The philosophy of rheumatism and gout, and a new method of radically curing those distressing maladies without the use of internal medicine / by J.F.I. Caplin.

THE

Philosophy of Rheumatism and Gout.

THE PHILOSOPHY OF Rheumatism, and Gout;

AND

A NEW METHOD OF RADICALLY CURING THOSE DISTRESSING MALADIES,

WITHOUT THE USE

OF INTERNAL MEDICINE;

BY

J. F. I. CAPLIN, M.D., F.A.S.L., &c.,

Inventor of the Electro-Chemical Bath.

"What Art cannot perform:
Nature accomplishes."

LONDON;

TRÜBNER & Co., PATERNOSTER-ROW;

OR AT

THE ELECTRO-THERAPEUTIC INSTITUTION,
9, YORK PLACE, PORTMAN SQUARE.

MDCCCLXX.

TO THE

MANY THOUSANDS

IN THIS COUNTRY, AND ELSEWHERE,

WHO ARE AFFLICTED

WITH

RHEUMATISM AND GOUT;

THE FOLLOWING PAGES

ARE RESPECTFULLY DEDICATED,

WITH THE EARNEST SYMPATHY

OF THE AUTHOR.

CONTENTS.

INTRODUCTORY PREFACE.

THE DISTRESSING MALADIES, which form the subject of this little Treatise, are so extremely prevalent in this country, and so inaccurately understood,—either as to origin, nature, or mode of treatment,—that I have thought, I might be the means of conferring a great service upon the suffering public, if the results of my many years experience concerning them, and my mode of practice in dealing with them, were placed before it.

THIS work has not the pretension of being a profound or literary disquisition, so much as a popular handbook; in which, so far as was compatible with accuracy, the medical terms,—unfamiliar to the general public,—have been avoided. For the reason, that in similar Treatises to mine, I have not unfrequently observed, that the adoption of technical phrases,—save, where they could hardly be omitted, has too often served to bewilder the non-professional reader. It is in no spirit of egotism, that I avow my desire to avoid this little pitfall, by keeping to the King's highway, so far as I am able—*i.e.* by being chary of *hard words*. For, on the present, as on all occasions, my aim is to inform, not to perplex the mind.

We live in an age of new lights, and new discoveries; and if we consider the significant, and mighty movements, of a recent date, made in all the arts and sciences—such as chemistry, physiology, psychology, geology, astronomy, electro-telegraphy, and applied mechanics,—it surely would be a matter of great surprise, were no new discoveries made in the —so-called—"ART" of Healing!

Such discoveries, when brought to public light, should not arouse cavil, suspicion, or prejudice, so much as, receive impartial investigation, which may lead to the satisfaction of a want, universally experienced.

Hardly, therefore, is an apology needed, if the author, in the following pages has struck out a new line, by calling into use old forces, and applying them in a method hitherto undiscovered; nor, if in doing this, he has had to differ from those who preceded him—either in their theories as to the origin of the diseases here treated of, or in their modes of grappling with them.

There was a time, indeed, when medicine was nothing more than a practice, founded upon empiricism; its only object being to enquire whether a remedy had a good or bad effect, in a given case; but the "*why*," and the "*wherefore*," the *causes* of this effect, it did not venture to investigate.

When, however, we consider the exact physiological knowledge, established upon a scientific basis, at

which we have arrived; and reflect upon the fact, that, we have now learned not only, that the processes of health and disease in the living body, are regulated by the fixed, and immutable *laws* of Nature—but that we also know, *what these Laws are*, —as cause, and necessary effect—we may say that the day of empiricism has well nigh gone by.

Instead of uncertain, and ever-shifting, theories, we have now definite facts—positive truths—not speculative fancies.

As, then, we have attained a clear insight into the very essence of natural phenomena, and can point out the Laws, by which they are determined, we can dare to be *certain*, in the solution of our problems, and to say,—this *is*,—because it *must* be so; and *cannot be otherwise*.

Such, then, being the magnificent measure of perfection to which science has attained, I conceive I am justified in maintaining, that a new application of an old Law of Nature,—may be promulgated, and earnestly recommended for adoption, without prejudice to professional courtesy, and without any reflection, upon the talents and labours of those learned men, who have gone before; who, while they made the best use they could of the materials at hand, in the fields of science—nevertheless, erred in many of their theories, giving to their generation fallacies—instead of facts.

In proof that I am not singular in this opinion, I

will conclude with an appeal to one, whose authority to speak, none will question,—the illustrious BARON VON LIEBIG.

He says :—" The mere knowledge "
" of external forms and physical properties no "
" longer satisfies the scientific enquirer."
" He is deeply impressed with the impor- "
" tance—nay the indispensable necessity of a "
" more profound, more intimate, more chimical "
" insight, into the composition, and changes "
" of organic bodies."
" It is not unworthy of remark, that many "
" physicians profess to hold physiology, in con- "
" tempt, exactly as they do chemistry; that "
" medicine reproaches physiology, and that "
" with equal injustice, as she reproaches che- "
" mistry."
" There are in fact many physicians, and "
" medical writers, who assert the impossibility "
" of elevating dietetic, and medical practice, "
" to an exact science: and upon this assump- "
" tion, they proceed to explain in their own "
" way, the essential conditions of life. They "
" strive to force upon us, as natural laws, and "
" as laws of health, and disease, their own "
" imperfect views of physiological, pathological "
" and therapeutic phenomena."

" In their opinion, it is *not the study of* "
" *Nature*, but *their books*, which is valuable "
" to medical practice.

" They have always at command in the "
" terms " vital force," " vital power," won- "
" derful causes, by which they explain all "
" phenomena they do not understand; thus "
" attempting to elucidate what is unknown "
" to them, by a certain something utterly "
" incomprehensible, and undefinable.

" In each disease, they see in action an "
" inherent independent force, opposed to the "
" physiological. As they have no hope of "
" arriving at an exact knowledge of the pro- "
" cesses of health, disease, and restoration, "
" they regard dietics, and therapeutics as con- "
" sisting chiefly of what is useful and hurtful "
" under certain similar circumstances."

" Rejecting altogether an exact acquain- "
" tance with *nature, the source of all knowledge*, "
" they look upon themselves as the true dis- "
" pensers of light, and information; and the "
" most modest opposition to the views of such "
" infallible guides is regarded by them, as "
" downright HERESY."

" Persons unacquainted with the present "
" position of science, and misled by the views "
" just stated, would easily suppose that the "
" natural sciences, physiology and chemistry, "

" had for centuries arrived at their full de- "
" velopment, that the natural forces have been "
" investigated, and their laws determined, "
" and that every effort had already been "
" made, and always in the proper direction "
" to gain an insight into the vital processes."

" Had this been the case, a reasonable "
" person might probably have given expression "
" to the opinion, that such an insight was "
" not to be expected, without thereby im- "
" plying an " impossibility," in its future "
" accomplishment."

" Now, so far from physiological, and che- "
" mical inquiries having been pursued for cen- "
" turies in connection with therapeutics, and "
" dietetics, they are now but in their infancy."

" Though scarcely commenced, they have, "
" however, already established the conviction, "
" that both have a scientific basis resting on "
" *exact physiological knowledge:* and that *the* "
" *processes of the living body are regulated by* "
" *natural laws*, which are proved by daily dis- "
" coveries to be within the scope of observa- "
" tion."

" The physician, who has learned medicine, "
" not as a science, but as an empirical art, "
" acknowledges no principles, but only *rules*, "
" derived from experience."

" From what a different point of view should "

" we contemplate, the abnormal, or diseased "
" conditions of the human body, if we were "
" first acquainted with its normal conditions; "
" how differently would the treatment of "
" diseases be conducted, if we had perfectly "
" clear notions of the processes of digestion, "
" assimilation, and *excretion!*

" Without just views of force, cause, and "
" effect,—without a clear insight into the "
" very essence of natural phenomena,—without "
" a solid physiological and chemical education, "
" is it to be wondered at, that men,—in "
" other respects rational,—should defend the "
" most *absurd* notions?

" REASON ALONE WILL NOT PREVENT WHOLE "
" NATIONS, FROM FALLING INTO THE MOST "
" ABJECT SUPERSTITIONS;—(regarding medi- "
" cine, and therapeutics, as well as other ques- "
" tions.)"

" Can men, who do not apprehend the na- "
" ture of scientific investigation in a philo- "
" sophical spirit, and who cannot *interpret the* "
" *language of phenomena*—can such men be "
" expected to derive the least advantage, from "
" the discoveries of physiology or chemistry; "
" and can they be deemed capable of making "
" the most insignificant application to prac- "
" tical purposes, of those discoveries?"

" We often see such persons *annoyed, that* "

" *truth should be so simple;* and yet ;—in "
" spite of all their efforts, they cannot succeed "
" in deriving from it any practical knowledge."
" *There was certainly at one time, no state* "
" *of matter more obscure, more completely* "
" *hidden from the corporeal, and intellectual* "
" *eye of man, than that which we denominate* "
" ELECTRICITY."
" A thousand years elapsed from the birth "
" of natural philosophy, ere the human mind "
" had obtained the slightest notion of the "
" existence of this, THE MOST STUPENDOUS "
" POWER IN NATURE ;—a POWER, PERFORM- "
" ING THE MOST IMPORTANT PART, IN ALL THE "
" ALTERATIONS OF INORGANIC MATTER, AND "
" ALL THE PROCESSES OF VEGETABLE, AND "
" ANIMAL LIFE !"
" The philosopher undeterred by innu- "
" merable difficulties, has at length obtained, "
" as the reward of his untiring researches, a "
" most intimate knowledge of Electricity : and "
" has made it his handmaid. He knows now, "
" that Electricity, Heat, Light, and Magnet- "
" ism had a common origin."
" By means of ELECTRICITY, he has subjected "
" the sister sciences to his service. By its "
" aid, he sends, with the speed of Lightning, "
" his thoughts to the most distant regions, "

" and extracts the noblest metals from the "
" poorest ores."

" It was by ELECTRICITY, that he *first arrived* "
" *at the knowledge of the true constituents of* "
" *the earth.*"

" When a Power of Nature, invisible, and "
" impalpable, is the subject of scientific en- "
" quiry, it is necessary, if we would compre- "
" hend its essence, and properties, to study "
" its manifestations, and effects."

" For this purpose, *simple observation* is in- "
" sufficient, since error always lies on the "
" the surface, while truth must be sought in "
" deeper regions."

" Nothing must be left to the fancy, or "
" imagination."

" The imagination, in thousands of cases, "
" gives rise to thousands of errors; and "
" nothing is more hurtful to the progress of "
" natural science,—nothing has more power "
" of limiting, and distorting our views of "
" natural phenomena, than—AN OLD ESTA- "
" BLISHED ERROR."

LIEBIG:—"*Familiar Letters on Chemistry.*"
London, 1859, pp. 17—25.

