

Medical reflections on the water cure. / By James Freeman, M. D. Physician to the Cheltenham Hydropathic Institution.

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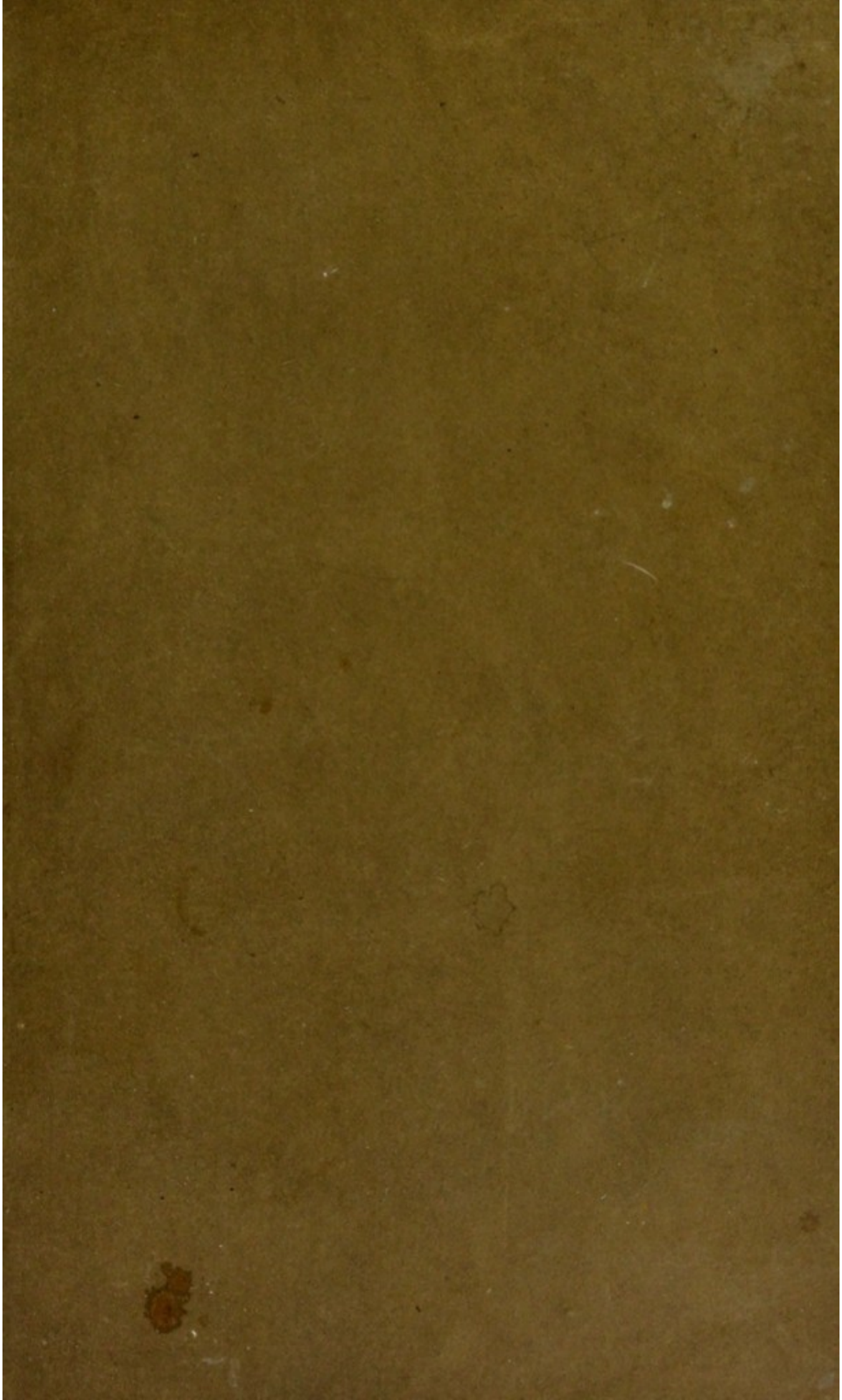
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MEDICAL REFLECTIONS

ON

THE WATER CURE.

BY

JAMES FREEMAN, M.D.

