquiry into the physiological effects of the processes of Mesmerism, and a few remarks on some recent publications on this so-called science: but this sketch being too brief to be at all commensurate with the importance of the subject, is for the present suppressed.*

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

BY

JOHN BURNET

OF

THE

UNIVERSITY OF OXFORD

IN TWO VOLUMES

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