As I have all along adopted the principles, so lucidly enunciated above by one, who

holds the foremost place in the paths of Science; and, as those principles, have been again and again borne out by incontestable facts,—I have no hesitation in presenting them to the careful consideration of my readers;

And beg to remain,

Their faithful and devoted servant,

J. CAPLIN, M.D.

LONDON.

9, *York Place, Portman Square.*

March 15, 1870.

PHILOSOPHY

OF

RHEUMATISM,

AND METHOD OF RADICALLY CURING IT, WITHOUT INTERNAL MEDICINE.

Of all the Diseases, incident to the human race, that of Rheumatism in regard to pain, is the worst.

It is also the most prevalent of all affections—because it is almost impossible to guard against it, or escape from it: for the simple reason that we cannot avoid the cause, which is the influence of the atmosphere.

Whatever is our occupation, wheresoever our presence, we breathe it, and are surrounded by it; not only when we are out of doors, but even when we are sheltered in our most secluded apartments.

We may be in a warm room, and be seated even before a large fire; yet we shall not be exempted from its influence. How often when writing at your desk, or engaged in your counting-house, do you look around you to discover whence proceeds that draught of air, which is doing such havoc with your body?

Nor are garments a protection, since you feel it in spite of them.

The air, which passes through the key-hole of an ordinary room door, attains a velocity of 45 yards in a second. And when the room is heated, this velocity is increased according to the ratio of the temperature, and to the narrowness of the aperture in the lock.

The air thus, whistling through, might give you rheumatic pains in the neck or shoulders; a face ache, or neuralgia. Or the air entering under the door may affect the lower extremities. To the same danger you are exposed when seated near a window, or in passing from one current to another, when overheated.

Take a common illustration of this :—A lady goes to a ball. It is the winter season—the room is heated—the windows are closed. What with the lights, the gas, and the crowded throng, the slightest exertion causes her to perspire. When she quits the room, half-suffocated, she is only too glad to breathe a fresh atmosphere.

You tell her to wrap herself up well: but her carriage stops the way : her servant is already holding the door of it wide open. Caution, admonition, are unheeded. She hurries on as fast as she can, thinking that by so doing, she will avert any ill consequences.

But a visit to that lady on the following day, will convince you of the contrary. You find her complaining of a stiff neck. She cannot turn her head round; and she suffers acute pain all along the neck and shoulders. To what is this due? To two affections, with which she is attacked—Paralysis and Rheumatism. What! in less than a minute? Yes—so it is—and all through the effect of a cold! In all circumstances, then, beware of *Draughts!* Bronchitis, and many other ailments, may be super-induced by the same cause, according to the predisposi tion of the patient.

We may take another example of daily occurrence. Any one, who is suddenly exposed to a temperature lower than that of his skin may be affected in any other organ of his body or in his limbs. It may be the head, lungs, liver, abdomen, legs, hands or feet, &c., &c.

Although cold is not an element in itself; and is a nonentity, life requires heat; and life, whether it be animal or vegetable—is endangered, and at last destroyed for the want of it.

Exposure to cold, wind, rain, draughts, sudden meteorological vicissitudes, sitting in wet clothes, lying in damp linen, &c.; every cause, in fact, which tends to depress the normal degree of the body's temperature—all these disturb the circulation in the part exposed, cause local stagnation, and thereby derange the general circulation of the blood, producing a reflex derangement of the whole system. Cold thickens and stagnates the blood, obstructs perspiration, by clogging up the pores, and arrests the even movements of the living machine. Disease ensues; and, with extreme cold, comes death.*

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* As these sheets were going through the press, I met with the following paragraph in the DAILY TELEGRAPH, *Feb.* 7, 1870. It is so extremely apposite, that I append it for the benefit of my readers:—

"Which is the greatest among the petty nuisances of life? We come to the point at once, and answer emphatically—a *cold in the head.* Existence becomes a question of sneezing, or wishing to sneeze. The sneeze, indeed, may be a momentary luxury; but it is dearly bought. That vague waiting for the sneeze to come, which finally culminates in a delicious 'Ah-tchoo,' is not a pleasant condition of affairs. A cold in the head, then, is the most serious of petty nuisances; but a real cold, attended with fever, shivering, sore throat, and what not, is far from being a petty nuisance; it is one of the most formidable evils of human life in our cold, humid, northern climate.

"The undertaker is so frequently the gentleman who is called in

This may seem strange to those who are not familiar with the laws of Physiology.

"Well!" they may ask, "how could so much mischief result from my skin being exposed to cold?"

This difficulty will be answered by the following considerations.

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at the termination of '*only a bad cold*,' that any one who can point out to us how bad colds can be avoided and cured, is a benefactor to his species in latitude 52 N.

"Such an one is Dr. Symes Thompson, who recently delivered at the Gresham College a lecture upon the subject of 'Catching Cold.' This was just about the time when Professor Tyndall was lecturing at the Royal Institution on 'Dust,' and teaching us how we could avoid all danger of infectious disease by the simple process of wearing a respirator of wool or cotton.

"The prevention of 'colds,' Dr. Thompson tells us, is mainly accomplished by *keeping the skin in a healthy state*; but the question is, having caught your cold, what are you to do with it? The point is immediately to bring back vigorous circulation and *exhalation from the skin*. In the first place pop yourself at once into a Turkish bath, a vapour bath, or a hot-air bath, of one sort or another. Then administer stimulants, but do not be led astray by the word. By stimulants, Dr. Thompson means, in the first place, concentrated food in dilution, such as 'Whitehead's solid essence of beef.' By no means fly to strong drinks. On the contrary—barring the aforesaid 'essence of beef'—do not drink anything at all—not even water.

"*The remedial action through the skin does its work by drawing away the superabundance of the circulating fluid from the overcharged part.* Your business then is to withhold supplies of the watery ingredient from the blood. 'Diminution of drink sustained at the point of moderate persistent thirst is the most certain and powerful preventive of congestive disorder, and the most sure remover of undue internal susceptibility which can be adopted.' Surely, if Dr. Thompson be in the right—and he is a gentleman of no inconsiderable repute in his profession—here is a simple method of dealing with a bad cold In plain English it may be stated thus: As soon as you have caught a cold, take at once a Turkish or vapour bath. Go home, take moderate doses of 'beef tea;' do not drink anything else, save just a mouthful or two of liquid, to save yourself from too great suffering. You can scarcely go

If we measure the importance of an organ by its size, we shall find, that the *skin* being the largest of all, is of all the most important.

A brief description of its structure and functions will satisfactorily prove to the reader that this is so.

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wrong—keep yourself at thirsty point, and it will be well with you.

"There is the more need of being careful in this matter, seeing that the more often you take cold, the more likely you are to take cold again. Each cold brings with it increased susceptibility of the internal membranes to congestive derangements.

"So, then, fix in your own mind the *bath establishment* to which you will fly in case of need; buy a good big packet of 'Whitehead's essence,' which keep by you for use; make up your mind to a few hours of thirst, and you may set common colds at defiance."

§ II.—THE SKIN.

THE envelope, or integument, of the body, which we term the skin, serves not only as a protection to the subcutaneous tissues within, and as a means of keeping them in place, by binding them altogether, and thus causing each organ to retain its position, and support the other; but, also, it contributes to the regulation of the general functions of the organism.

It affords, first, a means for purifying the blood—as it facilitates the elimination of its impurities by perspiration.

Nature has provided for this purpose, a series of orifices called *sudorific pores*, through which from two to three pounds weight per day of the refuse of the whole materials of the body should be removed, in order to make room for the supply of new materials.

It has been calculated that a man of ordinary stature has eight millions of these pores; viz., 3,520 to every square inch.

These pores are about a quarter of an inch long; and, being spiral in form, they have a greater capacity, than if they were straight, It has also been computed that if these fine tubes were all united in a line altogether, that line would extend to a distance of 28 miles!

It being their office, then, to throw off the impurities of the blood, and the effete materials of the body, we may look upon them as the *main drainage pipes* of the human edifice.

As this is the case, it is easy to understand, how very essential it becomes to keep the skin in good condition.

But, secondly, in addition to this, the skin is destined to perform another highly important function in the human economy. And this is to *regulate the degree of heat* within; for when too much heat is retained in the body, inflammation and fever are the certain consequences.

Again, the skin is supplied with innumerable *sebaceous glands*, which secrete a certain unctuous fluid destined to protect it from the withering influence of heat; to keep it soft and supple, to lubricate its surface, and to preserve it from injury by any noxious fluid, or foreign substance.

The skin is, moreover, supplied with *capillary vessels*, so contiguous to each other, that you cannot prick it with the finest needle without drawing blood.

It is also so marvellously *interlaced* with a *net-work* of *the finest nerves*, that you feel the slightest impact;—which proves that the impression has been conveyed by the nerve-conductors to that part of the brain, called the common centre of sensation.

The reader will now easily understand that the cutaneous envelope is, as I have stated, one of the *most important organs* of the body; and that any interruption of its functions entails the infliction of all kinds of maladies, such as rheumatism, &c.

I may affirm, in one sentence, NO ONE CAN BE IN GOOD HEALTH, WHOSE SKIN IS NOT IN GOOD ORDER.

Now we return to the question propounded at the commencement of this pamphlet.

§ III. WHAT IS RHEUMATISM?

RHEUMATISM is a painful musculo-cutaneous disease, caused by obstructed perspiration, and defective secretion, the resnlt of cold. It is Protëan in character; affecting sometimes the whole body at once, and at others, fastening upon a particular member of it.

There are *two kinds* of Rheumatism — each distinct from the other—but both emanating from similar causes.

These are *Simple Rheumatism*, or Rheumatism proper; and *Drug Rheumatism*, or Rheumatism complex.

The first, as I have stated above, is occasioned by cold, moisture, wind, rain or draughts, &c.: by any cause, in fact, which has the effect of contracting and closing up, or inducing the apertures, of the pores of the skin to collapse.

What happens in such a case? If the reader has attentively followed what I have before explained the functions of the skin to be,—he will be able himself to anticipate the consequences.

Let me however dilate a little more upon the subject, because it is of extreme importance, and I would wish to establish thoroughly the truth of what I have advanced.

When the superficial pores—I mean those of the epidermis—are closed, the act of perspiration is arrested and the *effetes* are retained within. These effetes are composed of dead matter, *i.e.*, of the particles which, after a certain time, have exhausted their properties of

maintaining, building up, or repairing the fabric of the body.

These must then of necessity be thrown out, in order to make room for a supply of new material. But the outer doors are closed and they cannot escape. Their retention does not however arrest the process of organic decomposition, which is ever going on within, and is the result of that chemical action, which never ceases, as long as life lasts.

What then is the result? The numerous pores, whose existence I have indicated, afford still more room for the aggregation of a greater mass of effete molecules, which accumulate until the whole of the pores are completely filled up. Thus is built up a yet greater barrier to the elimination of the morbid particles before spoken of.

The effetes, then, continue to be generated by the wear and tear of the machine, as also by the friction of the molecules one against the other, by the contraction and motion of the muscular fibres, and the chemical processes presiding over the metamorphoses continually taking place.