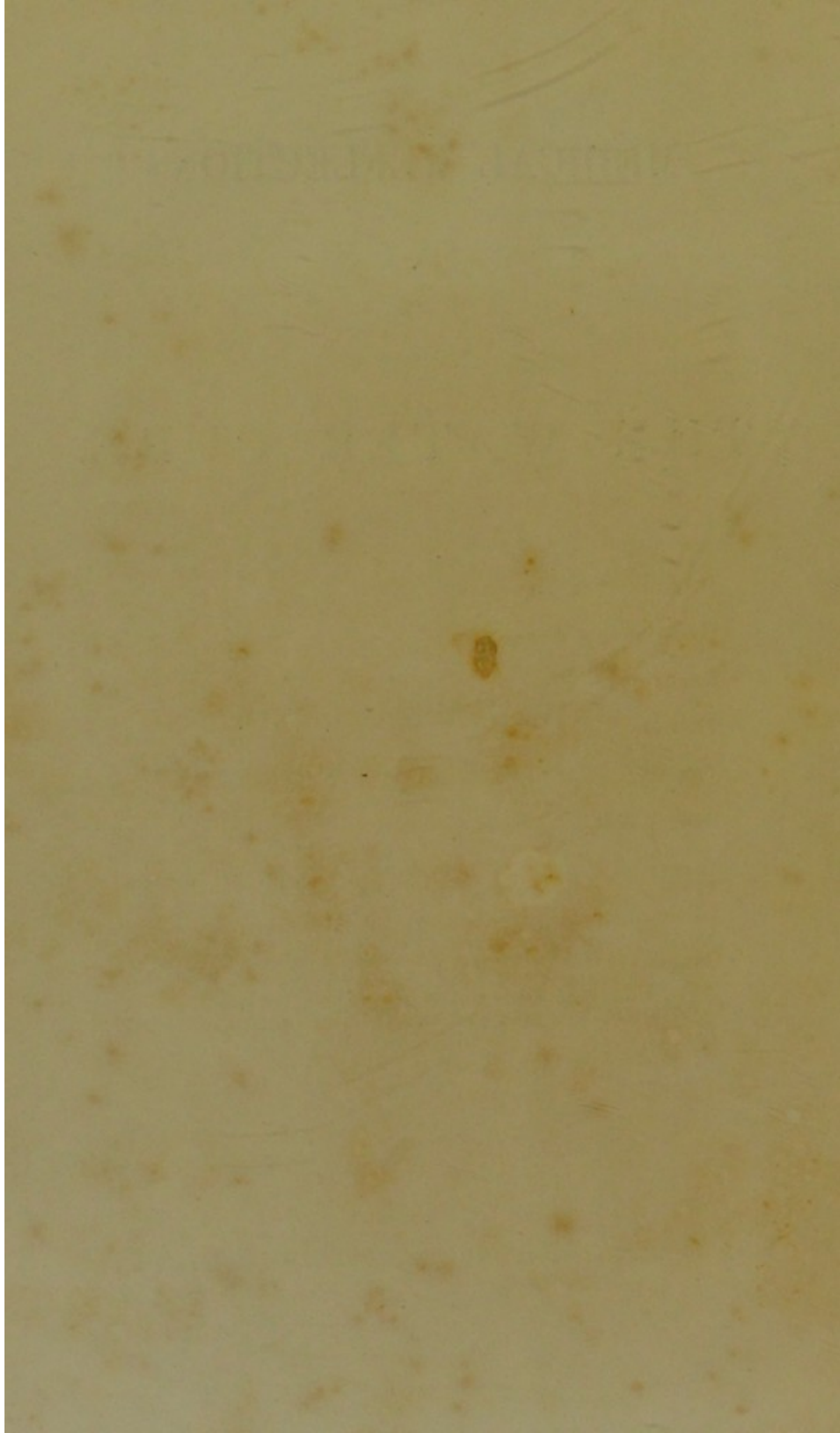
PHYSICIAN TO THE CHELTENHAM HYDROPATHIC INSTITUTION.

“ De nobis ipsis silemus : de re autem quæ agitur, petimus,
ut homines eam non opinionem, sed opus esse, cogitent ; ac pro
certo habeant, non sectæ nos alicujus aut placiti, sed utilitatis
et amplitudinis humanæ fundamenta moliri.”—*Nov. Org.*

LONDON :

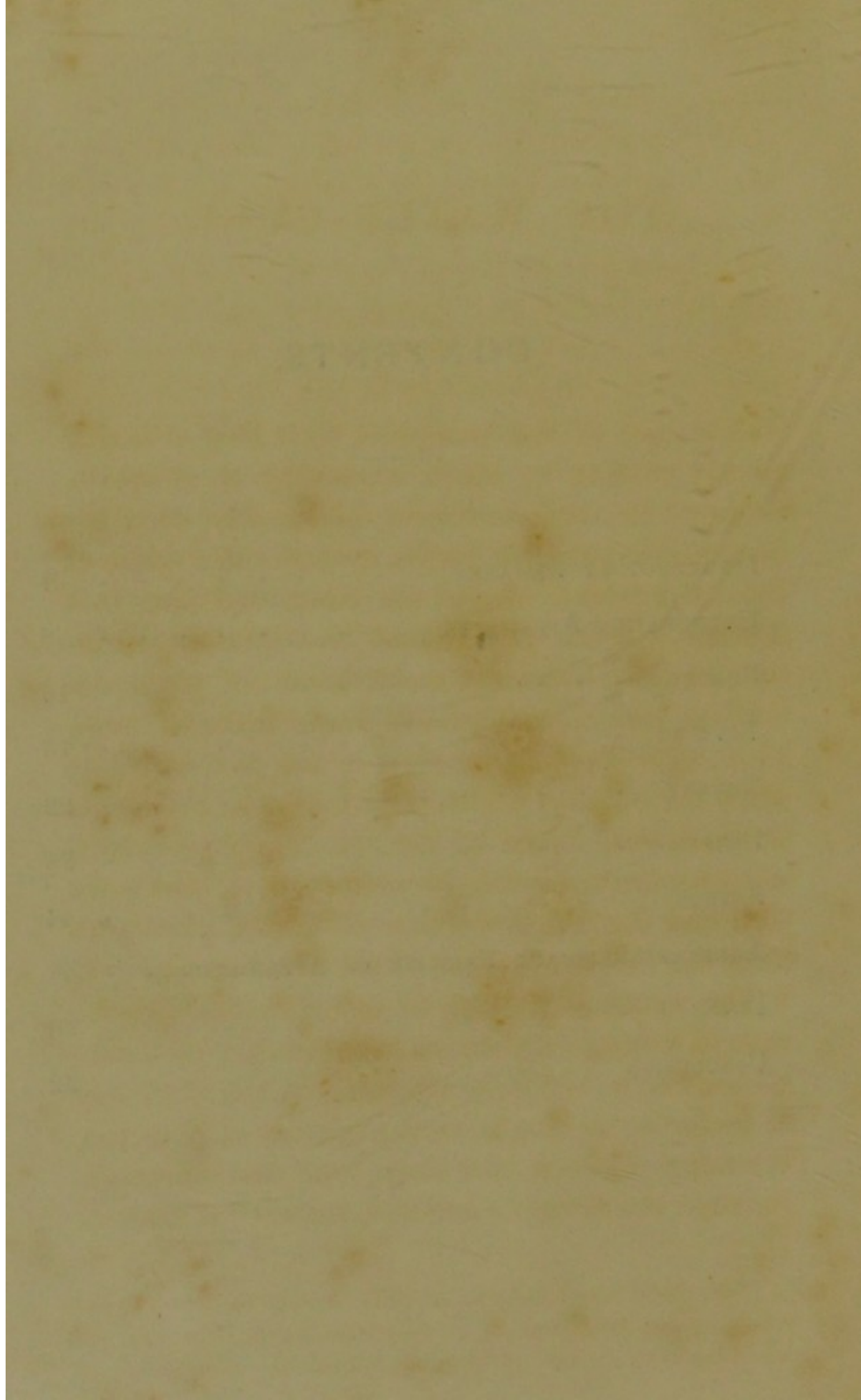
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1842.



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THE WATER-CURE.