What becomes, then, of all this refuse? It cannot find its way out. It remains, therefore, in the blood, which carries it all over the body, and deposits it here and there, and perhaps everywhere; or these particles may be arrested in their course through the body, and be located in some particular spot, or organ, which, being weaker than another, has less force of repulsion, and is, consequently, predisposed to admit them.

Such organ may be the liver, lungs, spleen, stomach, &c.; or the molecules may settle down in the joints and the larger or smaller articulations, as is the case in gouty affections; or again, they may be imbedded in the tissues, when the result is "*muscular Rheumatism.*"

The mucous and serous secretions now begin to suffer.

For the morbid effetes cannot contribute to the formation of new blood, nor be assimilated to the living tissues.

A cold sensation pervades the whole organism, for want of nutrition. Then debility ensues. The nervous system, irritated by the vicious condition of the blood—which contributes, or rather should contribute to the nourishment of the nerves, as well as to that of every other portion of the body—now becomes affected with the malady commonly known as "*Nervous Debility.*"

This is so common a complaint, but one so little understood, that I must digress somewhat, to dwell upon it.

What then is "NERVOUS DEBILITY?" How does it originate, and what is its primary cause?

It is admitted by every physiologist that no organ can injure itself, or contract a disease of itself. *The causes of all diseases proceed from without*: so that if, at a given time, the whole body is in sound health, it must, and will remain so, unless interfered with.

I will content myself with citing only one author in confirmation of this statement:—

"There exist," says Dr. Edward Johnson, "no elements of disease and premature decay within the human machine, as constituting a part of its nature. On the contrary, like all the rest of nature's works, it is constructed with so much skill and wisdom, that it is impossible for it to go wrong, unless it be injured from without. It is amongst the external causes, and circumstances, and influences, with which man has surrounded himself, that he must look for the causes of the disorder within. Then knowing that effects cannot cease until their causes have been removed, the physician sees at once that the first great step towards the cure of any disease must be the removal of the cause which produced it."

Patients often complain that they are suffering from "*nervous debility!*" and their medical adviser will most likely agree with their opinion.

The expression is a sort of pass-word, which is as vague as it is convenient, both to patient and doctor, when neither can characterize the disease more specifically.

There is also another term, with which we are equally familiar, and which satisfies the patient without further enquiry—and that is the term "*biliousness*," or "*liver complaint.*"

Indeed, it is almost an English mania to challenge the *liver* with being at the root of every derangement of the visceral organs.

Have you a head-ache? it is owing to the bile, or a pain, ache, or stitch in your side, or the abdomen? it is because the liver is out of order, when perhaps the symptoms are only due to flatulence. You have bad digestion, either from taking too much or too little food; the liver again is made the guilty cause. You labour under constipation or diarrhœa, this too is due to the state of your bile!

These two expressions, then, "nervous debility" and "biliousness" are those most generally employed, and employed too in the most unmeaning and inappropriate fashion.

Now I wish to guard patients against the use of medicines, which, if other than organic substances, are the certain cause of Drug Diseases, and these become in process of time constitutional affections.

But even in the use of these organic medicines a great difficulty arises—for in these days of *universal adulteration*, who shall guarantee to us the *genuineness* and *purity* of our drugs?

How often are both physician and patient surprised, and disappointed, at the failure of a prescription! Who shall say that the drugs prescribed had not either lost

their savour, become vitiated, or been adulterated? For all drugs lose their virtue, and become stale, in time.

This is the reason why the *same* prescription, dispensed in two different places, with equal *bona fides* of the chemists, so frequently produces opposite results, or no result at all.

It is one of the exceptional benefits, at all events, of the medicine which I treat of below, that ELECTRICITY cannot be tampered with, can NEVER BE ADULTERATED, AND ALWAYS KEEPS FRESH!

I have treated numerous patients who have suffered from Drug disorders.

Other practitioners go so far as to contend that degeneration of the blood is caused by the condition of the nerves, as if it was the nervous system which presided over the formation of the entire human structure! whereas, Anatomy demonstrates that the case is quite the reverse.

It is the BLOOD, and BLOOD ALONE, which furnishes all the materials of the human fabric.

The first germ of the spinal marrow is to be found in the fœtus, only three months after conception, and it grows in exact and simultaneous ratio to the increase and growth of the blood vessels—the primogenital authors of the nerves, the system of which is as yet scarcely perfected, when the child is born.

The nerves, then, have very little, or even nothing to do with the development of the organism. It is clear, therefore, that the formation of every part of the body—including the brain, and the nervous system,—is dependent entirely upon the blood.

It will now be seen, from the explanation of the above physiological laws. that the nervous system, at an

early age, can only be deranged by the unhealthy condition of that element, which is the fountain of its existence.

The disorder may originate in the blood of the mother herself. Then we call the affection congenital. The mother again may feed the infant upon bad, or poisonous milk, which is only blood, secreted in a particular form, or upon other improper food.

From whatever source it may be derived, such contaminated blood produces an irritating or poisonous effect upon the pulpy substance of the nerves, which is the cause of those convulsions to which infants are subject,*

I now resume, to conclude, my observations upon the cause of simple rheumatic affections.

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* I do not deny that there is a time when the *nervous system, when it has come to its normal perfection, may react upon the vital organs*, and even upon the whole fabric of the body; but this only takes place when the brain has arrived at that stage of maturity in which the mind becomes so far developed as to be capable of receiving impressions, and be susceptible of emotions; *i.e.*, when it begins to exercise its perceptive, and reasoning faculties, &c.

Then truly the excitement of the passions, such as those of fear, joy, grief, hope, love, &c., by affecting the brain, may disturb the functional harmony of the whole system: and this too, to such a degree, that the excitement may be so violent, or sudden, as to arrest those functions altogether, and produce instantaneous death!

This will be more easily understood, when we consider that the nervous system resembles the structure of a tree.

The brain is the root of it—the spine is the trunk—from whence radiate on all sides those branches which convey supplies to the whole organism.

When the brain has been long and repeatedly disordered by any of the causes named above, then it becomes so extremely sensitive, that the most trivial impression upon it—such as a single word, —may affect it so much as to cause the whole body to shake, to drive the blood to the heart or head, and thus cause palpitation, suffocation, apoplexy, or paralysis.

Long experience and thoughtful observation have led me to the conviction, I repeat it once more, that no disease exists which may not be traced, more or less proximately, to an unhealthy condition of the skin.

When we consider that the capillary tubes (which are no larger than a fine hair) are minute channels destined to convey blood; it will be evident that the blood, in order to be able to percolate through them, requires to be in a complete state of liquidity. This state can only be attained by means of a certain proportion of heat.

But blood that is contaminated and contains heterogeneous matter, must be thicker than pure blood, and cannot consequently circulate so freely. This is the reason why those labouring under Rheumatic affections always complain of feeling cold; and why also their skin appears bloodless, pale, white, or yellow, on account of the absence under the skin of a normal supply of life's element.

I have said already that the skin, by its porosity, is the regulator of heat within the body. But when it happens that a considerable portion or surface of the skin is in the abnormal condition before named, an excess of heat is retained within; and this produces that terrible affection known by the name of

RHEUMATIC FEVER.

So again a morbid fear of death strongly and constantly impressed upon the mind, *i.e.*, on brain, may ultimately be the cause of death.

For example, a mother dies from consumption. The disease is considered to be hereditary. One of her daughters catches cold—a cough supervenes. She fancies that she will certainly die of the same disease, as did her mother—that she is doomed, in fact. She broods upon the fancy which presses perpetually upon her mind. As mind acts upon matter, the brain telegraphs through the nerves to the chest, the reflection that is continually occupying it. The

§ IV.—ON DRUG RHEUMATISM

AND ITS CAUSE.

I SHALL now direct the attention of the reader to the *second* kind of Rheumatism, which I denominate, for distinction sake, "DRUG RHEUMATISM."

But it may be as well first to recapitulate a little.

I have shown that simple Rheumatism is caused by the retention within the body of effete substances, which, having become inert, and as such, being disqualified for the formation of new blood, act as a sort of poison, because they interfere with the vital functions, although they once formed an integral part of the economy.

The general disturbance to the vital organs set up by their presence, is frequently the fruitful cause of severe suffering, and even of incurable diseases.

If such, then, be the effect even upon robust constitutions, as it is, of this retention of inert matter (which was organic in its nature); what must be the terrible consequence of introducing into the body *foreign* and *inorganic* substances, which nature never destined to form a component part of the blood, and cannot,

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lungs, in sympathy, do actually become affected, and ultimately she dies of consumption, produced by the effect of morbid fear upon the mind.

If any sisters survive, the like results will almost inevitably follow, if the like causes present themselves.

But it might have happened after all in the above instance, that the mother's lungs were not at all affected when her daughters were born. For a blind belief in the certain transmission of hereditary diseases (in which I scarcely concur) has been the death of many!

therefore, be assimilated to or converted into living tissue?

Here we arrive at the *cause* of Drug Rheumatism.

I have established it as a fundamental principle in my mode of treatment: "*That there is no disease whatsoever, which has not either for primary or secondary cause the presence and retention in the body of inert substances.*"

The effect of the retention of these substances, alas! is too familiar to us, wherever we go, in the form of *Drug Rheumatism* in greater or less intensity, and qualified, according to the predominance of the drugs administered. So that it may be Mercurial, Arsenical, Saturnine, Martial, Cuprine Rheumatism, (and what not?) for the diseases induced by the presence of these poisons, either singly or collectively in the system, present such a *combination* of varied and anomalous types, that they often baffle description and are not to be found in Nosology.

I am warranted in affirming this proposition, as an incontrovertible truth.

A daily experience of 16 years, during which, (with only two exceptions to be named below) I have always detected some of those metallic deposits electro-plated on the copper of the bath, after its occupation by a patient, authorizes this assertion.

The two cases in which this phenomenon was not observed were: first, that of a young man, aged 23, who applied to me when labouring under an attack of paralysis, caused by sun-stroke (while he was graining a shop-front in summer time). He had never previously had any illness, and had consequently required no medicine.

The second case was, that of a young woman employed in my establishment, who had also always enjoyed the best of health through life.

In confirmation of my statement, I quote a passage which exactly expresses my views.

It is an extract from a little work by Dr. Rooke, of Scarborough, which, has run through forty editions of 40,000 copies already.

"In addition to the usual medicines prepared from roots and plants, I tried, in common with the rest of medical men, the different *metallic medicines;* and found the effects of most of them to be inimical to both solids and fluids.

"Even the *smallest* doses of some are very frequently attended with fatal results: yet we can scarcely take up a prescription from even the most fashionable physician, without finding it to contain one, and more, of the metallic preparations of either alum, antimony, arsenic, bismuth, borax, copper, iron, steel, lead, tin, zinc, sulphur, mercury, &c.

"Now, organic chemistry teaches us that all metallic salts and oxides exercise a direct decomposing influence upon the blood and other fluids.