THE author of this pamphlet feels that it is due to his readers to state, as briefly as possible, some of the circumstances which first drew his attention to the hydropathic system ; and some of the facts which afterwards convinced him that it was a mode of medical treatment well deserving the serious consideration of the profession, and of incalculable importance to mankind. He feels also that it is due to himself to state the reasons which induce him to hope that he possessed some of the qualifications which were requisite for the investigation of the subject, and for the deduction of sound principles from the facts presented to his observation.

The writer is the son of a professional gentleman in extensive practice in the county of Kent ; he had been carefully educated in the doctrines of medicine as taught in the schools of England, Germany, France, and Italy, and had diligently pursued the study of medical science* in each of

* As some confirmation of this statement, the writer trusts he may be permitted to state that, during the time he was a medical student in London, he had the satisfaction to

those countries, and in the works of their most eminent professors ; he had laboriously investigated the phenomena of disease in many of the largest hospitals and medical establishments of Europe, and also in the daily avocations of the extensive general practice before referred to ; his habits of thinking on medical subjects had imbibed a strictly professional character ; his pen had been occasionally employed in the diffusion of medical knowledge ; and he had been honoured with the personal friendship and professional intimacy of some of the most distinguished physicians and surgeons of the present day. It may be easily conceived that, under these circumstances, his mind had become thoroughly wedded to the established system. He was, however, at the same time, painfully aware of the imperfections of his art ; he had long observed, with despondent feelings, that many chronic diseases were entirely beyond the reach of medical assistance, and that many patients who recovered, did so under a course of treatment which was but few degrees removed

obtain Mr. Pereira's prize for chemistry ; the gold and silver medals for the theory and practice of physic, in Dr. Hope's class ; the gold medal given as a clinical prize by the physicians of the London Hospital ; and Dr. Hope's prize for auscultation. He has to thank his friend, Professor Tagliobò, and the other physicians of the hospital of San Spirito, in Rome, for the excellent opportunities of observing disease he possessed during a winter's attendance at that extensive establishment.

from negative. He was thus becoming sceptical as to the value of many branches of the art which he was destined to practise, and experienced many misgivings as to the honesty and efficiency of some of the proceedings which professional usage would require him to adopt.

With a mind thus hesitating—on the one hand, ardently devoted to the cultivation of medical science, and on the other, conscientiously questioning its value in many cases of disease—circumstances fortunately directed him to the hydropathic establishments of Germany. Thither he was accompanied by a patient, for whose case the water-cure was recommended by the concurrent advice of two of the most illustrious physicians in London. While visiting and residing in those institutions, he was convinced, in spite of the prejudices of his medical education and experience, that the hydropathic mode of treatment possessed a real efficacy, and, if skilfully applied, was competent to the removal of many diseases which have resisted all the efforts of the established system. Numberless cases in illustration of these truths were actually presented to his observation.

Being satisfied on those points, he next proceeded to investigate the principles on which the treatment operates, and to determine the cases in which it is especially useful. At every step of his inquiry, he was more and more convinced of its reasonableness, and of its accordance with scientific medical principles. He found that

water, in various modes of application, is endowed with the power of producing definite and determinate changes in the animal system, which are indicated as the respective means of cure in many instances of morbid action—that, in a word, its operation is as rational in theory as it is beneficial in practice.

In consequence of the increased conviction derived from this investigation, the author determined to assist in the diffusion of the benefits of the hydropathic treatment among his fellow countrymen. As one means of effecting that purpose, he submits the following pages to their consideration, convinced that his statements will not be found more sanguine than the subject justifies, and trusting that they may attract the attention of some invalids to the means of alleviating their sufferings.

In further pursuance of this object, and strongly impressed with the great importance of the subject to the interests of humanity, he determined also, during his last residence in Germany, to institute a water-cure establishment immediately on his return to England, and personally to superintend the medical department. Several places presented themselves to his notice as being well adapted to the purpose; but he ultimately came to the conclusion, that perhaps no town in the kingdom possessed so many of the requisites for such an institution as Cheltenham. Its position on the map of England, the acknowledged temperateness and salubrity of its atmosphere, the

healthiness of the soil, the purity of the water, the beauty of the scenery, the gay and cheerful character of the town itself, its abundant accommodation for visitors, the numerous conveniences and comforts which it presents to invalids, together with the high reputation which its medicinal springs have deservedly obtained for it, all combined to point out Cheltenham as a place in which the benefits of the water-cure might be conveniently and extensively communicated to the public.

In concluding these introductory remarks, the writer wishes it to be distinctly understood, that his object is not to depreciate the importance or value of any other curative means, much less to bring the profession, of which he has the honour to be a member, into ridicule or disrepute. He is perfectly convinced that, with the educated and reflecting portion of the community, the claims of a new system, before they are generally admitted, must rest upon a more solid foundation than the errors or abuses of an old one; and that the progress of truth and of science is but rarely accelerated by sarcasm, however pungent, or by declamation, however emphatic. He is fully satisfied that the system of hydropathy requires no such spurious support, either in theory or practice; and that the day is not far distant when its merits will be universally acknowledged by the wise and benevolent.

HYDROPATHIC APPARATUS.

THE water cure consists in the application, in various modifications and combinations, of the following therapeutic agents :—

1. *Sweating*, which may be either in a dry blanket or in a wet sheet.

2. *Bathing and external washing*, which may be *general*, consisting of the full-bath, the half-bath, general ablution, and sprinkling, the douche, and the shower-bath; or *local*, as the sitz-bath, either in still or flowing water, foot-bath, hand-bath, head-bath, eye-bath, &c., according to the part to which the water is applied.

3. *Injections*.—4. *Compresses*.—5. *Drinking cold water*.—6. *Diet*.—7. *Exercise*.—8. *Clothing*.

We proceed to give a concise description of these several means of treatment, in order that our readers may have such a conception of the hydropathic method as will enable them readily to comprehend the contents of the succeeding pages. A more lengthened account is rendered unnecessary, partly by the previous publications in this and other countries, and still more so by the fact that nothing but personal examination can give a perfect idea of the system, so different is it in its machinery, from any other plan of cure. Therefore, although care has been taken to make these pages convey, as clearly as circumstances permit, a correct and practical out-

line of the water cure, the descriptive portion is only to be regarded as preliminary to the more important matter by which it is succeeded.

Sweating in a dry blanket.—A blanket being extended on the bed, the patient, completely stripped, places himself upon it, his arms lying at his sides. The attendant then envelopes him in the blanket as closely and firmly as possible, every part except the head being carefully covered. In cases where it is deemed necessary, the head also is covered by a napkin, space being left for unrestricted respiration. Other coverings are then added, and firmly enclosed in a counterpane. In this state the patient remains one, two, or three hours, according to the instructions of the physician, and the peculiarities of the case. As soon as he begins to perspire, the window is thrown open, if the weather be favourable, to admit a circulation of fresh air, and he is supplied from time to time with cold water, which he is required to drink freely. By drinking cold water, the process of perspiring is rendered both more rapid and more effectual.

Sweating with the wet sheet is effected in exactly the same manner as that described above, except that the patient is enveloped in a sheet dipped in water, more or less wrung out, previously to the application of the blanket and other coverings. This method is not so frequently adopted as the former; but it is found to excite perspiration, in some cases, more readily than the blanket.

In both cases, as soon as the operation has proceeded to the degree, whether of intensity or duration, prescribed by the physician, the attendant removes all the coverings except the blanket. Securely enveloped in that, and protected as effectually as possible from contact with the atmospheric air, the patient is, in most cases, conducted to the cold bath. Arrived there, he casts off his blanket, dashes a little water over his head and chest, and plunges as suddenly as possible into the cold bath, where he remains a period varying from one to five minutes, or longer. While in the water, he is required to plunge his head under frequently, and to use as much exercise, by friction, &c., as he can. On leaving the bath, and after every other application of cold water, he is enveloped in a dry sheet, and briskly rubbed, to excite the action of the skin. Active exercise should then be taken, during which a few tumblers of cold water ought to be drank.

In other cases, the patient, after sweating, is merely washed with cold water, or has it affused or sprinkled over him, with subsequent friction.

The time at which sweating is had recourse to, is early in the morning, unless it be required more than once a day, in which case it is generally repeated after dinner. The patients are usually called for the purpose at from four to five o'clock in the morning, and they are released from the envelopment at from six to eight o'clock.

Bathing and External Washing.—The *full-bath*

consists of an ordinary cold-bath ; in the better class of hydropathic establishments made sufficiently large to plunge into ; in others, it is substituted by a portable bath, in which the whole body can be immersed.