"The recent experiments of *Orfila* in cases of poisoning with Arsenic, incontestably prove that mineral preparations are not only disseminated throughout every part of the body, but CONTINUE *there located for an indefinite time.*

"A most lamentable case of this nature occurred a few years ago to a lady residing in the North of England, who had formerly taken arsenic as a medicine, whilst living in India: which after remaining in a latent state for several years, change of climate and other exciting causes rendering the system in a condition favorable to its development, resumed its deadly action by producing all the symptoms of which the victim died!

"Had the medical men, who attended the unfortunate patient, made themselves thoroughly acquainted with the nature and action of minerals on the human body, together with the history of the previous illness when in India, and its unjustifiable treatment there, they would not have arraigned an innocent person at the bar of justice, on a charge of murder!

"The same law holds good also with metallic substances, administered medicinally. A physician of *Breslau* has a large collection of bones containing globular mercury in their cellular tissues, and there are many such collections in other places.

"Metallic combinations also induce a state of nervous irritation

often incompatible with life—the ganglionic system of nerves is immediately affected by them; and hence many instances of deadly poisoning have been known to occur when given medicinally.

"Metallic salts are allowed however to be exhibited with impunity in every case of disease. No matter whether sickness invade the strong man, the delicate female, or the suckling babe, they are given to all alike.

"Such is custom, and such too is ignorance, even in this age of medical wisdom!"—From the *Anti-Lancet*, p. 25, by CHARLES ROOKE, M.D.

I shall here state a fact well-known to every one, which illustrates, as well as a hundred would, what is the effect of introducing an extraneous substance, even innocuous in itself, into the living tissues.

The smallest splinter of clean wood will produce inflammation when it enters the finger. Purulent matter is formed; and the pain becomes so acute, that for a time the patient loses his rest through it, until the offending intruder has been expelled.

The formation of purulent matter goes on increasing. But this pus is in itself an inert matter. Nature directs it outwardly towards the skin. The skin, whose life cannot continue without blood, gives way and perishes; and when thus broken up, the splinter is expelled together with the purulent matter. The pain now subsides at once. Here nature herself indicates the mode of cure.

The wisest course we can all follow is to copy her example; *i.e.*, endeavour to throw out, by the shortest road, the cause or causes which offend within In other words, let us be agreed, that the only way to cure a disease is to remove by the roots, or eradicate, the cause of it, whatever that may be.

I have carefully studied some of the most learned works upon Rheumatism—its causes, symptoms, and treatment.

Among these is the article on the subject which occupies 229 pp. in the "*Dictionnaire des Sciences Medicales*"—*Paris*, 1815—64 *vol.* 8*vo.*, also that in *Copland's* Dictionary, 5 vols., with the elaborate disquisitions of that eminent author upon the kindred diseases of gout, neuralgia, and sciatica.

I have also perused the work of *Dr. Fuller*, besides numerous others. But I find that the generality of authors differ from each other in every point, excepting one; viz., in the opinion that rheumatism, gout, and their analogous affections, are symptomatic and indicative, of the presence of pre-existent diseases, to which they attribute, that scourge of humanity,—the dreadful malady, of which I am now treating.

To this opinion I am radically opposed.

I maintain on the contrary that Rheumatism, instead of being the sequence or effect of other diseases is the *primary cause* of the multiform evils, which spring from the retention in the system, or in some particular organ of it, of inert, excrementitious, or poisonous substances.

Having thus explained the nature of rheumatism, I will proceed to consider the affection, so closely allied to it, and commonly called Gout.

§ V.—ON GOUT.

RHEUMATIC GOUT, AND GOUT PROPER.

If I were to comment upon the various opinions of the authors, who have written upon this subject, from the time of Hippocrates, called the Father of Medicine, (who flourished 2,300 years ago), down to the present day, I could write a ponderous volume.

In the French Dictionary already referred to before, the digression on Gout occupies 206 pages, and therein are cited the various hypotheses as to the origin and nature of it, and also the different modes of treating it, from the earliest ages down to the present century. The opinions are as discordant as the remedies applied. This is not to be wondered at; for, if we do not know the source and cause of a disease, how can we expect to cure it?

All the resources of the pharmacopœias, it seems have been tried in vain, and though temporary relief—or rather temporary suppression—of the disease have been obtained, I can meet with no authentic record of a radical cure, nor the prescription for effecting it.

Let us, then, again take Nature for our guide, and, keeping in view the physiological laws of our organism, see, if we cannot unravel the difficulty which here besets us.

I have shewn that rheumatism is the primary cause of of almost every disease, (accidental lesions excepted.)

Rheumatic gout by common consent, and as its name implies, is only another form or offspring of rheumatism. I need not, therefore, dwell farther on this fact here.

But I undertake to prove that Gout Proper is also descended from the same parent, and is the *quintessence*

of rheumatism,—distinguished from it, only in respect to the particular organ of the body, in which it takes its seat.

I shall simplify my description, if I divide rheumatic affections into the three following distinct branches:—

The *first* being *Muscular* Rheumatism.—

The *second*, *Articular* Rheumatism; or that which is seated in the larger joints, such as the shoulders, elbows, hips, and knees; and which is sometimes called, "*Rheumatic Gout.*"

The *third* being the *Rheumatism* called "GOUT," which is confined to the minute and small joints—such as those of the fingers, and toes.

Let us now examine the composition and structure of these different organs.

1st, THE MUSCLES.—The muscles are formed of fibres, which compose the cellular tissues. They are soft, porous, and elastic; and are accordingly susceptible of dilatation and expansion

Such being their nature, it will be readily understood that they afford a mode of easy ingress for the rheumatic matter, or serous lymph, which is an effusion, (as I have shown,) produced by the retention of inert or effete substances, and which, being of an acrimonious nature, irritates the nerves, and produces the pain commonly called "*Muscular*" *Rheumatism.*

2ndly. The LARGER JOINTS OR ARTICULATIONS;

Where the bones meet to form moveable joints, the rounded ends are covered over with a smooth, white, gristly, substance called *cartilage*, so that they may move freely one over the other; the parts are also lubricated by means of a fluid, called the "*synovial liquor*," which is secreted in a capsular membrane, contained in each joint.

All the various joints are bound to each other, and

strapped, so to say, together by strong, tough bands, called *ligaments.*

They are moved by the muscles, the extremities of which, where they are attached to the bones, are called *tendons.*

The bones are also supplied with absorbent vessels, nerves, and lymphatics, to enable them to derive nutriment from the blood.

From this anatomical sketch, it will be seen that we are tracing the course of the disease to a part of the body, which is no longer porous, spongy, and elastic, as the muscular fibres are, but which, on the contrary, is tough, hard, and compact, such as the larger bones, the tendons, ligaments, and cartilages.

When the rheumatic principle, or poisonous essence, has found its way to these parts,—then the affection becomes more serious, more painful, and more difficult to cure. This is the disease known as "*Rheumatic Gout,*" or "*Arthritis.*"

Let us now follow the poison as it leaves the more fleshy and porous parts in the muscles, to make its way to the joints.

The acrimonious principle of the Rheumatic poison is carried along in the blood vessels, and then oozing out from them, is deposited either on the cartilages, ligaments, or tendons, as the case may be.

These being tough and gristly, retain the poison, and, in process of time, it becomes firmly imbedded, so as to be very difficult to dislodge or remove.

What takes place now? Inflammation of the bones sets in; they swell; the beautiful hinge mechanism of the joint is clogged, and becomes deranged. Thus locomotion is impeded, and, in chronic cases, is rendered impossible.

Again, if any gritty particles of iron, arsenic, mer-

cury, or other metal are deposited between the joints, the mischief is much greater, and the pain proportionately intensified. One joint abrades and grates upon the other; inflammation sets in, the heat of which dries up the lubricating synovia; and then granulation follows. *Caries* of the bone may also set in; or the two joints may become soldered, as it were, together, when we have what is termed an "*Anchylosis.*"

Such is *Articular Rheumatism*, or Rheumatic Gout.—

—It may be interesting to the Reader to hear from Sir Benjamin Brodie the reason why the *knee-joint* is so much oftener the seat of this disease than the other articulations. He says:—"In this disease, no cause is so frequent as that of cold; hence the frequency of the attack in the knees, and its comparative rarity in the hips and shoulders, these parts being more sheltered and protected with a thick mass of flesh, whereas the knees are almost bare."

3rdly.—Our next consideration is the structure of the *smaller joints*, which are the seat of Gout Proper.

These are the *fingers* and the *toes*.

The *materials* of which these joints are composed, are precisely the same as those which enter into the composition of the larger joints mentioned above; but they vary in shape, form, and size, according to the functions, for which they are destined.

It is not necessary, then, to enumerate them again; but it is important to my subject, to direct attention to the great *number* of bones and articulations found in these organs.

Each *wrist* contains *eight small bones*, placed in double rows; each *hand* is formed of five bones, and to each hand there are *fourteen finger bones!* The same number are found in the feet and toes.

From this it will be obvious, that the joints or articulations of these numerous small bones must be exceedingly fine and minute.

When, then, the rheumatic virus, of which we have been speaking, instead of being expended on a *large* area like that of the muscles, or the greater joints, is compressed in a concentrated form upon a much more confined and narrow space, such as the small interstice of a finger-articulation, we can conceive how much more violent the pain must be—and this is "*Gout Proper.*" The same kind of effect—but differing in degree—is produced in this disease, as in articular rheumatism.

When *Urate of soda*, *uric acid*, *nitrate of ammonia*, *phosphate of ammonia*, and *oxalate of lime* are contaminating the blood; one or more of these substances are precipitated upon the cartilages: and then we have *calcareous or chalk* deposits. These substances being very acid, and caustic by nature, eat into the cartilages; which produces exquisite pain.

It will now be seen that the acute pain, and anguish, —I may say,— which accompany attacks of gout, and which rob the patient of rest by night or day, compelling him sometimes to avoid the pressure of the lightest garment upon the parts affected, are owing to the *condensation of the rheumatic virus*, which is strained through and compressed into the interstices of the small articulations.

We may define, then, Gouty matter to be,—the "*expressed juice*,"—so to say—the concentrated essential principle, of rheumatic poison.

Now lay one of your fingers upon your knee-joint, and compare it with the latter; or compare one of your toes with the knee, and you will see how great is the contrast in *size*. You will find the two at least six times smaller than the knee. Well, we have seen that *muscular* rheumatism, painful as it is, is not *so* painful as the *articular*, by reason of its energies being expended upon a wider sphere. But narrow down this area to a com-

pass six times more circumscribed, and you get six times as much intensity of pain !

I will take an example from my electric batteries. I hold a piece of iron wire, between the two copper conductors of the Battery, and of the same diameter as they are. The *electric* fluid is transmitted through that wire ; but you *see no* change in it. Let me now diminish the area or *extent* of the surface to be acted upon, and you will see how different is the result !