The *half-bath* contains water of less than a foot in depth. In it the patient sits or reclines, friction being very actively employed on his body and extremities. Sometimes water is at the same period poured or sprinkled upon his head, or he is placed under a shower-bath. Cases occur in which the patient is required to be kept some hours in the half-bath.

General ablution requires no description. It is sometimes effected by means of a common watering pot, at others in the ordinary manner.

The Douche.—This powerful agent consists of a stream of water falling on the naked body from a height varying from eight to thirty-two feet. Neither extreme of elevation is so commonly employed as a mean of about twelve or fifteen feet. The water falls from a pipe of from an inch and a half to three inches in diameter. The several portions of the body are exposed to the falling stream, according to the exigency of particular cases, under the careful direction of the physician. The time during which the douche is employed is usually about five minutes. It produces a very sensible impression of warmth, even while falling, and excites an exceedingly vivid glow in the ensuing reaction. The size of the aperture of the pipe is made to vary, so as

to give exit to a smaller or larger quantity of water. Careful rubbing with a dry cloth, followed by active exercise, and water drinking, are as indispensable here as they are after the full-bath.

It is not necessary to describe those local baths, the nature of which is indicated by their names, such as the foot-bath, hand-bath, eye-bath, &c. It is obvious that they consist merely in the application of cold water, in the most convenient manner, to the parts indicated by those terms; or to any other part where local application is considered necessary. But of the *sitz-bath* a few words may be said. This is a bath containing cold water about a foot in depth, in which the patient sits, with his legs out of the bath, for a period varying from five minutes to an hour. The impression of cold is at first very intense, but it is succeeded by a delightful glow, caused by the rapid afflux of blood on quitting the bath, and taking exercise. By this afflux of blood, the quantity of that fluid is sensibly diminished in the superior parts of the body; whereby the *sitz-bath* becomes a valuable remedy in affections seated in the head or chest. It is also of essential service in disorders of the digestive organs. Active friction of the back, abdomen and thighs, is maintained during the time the patient remains in this bath; the upper and lower extremities may remain clothed.

Injections of cold water are effected in exactly the same manner as other injections. They vary

as to their quantity, temperature, frequency of application, &c., with the nature and intensity of the disease for which they are employed. They constitute an essential and valuable portion of cold water treatment.

Compresses are wet cloths. They are employed in two ways, with very different, indeed opposite, effects. Perfectly wet cloths, arranged so that free evaporation can take place, are febrifuge, antiphlogistic, and sedative; while the same cloths, well wrung out after being wetted, and securely covered with a dry bandage, so as to exclude the atmospheric air, are stimulant and counter-irritant.

The entirely wet cloths are employed in superficial inflammation and general fever. In the former case they are applied only to the part affected; in the latter, the whole body is enveloped in a wet sheet. In both, the moisture is renewed as often as the sensation of warmth begins to be perceived. This is found to be a very efficacious remedy in fever. The scientific physician will recognise its resemblance to the method practised fifty years ago by the celebrated Dr. Currie at Liverpool, Professor Gregory at Edinburgh, and others.

The compresses most frequently employed are those of the califacient or stimulant nature above described. They are found at hydropathic establishments conveniently made for the purpose. They require renewal two or three times a day. After being worn a few moments, they

produce a sensation of warmth, which continues until they become dry. In this manner they are stimulant, and operate as powerful counter-irritants, or derivatives.

Drinking cold water.—The hydropathic physician requires his patient to drink plentifully of cold water, to the exclusion of every other fluid except milk. This is the only internal medicine he employs, and the only means which he sanctions for allaying thirst. The water should be drank while taking exercise after a bath, and at the intervals between meals. The quantity taken in a day varies from ten to twenty or thirty tumblers. In some cases much more is taken. We have known a French gentleman at an institution in Germany take ninety tumblers a day. He was considerably benefited by the treatment. This quantity, however, will very rarely be advised.