I now take a *very thin* piece of iron wire, two inches, in length, and place it, instead of the former, between the two poles of the same battery ; and the intensity of the current is so much increased that the wire is fused instantaneously ! The *electric* fluid, be it observed, is the same in quantity in *both* experiments. In the first it was *not* restricted in its passage ; in the second, being *confined* to a *much* narrower space, it became condensed, so to say, and its intensity was increased to such a degree, as to produce the above phenomenon. This plainly proves, that the power of one, and the same experimental agent is multiplied, in proportion to the diminution of the space to which it is confined.

I could cite many other illustrations of this principle, but I think the above will suffice to render my meaning intelligible.

Hence, we may assert that RHEUMATISM is *one, and uniform in its nature and origin, and differs in degree or intensity, only according to the locality and structure of the organ in which it is seated.*

It is known to be erratic in its character, and susceptible of *metastasis*, or transposition, so that it will sometimes leave one limb, instantaneously, to be transported to another—perhaps an opposite one ; or it may attack, by repercussion, an internal and vital organ, such as the heart, stomach, &c. These changeful fits are not to be wondered at, when we reflect, that the disease lies

in the blood, which circulates in every part of the body, carrying along with it, in its current, the poison with which it may be charged.

I have stated, that rheumatism may be the primary cause of almost every disease, but this is far from asserting, that no disease can proceed from any other cause. A man may catch a fever, may break his bones, may absorb poison into his system, may suffer from a mental affection, and nervous disorders, without ever having had rheumatism. What I do say is, that these and such like disorders will *not produce* rheumatism; but that, conversely, rheumatism may be the original cause of all of them.

If so, the remedy, which will cure the one, will eradicate the other. Therefore, a long experience has proved to me that *sciatica*, *paralysis*, *cutaneous diseases*, and, in short, all those maladies which originate from a similar cause, to rheumatism—*i.e.*, the congestion of morbid or inert matter upon some particular organ—can be, and *must* be, removed by one and the same remedy.

Let us now consider what is the *object of Medicine* and Surgery, if it be not the *removal of offending matter?*

If deleterious substances, or indigestible food, have been introduced into the stomach, the physician prescribes an emetic to get rid of them: for concretion in the bowels, a cathartic; for congestion of the kidneys or bladder, a diuretic—and so on. With what object, I ask again, if it be not for the removal of the substances, which interfere with the functions of those organs?

So also the surgeon opens an abscess, to allow the purulent matter to escape; he taps the dropsical patient, that the spurious water may pass off. The gangrenous flesh, he excises; and amputates the mortified

limb. The lacerating calculus he removes from the bladder; and the best mode of curing the toothache is to extract the tooth.

In a general sense, then, we might describe the *art of healing as the art of expurgation.*

But no DRUGS or SURGICAL INSTRUMENTS are of avail to remove rheumatism, sciatica or gout, located in the substance of the muscles or articulations,; to remove œdema, or the thickening of the synovial liquor and other secretions; to reach the parenchymata of any vital organ, or congestion of the brain; to eradicate neuralgia or tic-douloureux; or to cure, in a word, all those diseases, whose cause is owing to the poisoning of the blood.

In some constitutions, Nature herself, when not exhausted, will undertake the work of elimination: and then she expels the peccant humors from the blood in the form of an eruption; of boils, carbuncles, furuncules, ulcers, &c.

But in the majority of cases, she is too feeble to help herself; and then, it is that she looks to the physician for help. Now comes the question what help can he afford? Drugs will not assist her; they have brought her to her present condition. Is there any agent then, any method discovered, which will *co-operate with Nature* in this predicament, and which will relieve her of her burden, and not add to it, as is the case with all inorganic drugs?

Yes, Providence has provided us with such a saving agent—an agent homogeneous with the principle of life itself.

What this agent is, we shall learn in the following CHAPTER.

§ VI.—THE MEANS OF RADICAL CURE.

THIS curative agent differs from all others; and is so subtile, that it penetrates everywhere, and pervades the whole of creation.

It is the great agent of decomposition. It is an agent which is generated within our own bodies, without which we could not exist, without which we should have no vegetables upon the earth, nor, indeed, animal life.

This imponderable and incoercible element was destined by the Author of Nature, to communicate and maintain that requisite and indispensable motion, without which everything would be reduced to complete inertia—that is death.

This universal motor power is ELECTRICITY.

Very few persons are acquainted with its *modus operandi;* and with its relation to the laws of life, health and disease, *i.e.*, the laws which determine the physiological phenomena on which our existence depends.

We are constantly hearing, however, Medical Electricity spoken of as "Galvanic" Electricity, "Voltaic" Electricity, "Faradayic" Electricity, &c.; and yet there is little correct enquiry made, as to the origin or mode of action, of these so-called electricities.

I remember hearing *Professor Tyndall,* in a Lecture at the Royal Institution many years ago, after making some astonishing experiments, observe: "Now you have seen the extraordinary effects produced by

electricity; but I must tell you that we do not know what is its primary cause, nor its development, and probably we shall never discover them."

Physical philosophy is the science of correctly interpreting the language of phenomena; *i e.*, of finding out the cause, by the effects which are produced.

But we must first distinguish between the various effects, in order to study them and draw logical deductions from the different phenomena which they present to our notice.

In almost every work upon Medical Electricity we find the words "*Galvanism*," and "*Electricity*" employed at random together, as if the two were synonymous.

One species is denominated "*dynamic*" and the other "*static*." These terms are innacurate and inexpressive.

The first I denominate "*Chemic*," because it is generated by chemical decomposition, and acts chemically upon the chemical compounds in the body, whether extraneous, or not; the second one, I call "*atmospheric*," because it exists in the atmosphere.

Both these electricities are valuable therapeutic agents; but their *modus operandi* totally differs.

I do not purpose here to dwell *in extenso* upon the two kinds above named; (for I am preparing a larger Scientific Treatise, which will embrace the whole subject;) but shall confine myself to the consideration of the phenomena produced by the electricity, called "*chemic*" or "*physiologic*."

I am now treading upon delicate ground, and am aware that my notions differ *in toto* from the opinions of those, who have written upon *this* kind of electricity; (for I have nothing here to do with that General Electricity, by which are obtained the phenomena of telegraphy, electro-plating, scientific demonstrations connected with the arts and sciences, &c.)

I can hardly expect those authors who have preceded me, and who have written elaborate works on the subject, containing opinions totally opposed to mine, to condescend to agree with me, and acknowledge that they have been in error.

On the other hand, those who may have read their works, and adopted their opinions, may be inclined to think, that in differing from such high authorities, my views can scarcely be correct. At an rate, I am prepared to be accused of boldness, if not presumption, in attempting to throw a new light upon the question.

Indeed, I *have* been informed already that my views were singular, and did not accord with those generally adopted by scientific men. My only answer to such observations is, that I take for my authority an infallible teacher, superior to them all—*Nature herself.* And in doing so, I remain faithful to my motto—"NATURE ALONE IS MY GUIDE."

Let us, then, consider what is the LAW she establishes in the production of Chemic Electricity within the earth.

For the earth, the *terra firma,* is known to be a vast Electric Battery; and hence we call it the "common reservoir" of electricity.

The first process in the evolution of this electricity is *Fermentation.*

You cannot sow a grain of wheat, or the smallest seed; you cannot plant in the soil any vegetable body whatsoever, which is not immediately the subject of this phenomenon—a phenomenon which is the chemical result of a combination of moisture, heat, and air Moisture, which is water, is composed of two gases—oxygen and hydrogen.

The seed absorbs this moisture, and soon begins to swell and expand. The atoms of which it is composed

lose their force of cohesion, are separated, and disintegrated. They now throw off the putrescent cuticle or husk, (by which they were confined,) and germination commences.

All the constituents are decomposed, and electricity is evolved. This increases according to the development of the germ, which grows and expands by imbibing and appropriating to itself the elements of nutrition with which it is surrounded.

If electricity is the agent of universal movement which controls all the phenomena of nature—from the minutest to the most gigantic objects—all and each of them are charged with electricity, and this forms in itself again an electric battery, *i.e.* an agent of decomposition.

Such is the Law of Nature, which is as uniform as it is universal.

The disintegration of the molecules composing the tiniest seed, is carried on by the same law, as that which sets in action the stupendous natural batteries, which we call *Volcanoes !*

How is this ? When the salt water of the sea penetrates by some fissure within a subterranean cavity, oxidation of the various substances, of which it is composed takes place ; heat is generated ; expansion and dilatation succeed. The molecules are disintegrated ; decomposition follows, and electricity is evolved. Then incandescence commences ; the materials are fused ; gases are generated ; and an eruption is the inevitable consequence.

Such, then, is the primary cause and origin of electricity. But, as I said, the effect in turn becomes cause, and promotes decomposition more or less rapidly, in proportion to its volume, and to the nature of the subject matter to which it is applied.

For instance, the decomposition of vegetable refuse, such as leaves, parings, &c., and of tainted meat,

rapidly produces electricity—as may be ascertained by an electro-meter.

In our electric batteries, where we decompose a heavier and more compact substance (the metal zinc), electricity is evolved upon the same principle.

Fifty years ago, before the time when that great physicist, Lavoisier, had published his new treatise on Chemistry, there were considered to be only thirty-one simple bodies — simple, because they could not be decomposed by any chemical re-agent. Since that period, however, these have been decomposed, and we have discovered the original number to be double. By what means? By means of electricity.

Diamond — which is thought to be pure carbon — could not be ignited by fire. This has been recently effected by means of electricity.

Thus electricity has been shown to be the greatest decomposing power of Nature.

From the above fact, I have drawn the conclusion, that if decomposition evolve electricity, this fluid must be generated in the human body, by the same principle, viz, the decomposition of food. And following out the analogy, I discovered that the stomach is a sort of electric battery: that the second stomach, or the duodenum, which decomposes the chyme into chyle, is another agent of the same kind, the process of decomposition going on in both, until blood has been manufactured.

When this stage has been reached, the blood itself is chemically decomposed, to contribute to the transformation, and combination—each by its own appropriate organ—of all those substances of which the body is composed; such as the bones, teeth, nails, nerves, muscles, fibrous tissues, the saliva, tears, cerumen of the ear, the bile, gastric and pancreatic juices, and the other solids and liquids.

So that the construction of all and every part of the body is carried on by this process of decomposition.

But when the edifice has been perfectly completed, it does not remain stationary like a stone. It is ever on the contrary passing into decomposition, to be re-composed again.

The old materials first used, being worn out, are rejected to make way for new; and this wonderful waste and repair is carried on by decomposition—the same agent building up who pulls down.

This is nature's unchangeable law. The law of perpetual transformation and movement of atoms. It is the law of life, for no movement, no life—blood does not circulate in the veins of a corpse—inertia—is death.

I have shown that, according to a fixed law of nature, electricity is generated in the body; whence it follows, as nature ordains nothing in vain, that electricity, of a fixed quantity and definite degree, is absolutely essential to life, and therefore to a healthy condition of life.

Electricity, then, is to the body, what steam is to the locomotive. If the steam power be deficient, the engine flags in its work; if it is shut off altogether, it ceases to work, and comes to a standstill.

So when electricity is wanting in the human machine, all its complex movements are affected, and its functions deranged. We will illustrate this by a familiar example.

Look at the sedentary man, or man of letters. See what a quiet and still life he leads! eH is always closeted in his study. Change of air and exercise he has, so to speak, little or none. His countenance is pallid, his body emaciated. The tissues are flaccid and devoid of fibre; his muscles are shrunk for want of exercise, and have little or no elastic tone. His digestive organs are weak, his liver is torpid, his blood

stagnant, his appetite bad, and dyspepsia is his daily torment.

He scarcely dares open his door, or appear out of doors, for fear of catching cold; a large fire blazes in his room, and yet he is always chilly. What ails him? *Want of Electricity!*

Now let us glance at an opposite case. See that wheelwright, or forging smith, at work. Their arms are bare, or they are stripped to the waist. It is the depth of winter, and the weather is inclement, yet they do not shiver. They are indifferent to wind, cold, or rain, however much exposed to them. When they quit their work, to take their meals, they go out into the open air, independently of wind and weather, with their sleeves tucked up, and without their coats on, and yet they never take cold! Their whole frame is muscular and robust. Their sinews are brawny—their flesh is hard and compact. Their appetite is as keen, as their digestion is good. *They* never trouble the doctor much.

Why is all this? Because by hard manual work, by daily laborious exercise, they co-operate with the laws of our nature: they promote the functions of the body: by motion and friction they cause the refuse molecules of the organism to be easily displaced, and the waste materials to be thrown off. In a word, they perspire profusely, and at every pore. You see the perspiration rolling off them in large drops like rain. And every one of these drops of perspiration contains a molecular portion of the thirty different component elements, which enter into the constitution of our frames.

Then, to repair this large waste, or expulsion of refuse material, they require and consume six or eight times as much fuel, *i.e.*, food, as the sedentary and inactive man does, and that food is often of the coarsest and most substantial kind.

With a larger supply of fuel, then, they have more subject-matter for decomposition. The more decomposition, therefore, the more electricity; and *the more electricity, the more health and strength.*

But how shall we supply this vitalizing fluid, in those cases where from any cause it is deficient?

By means of THE ELECTRO-CHEMICAL BATH.

We will now examine the *modus operandi* of the ELECTRO-CHEMICAL BATH, in the cure of Rheumatism, Gout, Sciatica, Neuralgia, as well as almost every other kind of affection.

We have proved above, that the cause of Simple Rheumatism is the closing up and collapsing of the pores of the skin, and the retention, in consequence, or concretion within the system, of effete substances; and that the other kind of Rheumatism is due to the presence of mineral or metallic elements in it, introduced in the form of medicine, or otherwise. It has also been shown that neither can medicine within, nor the lancet without, reach the seat of these diseases, and remove the causes of them. Iodide of Potassium cannot remove Mercury, nor any other inert substance.

What will the BATH do?

§ VII.—THE ELECTRO-CHEMICAL BATH.

The patient is placed in a copper bath, filled with warm water, which is slightly acidulated with Muriatic Acid. The bath is the negative pole, and the positive he holds in his hand a few inches above the water. The positive electricity is thus introduced through the hand into the body, so as to saturate it entirely. Every molecule composing it is thereby permeated by the electric fluid. The water being hot, dilates the pores of the skin, which, when opened, give free passage for exhalation.

The property of Chemic Electricity is, as we have shown, to decompose and reduce to their atomic condition all inert substances. Next, as electricity is incoercible, it must come out of the body by the pores of the skin, which are dilated by the heat of the water. By this mode of introducing it, we obtain not a single current, but as many currents as there are pores in the skin, that is, seven or eight millions. Electricity radiates in every direction, as rays of light from a planet. Not only is the body kept up to a certain degree of temperature by means of the hot water, but we also introduce vital heat within it by means of electricity, the power of which, in my batteries, is sufficiently great to fuse instantaneously an iron wire, two inches long, when connected with the poles even of one battery.

In some instances, such as paralysis, we connect two, three, or even four batteries together; then the power is quadrupled, and is immense.—I have been asked whether the application of such power would be safe?

I reply, "Certainly;" for it must be remembered,

what are, as I have before stated, the dimensions of the pores of the skin, whose united length, if all drawn out in a line, would be twenty-eight miles! It is because the electricity is diffused over all this large area, that we dare apply it in such quantity.

Again, by taking the whole body, I act upon each and every separate part of it, and all are equally benefited. It is needless to say, that by this powerful agent the general circulation is stimulated, all the functions promoted, and the balance restored to the nervous system.

But *how can the Bath benefit the nerves?* Simply because it is the best purifier of the blood: and I have shown before, that the healthy condition of the nerves depends upon the purity of the blood.

Again, the Bath removes those congestions which may be located either in the brain, or in some portion of the spinal marrow, (so directly affecting the nervous system,) as well as those which may be settled in any other portion of the body, such as the joints or limbs, when we find, as the result of their baneful presence, Rheumatism or Gout.

It is by thus removing the cause, that the effect ceases.

The metallic substances, I find, as I said, always electro-plated, (after its occupation by the patient,) on the copper of the bath. They are distinguished by the colour of their oxydes, and they predominate in the bath, in proportion to the greater or lesser quantity of those substances which have been previously taken by the patient.

Thus, in one patient's bath, mercury will preponderate; while in another's, arsenic may be the principle deposit; and in another it will be iron, or iodide of potassium—according to the nature of the affection

he has suffered from, and the drugs which have been administered for his relief.

The more copious, then, the eliminations are of these noxious substances in the bath, the greater is the relief to the patient, and the nearer he is approaching to his cure.

I have observed that when electricity saturates the whole organism, it acts equally upon every part of it. But in chronic cases of Rheumatism and gout, we find (even according to other authors, who thus admit the presence of inert matter and morbific substances to be the cause of the disease) that the Rheumatic virus is accumulated in a coagulated form, in some one or more of the articulations.

In cases like these, a topical application of electricity to the part affected is required, in order to overcome the resistance of the concrete substances, to dilate and dissolve them; and then, by the counter-irritant effect of the electric fluid, to assist nature in expelling them through the skin in the form of boils, vesicles, or of a pustular eruption.*

* "THE TRUE PHYSICIAN constantly keeps the BOOK OF NATURE spread before his eyes, *makes her his guide in all things, and is proud to acknowledge himself nothing more than her pupil and servant;* observes that there are certain morbific poisons, as, for instance, the virus of small-pox, which she cannot get rid of by means of any of the ordinary outlets of the body.

"He observes in these cases that she establishes new outlets, in the shape of little abcesses, called pustules, or in the shape of vesicles, resembling little blisters, and sometimes in the form of abcess or boil. He observes that all strangers who go to settle at Aleppo, or Bussora, never become perfectly acclimated, or healthy, until a large boil, called *Bouton d'Alep*, has made its appearance on the cheek, but that as soon as this has come and gone, the health becomes fully established, and he suffers no more from the climate in future than a native.

"Observing, then, these things, and having moreover remarked that, by having intensified the operation, he can sometimes pro-

By this means, œdematous secretions also, and calcareous deposits—such as we meet with in gouty subjects—can be removed. I have, from time to time, preserved portions of these chalk formations, which have been collected in the Bath, when certain patients were leaving it.

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duce boils upon the skin, he endeavours to do so in all cases, where there is sufficient reason for supposing that the diseases may depend upon the *presence of morbific matter in the blood*, or when the counter-irritation of a crop of boils seems likely to be beneficial.

"Even here, therefore, he still takes nature for his guide, and does but imitate the physician within.

"After all this reasoning, the result of all these observations, he concludes, and says to himself: I am quite certain that *man is not a tin-kettle*. I am quite certain that he cannot be mended after the manner of a tin-kettle by any tinker or human artificer whatsoever. Or if the drug-physician will have it that he is a little more than a tin-kettle, then I am quite convinced that every such kettle contains within itself *its own tinker*, and that all the human tinker can do, is first to *clean the kettle*, and to hold it still, and keep it in the most convenient position for the tinker within to do his work.

"We already know, then, when the machine goes wrong, where it goes wrong, and how and why it goes wrong. All we now want is the *means of making it go right*.

"It is in remedies that we are so lamentably deficient—in remedies the great end and object of all the physician's studies, and without which all his learning is mere moonshine—remedies, the only thing about the physician which is worth a beanstalk to the patient, the only thing for which he pays his money to him, and *the only thing which he does not get from him*.

"Is it not marvellous, is it not monstrous, under these circumstances, that medical men should rise up in such bristling hostility against every reported new remedy, which does not happen to be a poisonous drug, instead of eagerly flying with open arms to receive it, to examine it, and try it, as common sense would naturally induce them to do?

"The labour of making these examinations and trials form a part, or rather should form a part, of their professional business.

For these local applications I have a large variety of electric instruments, adapted to the purpose of operating on every single member and organ of the body, even on nerves so exquisitely sensitive, as are the optic nerves.

I say it is their bounden duty, as the trusted conservators of the public health, to pay more attention to this branch—I mean the remedial branch—of their vocation. I say it is their bounden duty to examine everything, to try everything, scornfully to reject nothing, to cull out of every remedy that which is good, letting go only that which is useless—and this applies especially to the whole host of drugs, which *are not only useless, but pernicious*—and, finally, to hold fast that which they have attained, and thus to go on unto perfection.

"But they sit in judgment without evidence, and pass sentence without trial. If, indeed, they were already well supplied with drug remedies, the case would be different.

"There might, then, be some excuse for hanging sarcasms upon their upturned noses, against every alleged remedy which was not a drug. But it is notorious to all the world, and not concealed by themselves—for concealment is impossible—*that they have not one single remedy* for one patient out of every hundred who go to consult them.

"What says the late Dr. James Johnson, in his very last work—'A Tour in Ireland'? His words are these:—'I will go further, and declare it to be my most conscientious opinion THAT IF THERE WERE NO PHYSICIAN, OR SURGEON, OR APOTHECARY, OR MAN-MIDWIFE, OR CHEMIST, OR DRUGGIST, OR DRUG IN THE WORLD, THERE WOULD BE LESS MORTALITY AMONGST MANKIND THAN THERE IS NOW!'

"The celebrated Dr. Baillie, too, who enjoyed perhaps the largest and most fashionable business that ever fell to the lot of of any physician in the world, declared, after forty years of practice, that he 'had no faith in physic'; and on his death-bed he frequently exclaimed—'I wish I could be sure that I have not killed more than I have cured.'

"What is there in these drugs, then, that can wed medical men so insanely to their exclusive use?"—"*The Results of Hydropathy*," by EDWARD JOHNSON, M.D.