Diet.—The direction of Priessnitz respecting diet, as described by Dr. Baldou,* is the following:—“*Mangez, mangez, plus vous mangez, plus vous aurez de force pour guerir.*” (p. 24.) These words must be regarded, not as enjoining or sanctioning the indulgence of an excessive appetite, by which the wants of the system would be more than supplied; but as the dietetic watchword of hydropathy, shewing that by it diseases are cured without starvation, and that

* *L'Hydropathie, methode rationelle de Traitement, &c.*
Par le Dr. Baldou. Paris et Leipzic. 1841.

the more a patient eats, short of excess, the more force he will acquire to throw off his disease. In this respect hydropathy differs essentially and agreeably from other methods of treatment.

It must not be supposed from this, that every patient is permitted to exercise his own discretion, either as to the quality or quantity of his food. On the contrary, the physician is guided by the nature of the case, and occasionally finds it necessary to place a patient upon particular or restricted diet. The general maxim is, that the patient should eat plentifully of simple but nourishing food.

Three meals are given in a day; breakfast, dinner, and supper. Bread and butter constitute the only substantial portion of breakfast and supper; and milk is the only beverage which is supplied, except water. The dinner consists of various articles of plain and nutritious diet. No restriction is here practised, except for the purpose of wholesomeness. Fish, flesh, and fowl; vegetables, fruit, and eggs, may all be taken. But care must be had to avoid too much admixture of different articles at the same time. All stimulant and irritant compounds are scrupulously avoided. Good hours for taking the meals in England are—eight for breakfast, two for dinner, and eight p. m. for supper. The diet has been found a source of great dissatisfaction, by English and French patients, at hydropathic establishments in Germany. The mode of

cookery adopted in that country, and the tastes of the people, are so different to our own, that an Englishman is generally disgusted with a second-rate German cuisine. The same remark is made by French writers. Baldou says, (p. 25,) "The cuisine at Grafenberg is detestable. Except Germans, the only strangers who seemed to me contented with it, were Poles and Russians. For myself, many times I was unable to satisfy my appetite; and I defy any Frenchman to make more than two good meals a week."

Priessnitz regards the subject of diet in the same manner as men of his station usually do. He was originally a village peasant, and is not free from the prejudices of that class. He recommends, as wholesome, the fare of the poor; and discards, as injurious, that of the rich; without reference to the sanatory qualities of either. Thus, while his table supplies pickled cucumbers, melted butter in its oily form, and greasy German gravies, he prohibits coffee, tea, spices, and aromatics. In these distinctions he is, in our opinion, too literally followed by educated physicians who have the direction of hydropathic institutions. At those with which we are acquainted, at least half the articles of diet placed before the patients, are such as an English gentleman or lady would not venture to taste. There is no sufficient reason why great improvements should not be made in this respect.

Exercise.—Hydrophy regards exercise as an essential part of its means of cure. After each

application of cold water it is necessary to induce the requisite reaction ; and at other times exercise is serviceable in promoting a healthful vigour of all the organs of the body. It should be taken, if possible, in the open air. Each meal should be preceded, and each bath succeeded, by active exercise. Gymnastic exercises are excellent means of exciting early reaction after the baths. They are also valuable aids in the restoration and maintenance of muscular vigour and energy, and in wet weather indispensable.

Clothing.—It is generally found that an agreeable, and indeed proper, temperature of the body can only be maintained in cold weather by wearing flannel next the skin. The reason that this is necessary is of two kinds : in the first place, most people lead a too sedentary life and take too little active exercise. Perhaps this cannot be avoided ; the business of the world requires our devotion to occupations sometimes inconsistent with a due regard to health. Secondly, almost every one neglects a proper cultivation of the skin. If, on rising in the morning, the whole surface of the body were sponged with cold water, in every season, and the sponging were followed by appropriate friction with a rough towel, the skin would be found to have acquired a tone and vigour, which would remove this unnatural susceptibility to the influence of cold and other morbid impressions. The adoption of this habit cannot be too strongly recommended ; it would certainly be the means of incalculable benefit to the general health.

If the practice of general ablution were adopted, and the necessary proportion of exercise taken, no doubt flannel might in most cases be dispensed with. This is the reason that it can be so safely rejected by most patients on entering a hydro-pathic establishment. But, so long as those habits continue to be generally neglected, the universal rejection of flannel cannot be safely advised. In all cases, medical advice should be obtained before any important change of this description is made. But, no one should *commence* the use of flannel until satisfied that it is indispensable to his health or comfort.