DYSPEPTIC patients are often surprised to hear me prescribe a bath, immediately after meals! It is only consistent with my system to do so. How is this?—simply, because digestion is nothing else but the decomposition of food. If therefore I place a patient into the bath, after a full meal, and a certain quantity of the most powerful decomposing element in nature is introduced into the stomach—as well as in every other organ of the body,—by means of the bath, it is manifest I am thus assisting the stomach in its operation of decomposition, and that, in the most natural and congenial, manner possible.

BUT if the reader is anxious to know in what other class of diseases the bath will prove of service, I would refer him to a little book recently published, and entitled the "ELECTRO-CHEMICAL BATH,—IT'S USE AND EFFECTS;" *Illustrated in a series of scientific documents and autograph testimonials, from patients treated and cured by its means, under the direction of the Inventor, J. Caplin, M.D.* Third edition, pp. 266, London, Trübner and Co., Pater-noster Row.

This work is merely a *selection* of letters from those patients, who requested me to publish them; but does not contain a complete list of the many various diseases cured by my method. 1 will quote one or two recent cases, which will tend further to demonstrate the multifarious uses to which the bath may be applied with success.

A— L—, Esq., when in India, had suffered for ten years from a most violent *Tic-Douloureux*. In speaking or smiling, the upper lip was contracted—he would be seized with convulsive spasms: the blood rushed to his head: the blood-vessels would be swollen and distended, as though ready to burst—such was his lamentable condition when he came to me. Suffice it to say, that he was cured.

HIS WIFE also applied to me for relief.

Mrs. L— was suffering from a fluctuating tumor, as large as my hand, in the abdomen. I prescribed the baths for her. A pustular eruption, about the size of a shilling, was super-induced, and continued to discharge abundant matter for about a month. This lady was also radically cured.

She had two daughters,—one ten and the other twelve years old, —who used to come and take exercises in my gymnasium while their parents were in their baths.

On one occasion they did not make their appearance; and when I enquired of their father the reason of their absence, he said: "I do not know what is the matter with Lizzy; she complains of pains all over her body, of nausea, head-ache, loss of appetite, &c. She is feverish; and her temper is unbearable. What do you think is the matter?" I told him it seemed to me that these symptoms were the prodrome of an eruptive fever. "What shall we do?"

"Bring her to the bath to-morrow."

She came and was placed in her bath. Her skin was at this time perfectly free from any pimple, or rash, whatsoever. When she was taken out of the bath, she was found to be covered all over with *Scarlatina!*

I advised the parents to bring her again; but the child declined to do so; and began to cry, saying "It pricked her so."

I prescribed ordinary care with regard to diet and warmth, and I had the pleasure of seeing her return, perfectly well, in a few days, to resume her exercises.

I should be authorized, by this case alone, to predicate that the Electro-Chemical Bath would be a sovereign remedy, either as a prophylactic or curative agent, in the treatment of all *eruptive fevers:* such as *Small-pox, Scarlet Fever, Typhus, Erysipelas, Measles, &c.*

ANOTHER most interesting case of chronic *cutaneous or skin disease*—of eleven years duration—has just been successfully dismissed, as these sheets were passing through the press:

MRS. D—, *æt* 37, a very fine young woman, of healthy and strong constitution, had Scarlatina and Whooping-Cough when a child. Up to the age of 26 enjoyed good health: at this period a small red vesicle appeared upon the hand. It was soon alarmingly developed, and gained progressively over the whole body "as-

suming the form of *Psoriasis*, or, as it is sometimes called "*English Lepra.*"

The chest arms abdomen, and lower limbs were covered with large red patches, of various size and form, ejecting a liquid matter.

Some of these patches were as large as a man's hand, and so confluent, that they gave the skin an appearance of bright scarlet.

All the vital functions were deranged. A general languor and weakness were felt, and the acridity of the discharge was so great as to be intolerable.

Amongst the many medical gentlemen whom she consulted, three are eminent for their treatment of skin diseases.

But not only, during these eleven years, did they afford her no relief, but they could not even arrest the progress of the disease, which gradually increased, and grew worse.

The baths, and the baths alone, have restored her to health and strength.

She is now able to enjoy vigorous horse exercise, and is taking a tour of pleasure in England and Wales.

Mrs. D— Is quite willing to substantiate the above facts, to any private enquirer.

The baths met with the same success in the case of the late,

Mr. Marshall, surgeon, who was much engaged in the embalment of bodies—an operation in which arsenic is largely used.

The nails of his toes had rotted away in consequence.

He only took one or two courses of baths, and found himself well enough to resume his occupation. He came to the conclusion that "the Electro-Chemical Bath is an heroic means of curing *cutaneous* affections, especially where they have been aggravated by the use of *Arsenic.*'

He left the baths, however, too soon; and resumed, for his relief, the use of Arseniate; from the effects of which he died some months after. His partner, who succeeded him, (Mr. Mellin 16, Tichborne Street,) may be referred to, for further particulars.

I will refer the reader to three interesting cases, bearing upon the subject of this treatise, which they will find graphically described in the *Appendix*, lately added to the "*Electro-Chemical Bath; its Use and Effects.*"

CONCLUSION.

THE READER will have observed, that, in my treatment of the Diseases above referred to, *no mention is made of the use of Drugs or Medicines.* because I employ none, in the ordinary sense of the word.

The great Therapeutic Remedy, which I employ, is not compounded by me, nor concocted by man. It is supplied by Nature herself; and "WHAT ART CANNOT PERFORM, NATURE ACCOMPLISHES!" If the Sun is the universal power, without which nothing could exist; why should not the agent, second to it, in the economy of Nature, be also endowed, with a similar vitalizing principle, and be, as far superior to any product invented by man, as the Heavens are above the earth?

I have come to the conviction — a conviction founded on the study, and successful experience of many long years, that every disease which has not reached the point, when it becomes absolutely incurable, will be cured by means of Medical Electricity; especially when applied as it is IN THE ELECTRO-CHEMICAL BATH SYSTEM.

APPENDIX.

APPENDIX.

CASE OF ACUTE GOUT OF TEN YEARS' STANDING, WITH CONCOMITANT AFFECTIONS.

(*Copy.*)

"267, STANHOPE STREET,

"MORNING CRESCENT, N.W.

"11*th October*, 1869.

"DEAR DR. CAPLIN,

"Having been drawn to a trial of your Electro-Chemical Baths by reading the friendly letters of my brother professionals and friends, recounting in your book,* the various circumstances of their sufferings and and cures, I voluntarily proffer you a short account of my case, the unusual gravity of which, with its complete cure, may in turn move others to follow my example.

"I abstain from all panegyric, since a bare narration of facts illustrating the poignant and exceptional perversity of my sufferings commands more credit than mere sentiment.

"For upwards of ten years I have been a martyr to the GOUT. During this period I have visited every quarter of the globe. At each place of resort, under every condition of climate, temperature, and outward

* "THE ELECTRO-CHEMICAL BATH—ITS USE AND EFFECTS."—*Trübner and Co., Paternoster Row.*

circumstance of life, I have been a victim to attacks in their most aggravated form. At the outset, I think this may point out the rarity of my malady, which is ordinarily modified by change of climate.

" Every resource of medical skill, and hygiene had successively proved of no avail, till I took your baths. Again, I believe, such tenacity of disease is not of common occurrence.

" Regimen, and diet narrowed to a point, where the question arose, whether I could eat or drink anything that was to me less than poison, were equally fruitless of result. Such exaggerated obstinacy is not, I trust, the common fate of the gouty. Now, it is matter of indifference to me what I take; since everything to my palate, not only yields nourishment and enjoyment, but is relished with zest and appetite.

" To say that life, hitherto a burden, is now comparatively an unbroken pleasure, though of itself cheer enough for the mere sensualist, is to say less than, that, whereas I had grown a crippled idler, now I am in full possession of my faculties, both of body and mind, and am again a busy man.

" My professional avocations were so continuously disturbed by illness, that final retirement from public life seemed inevitable. It is, I am sure, seldom the case, that gout thus compels permanent cessation from labour. At present it will depend wholly on my own will and pleasure, when I shall resume active professional duty.

" Under such circumstances, I think, those who read this statement will readily appreciate my counsel to all sufferers, not to delay an instant in making trial of your Baths. I urge this course the more strongly, from having myself sneered at the notion of any human agency being capable of even giving me relief. It would be wearisome to detail the disappointment in successive

remedial attempts, which wrought this sardonic conviction.

"It is needless to say more, than that, having tried everything and everything failed, I had no hope left even for an essay of your treatment. Your book,* however, inspired me with courage for a last new effort; the success of each bath led to its revival, and ultimately to complete cure.

"While recording this result for others' guidance, I wish to express my warm and grateful sense of your personal attention and kindness, which move me to assure you of the high esteem you will ever share in my memory.

"I have the pleasure to be,

"My dear Doctor,

"Your sincere aud faithful friend,

"AGOSTINO ROBBIO."

VOUCHER FROM THE ITALIAN CONSULATE.

L.S.

"No. 352, Diritto Ital^ne. (Art^to.).

"Visto al Consolato Generale d'Italia. Buono per attestazione della *firma del Signor Agostino Robbio*, Professore Violinista di Genova.

"Londra, undici Ottobre, mille ottocento sessantanove.

"P. il Console Generale,

"ROBERTO A. HEATH,

"*Vice Console.*"

The above case does not present the ordinary characteristics of simple gout, as the writer himself remarks, but reveals a condition

* *Signor Robbio's notice was drawn to the Electro-Chemical Bath by Mr. Snell, whose attention had already been attracted to them by Captain Copeman. Both Captain Copeman's and Mr. Snell's cases follow.*

of constitutional disease which had involved all the vital functions.

Whether *gout be the cause or consequence* of previous affections is a question upon which medical men are not generally agreed.

I have a work on hand now, in which I shall shew the nature, and cause of Rheumatic Gout. I publish *literatim* Signor Robbio's letter, as he is anxious to make it known that he has been cured by the Electro-Chemical Baths, and once more restored to a perfect state of health, comfort, and happiness, after having exhausted every other remedial resource during the space of ten years, without being able to obtain any relief to his excruciating pains.

Such a case as this alone would prove that the electric treatment is adapted to every kind of disease.

I also take the opportunity of appending the following interesting letters, at the special request of the authors.

J. C.

LETTER FROM CAPTAIN COPEMAN.

CASE OF DEAFNESS.

(Copy.)

"36, BEDFORD STREET SOUTH,

"LIVERPOOL, 13*th Feby.*, 1869.

"MY VERY DEAR DR. CAPLIN,

"As my friend, Captain Sinclair, has left England suddenly, and cannot personally give you an account of himself, I am glad to be able to state the result of your treatment upon him.

"His ailment was a *serious deafness of one ear, which had troubled him for several years.* It came on gradually, but the last two or three years it had caused him much inconvenience. Whether it arose from exposure, or long residence in China, he could not explain; anyhow, the infirmity was annoying enough both to himself and friends.

"He happened to be visiting in London last January, during my stay there under your medical charge. He observed the rapid and satisfactory effect your treatment had upon me; and asked whether I considered you could do his deafness any good. I thought that you could. He consulted you—took six baths, and had two or three local applications to his ear, and the effect was magical.

"I saw him a week ago, a few hours before he left for Constantinople. He told me he had never felt in such robust health before, or such good spirits, and that his hearing was *perfect with both ears.*

"I can assure you, my dear Doctor, he is as grateful to you and your system as I am. But in my own case, there was more to cure. '*He loveth most to whom most is forgiven.*' And my thankfulness to you for your kindness and great service will be life-long.

"Believe me, my dear Doctor,

"Yours ever faithfully,

"CHARLES R. COPEMAN."

LETTER FROM R. SNELL, ESQ.

CASE OF CHRONIC RHEUMATIC GOUT—PARALYTIC CACHEXIA AND BRONCHIAL ASTHMA OF FIFTEEN YEARS' STANDING.

(*Copy*)

"57, UPPER GLOSTER PLACE,

"LONDON, N.W.,

"28*th October*, 1869.

"MY DEAR DR. CAPLIN,

"The old adage runneth, 'Seek not blood in a stone; for surely none shalt thou find.'

"When in April last I first came to your baths, I looked and felt what, I suppose, a stone must feel, if it have feeling.

"Now I enjoy the sensation of animate being, while you have brought blood enough to the surface of my body to give it the tinge, and to my face the bloom, of health.

"You may bear in mind my first visits to you were made in a cab or Bath chair, out of and into which, I was helped by my man-servant. Before the end of a second course of baths, I was able to hobble, with occasional halting for repose, to and from your house. Now I walk about for an hour at a time without rest.

"Prior to the use of your baths, appetite had grown squeamish, digestion eccentric, while need for stimulant was in daily growth. At this moment, I am practically rid of these hindrances to comfort. I can eat and drink pretty nearly anything I choose; while craving for wine, spirits, or even beer, at the worst of times never immoderate, is steadily in decrease. I hold this point to be of great moment, proving more than anything else the cheering effects of the Electro-Chemical Bath.

"The chemical effects of the bath were visible in the following fashion. Horny flakes of cuticle at first were continuously removed from the surface of the body, on which a fine, densely black, impalpable powder, like soot was rapidly deposited. On scraping off the powder, it rose in clouds through the water, which became turbid; and of the consistence of water-gruel. The sooty deposits were always thickest on those parts of the body, where pain or rigidity of limb was most keenly felt.

"On leaving the bath, bodily sensation was that of having lost a false skin, which had hitherto hampered every movement.

" Long after this outward relief was experienced, the brain, chest, and stomach remained densely clogged.

" The electrical douche first brought forth from the nostrils purulent discharges; thereupon breathing grew more and more easy, till asthma almost entirely subsided.

" Local galvanic applications next gave play to the limbs; and, derivatively, stimulus to digestion. Appetite increased both for solids and fluids.

" Alternate use of the Spinal and Ordinary Bath next began to free the brain, and to invigorate the stomach. Finally, health took the upper hand of disease.

" Each time the water was drained off, the bottom and sides of the copper bath were discoloured by patches and streaks of white, red, blue, green, yellow, and dark purple, colours. These hues, I was told, represented extracts from the system, of mercury, iodine, arsenic, antimony, and other metallic drugs. Of all these drugs I had taken large quantities.

" Naturally a sceptic, I invited a friend, an acute and experienced critic, and Vice-President of a learned Society, to visit me in the bath, and witness its effects. The presence of a shrewd, trained intellect, with unbiassed judgment, would, I thought, best act as a check upon possible treachery of my own sense or imagination.

" We were both of opinion that no mere hot-water bath would produce such sooty skin-elimination; that the correspondence of enlarged elimination with the seats of pain and rigidity could not be accidental; that the turbid state of the water, followed by mineral discolorations of the bath, as sequel to a semi-transparence of the water caused by settlement of the eliminated deposits, formed a chain of evidence leaving no doubt of the decomposing effects of the bath.

" The gradual unbroken return of health showed such working to be remedial and curative.

"Thus far I have cited, as briefly as may be, facts; since in this realistic age facts alone meet with attention and credence. Moreover, personal details often proving as wearisome to the reader as they are invidious to the writer, those who are not curious may halt at their pleasure. What follows is simply added in justice to you, my dear Dr. Caplin, and your medical predecessors who have attempted my cure in vain.

" After suffering severely in infancy and youth; from my twenty-ninth to my forty-fourth year completed this day, I have been a martyr to rheumatic gout and bronchial asthma, in their most obstinate, aggravated from. They have defied the skill of the leading medical men of England and Germany, whose names and methods will be seen further on; as well as the most potent drugs of allopathy and homœopathy, aided by the chief European thermal spas, sea baths, Russian baths, and Turkish baths.

" The last-named baths, after giving great apparent relief, brought me to the state of seeming petrifaction in which you found me. In your *brochure*, "Historica Records," p. 28, I found, to my wonder, this effect of the Turkish Bath on metallic deposits in the system foreshadowed in the following passage:

" '*It is evident that the frequent use of the Turkish Bath must prove injurious for the following reasons:*

" '*The blood is composed of seven-eighths of water, which is called serum; that quantity of water has for object to keep up the liquidity of the blood, so as to permit it to circulate freely in the smallest blood-vessels, called capillaries. If more serum than can be supplied or replenished is abstracted from the blood, it is evident that it must be deprived of its menstruum, and lose its normal and indispensable fluidity. The patient suffering from simple rheumatism has, by taking this bath, the chance of being relieved for the time; but if he continues, he is likely to get a great deal worse after; the plethoric incur the risk of having a determination of blood to the head; the paralylic have no chance at all.*

" ' *Those labouring from the retention of minerals in the system may expect to see them concreted more firmly in those parts where thny have been deposited. I must, however, say that, for the healthy and robust, these baths taken occasionally may prove very advantageous for maintaining them in healthy condition.*'

" Your prescience thus strikingly verified on my own frame enhanced my confidence in the accuracy of your judgment.

" Let any-one ponder on this meagre life-sketch, and say whether I am in error in believing you to have dragged me from the verge of the grave.

" Much as you have done for me already, you still promise complete cure. It is not for me to gainsay such cheering dictum; notably, since you have already achieved more than ever I dreamed to be possible. I can but say *tant mieux*, awaiting the fulfilment of your predictions with credulous hope.

" Many of your patients, illustrious and eminent names, have chimed in recording your zeal, kindness, and urbanity. It would savour of impertinence in an humble being like myself to seek to swell such goodly, truthful chorus.

" To say that I felt, and still feel, deeply grateful, would be simply to say, I presume, that I am not a stone, however much I may have felt and looked like a senseless fossil. To try to put all I feel into words would be a vain task. To say that I believe you to be a *disciple of Truth* will, for the shallow, be scant thankfulness; for the thinker, however, it will best interpret the view of,

" My dear Dr. CAPLIN,

" Your respectful well-wisher,

" R. SNELL."

"ALPHABETICAL LIST OF THE CHIEF BRITISH AND FOREIGN PHYSICIANS CONSULTED.

"Dr. Böge, Body Physician to the King of Prussia, first treated me for rheumatism with colchicum. Dr. Böge largely increased the dose, and I remained under the influence of colchicum till, hysteria setting in, the drug was discontinued.

"Dr. Brandis, Body Physician to the Queen of Prussia, handled my case at Aix-la-Chapelle, advising my return for a second season. The first season of six weeks nearly cured me, but exposure, through forced travel the following winter, combined with three months' excessive brain-work, brought back the disease with redoubled force. A second visit of three months in length aggravated the malady to a frightful pitch, much to Dr. Brandis' chagrin, whose interest in my cure, and unremitting attention, availed me nought, but winning my enduring thankfulness.

"Brodie, The Late Sir Benjamin, President of the Royal Society, a friend of a deceased uncle, Mr. James Snell, M.R.C.S., saw me *en ami*. After asking whether I had taken this, that, and the other drug, and finding I had tried all, Sir Benjamin Brodie said, '*Well, Mr. Snell, you seem piously to have gone through the whole pharmacopœia, and it appears to have done you no good. Now, what do you say to trying what effect doing nothing at all will have?*'

Dr. Eugene Cronin, M.R.C.S., M.D., &c.—This gentlemen kept me alive for one year with homœopathic drugs of greater potency than the strongest allopathic medicines I had ever taken. Had he been a fond brother, Dr. Cronin could not have shown greater interest in my fate. He hurried to my bedside at every summons, and by his judicous remedies soothed agony which, prior to his being called in, had brought me to convulsions and hysterics.

"Dr. Fallati, of Wildbad, a thorough gentleman and profound physician, in a word gave me a rule of thumb for future guidance —viz., to take neither drugs, baths, nor other help than nature, and to *half live*. I carried out his views as far as able.

Dr. H. W. Fuller, F.R.S., twice rescued me from agonising crippledom. and probable death; while 'screwing me up'—to use a familiar, yet expressive phrase—to temporary efficiency for active life in a startling manner. In comparison with the inoperative measures of others, Dr. Fuller's success caused me to ejaculate, '*Astra fugat Phœbus.*'

"Dr. Pearson, of the Liverpool Infirmary, at Buxton, *possibly* in excess of zeal—I say *possibly* in excess of zeal—to cure rheuma-

tism, in which he and the Buxton waters succeeded beyond all hope, nevertheless superinduced bronchial asthma. Frightful as the results were, I fully acquit him of all blame. He did his best. To him I applied the distich—

> 'Tis not in mortals to command success,
> But we'll do more, Sempronius, we'll deserve it.'

"Dr. Richter of Dresden, one of the leading physiologists of Europe, put me through a searching bodily examination, punching me about from head to foot in most approved fashion. He flatly refused to prescribe any drug; and, on inquiry how he had cured his own rheumatism, from which he had suffered, gave the formula: 'Russian baths once or twice a week, with daily a pint or two of Bavarian beer through the winter; after which, as soon as spring sets in, a mountain tour a-foot.' With much zest I tried this plan three years running without effect.

"Dr. Ritcher, of Toeplitz, Prince Esterhazy's medical adviser, while also generally sought by English patients on account of his mastery of our tongue, spent hours and hours in my society, and if warm friendship, guided by high medical skill, could have prevailed against rheumatic poison, I should have found effective antidote through his influence. Dr. Ritcher thought I had carried Dr. Fallati's recommendation to 'half live' too far; and in place of abstemiousness, enjoined generous living. Two months' use of the waters, with an interval of one month's rest, only reduced me to a tottering skeleton.

"The unanimity of earnest devotion to this case manifested by each medical adviser in succession, is referable mainly to that widespread professional zeal marking the medical faculty in general; heightened in this present instance by, what with common consent was pronounced, a 'bewildering complication.'

"This recognised intricacy and ineradicable virulence of disease, which I have only met with in a few fellow-sufferers, originates the foregoing *resume* of those more salient contrasts in medical practice to which I have submitted with unerring docility.

"To each and all of my kind doctors here named or un-named, I proffer my heartfelt thanks.

"R. S."

THE END.

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