RE-ACTION.

A few words may now be said on the subject of *re-action*. After every application of cold water, internal as well as external, the first impression of cold ought to be rapidly succeeded by a general glow of the whole surface, and a positive sensation of warmth. This is what is termed re-action. It indicates such an amount of healthful energy in the bodily functions, as enables them safely to endure the depressive action of the water; unless this energy exist, the treatment cannot safely be continued. The degree of re-action is therefore a valuable criterion to the physician in determining the extent to which his means may be applied.

An important rule for the observance of all followers of the water-cure is thus expressed by

Rausse :*—(p. 17) “ Never employ any bath or ablution, unless the system possess the warmth necessary to the production of powerful re-action ; and never permit one bath to succeed another until perfect re-action has followed the former.”

Another rule is, that cold water should not be applied when the body is heated and much excited by exercise, or soon after a meal ; the process of digestion should be completed before a bath is taken. Nor should water be drunk in large quantities at a meal, nor within half-an-hour before a meal. The celebrated Hufeland has recommended that children be accustomed to drink after rather than during a meal ; which is quite in accordance with the experience of hydro-pathic practitioners.

Having thus described the manner in which hydropathic treatment is administered, we proceed to a further consideration of the subject. In order to render the following observations more readily accessible to the reader, they are arranged under a succession of heads, which are selected so as to comprehend the points on which the public will probably be most desirous of procuring information.

* Allgemeine und specielle Hydrotherapie, oder die Grundsätze des Priessnitschen Heilverfahrens &c. von Wilhelm Rausse. Dresden, 1842.

EFFECTS OF HYDROPATHY.

For a person who has witnessed the practical employment of the water cure, or who has carefully reflected on written descriptions of it, we need hardly occupy much space in shewing that it is effective ; that it is not inert ; that it possesses a real power, and exercises an actual influence on the system. Can a person submit a rheumatic, gouty, or paralyzed limb to the fall of the douche, or his whole body to a transition from profuse perspiration to the cold bath, without some effect ? No one who has an adequate idea of the meaning of these terms will imagine that he can. It is obvious that the human frame cannot be subjected to the operation of a succession and combination of such powerful agents without the induction of some new phenomena ; some change must result, either in the nature, number, or relation of the elementary particles of the tissues, or in the existence, intensity, or direction of the vital forces. Let us analyze these changes a little more minutely.

By the prolonged agency of the daily sweats, a large portion of matter is actually removed from the system, which would otherwise remain either in its circulating fluid or its component tissues. As this removed matter is (except in the cases of plethoric persons) regularly replaced by new particles, a considerable change is thus effected in the structure of the body.

By the transition from the heat of the sweating-blanket to the cold-bath, the blood, previously collected on the surface, is suddenly driven upon the internal organs.

By subsequent friction and exercise, this fluid is again recalled to the surface, and rapidly circulated throughout the system. The sudden alteration in the direction of the fluid, described in these two paragraphs, communicates to the blood a power which it would not otherwise possess, and enables it to overcome the obstacles to its progress through the several parts or organs of the body. Obstructions to the capillary circulation are thus removed; the liver, the stomach, the skin, and the muscular system, are thus released from deficiency of action in their minute vessels; depositions of foreign matter are carried away; and additional activity and energy are imparted to all the vital functions.

By the douche and compresses a powerful counter-irritant action is produced.

The wet cloths or sheets are equally powerful agents as antiphlogistics, or depressors of abnormal activity. The continued application of cold water to the surface is more efficacious than any other means in reducing the temperature, and allaying the excitement of the body.

The daily admission into the blood* of a con-

* Some unprofessional readers may not be aware that all fluids taken into the stomach are absorbed by the veins, and become mingled and circulated with the blood.

siderable quantity of pure water, and the consequent excretion through the skin and other channels, constitute another power acting on the animal processes. By this means the blood is purified, its irritant qualities are suppressed, and the functions of the excreting organs are rendered more active.

The combination of the cold-bath in the morning with a moderate douche in the middle of the day, exercises such a tonic and bracing effect on the muscular system as no medicinal treatment can produce.

These are far from being all the means by which the water cure operates upon its patients. They are a few of the most conspicuous, selected as being readily understood and appreciated. In a future section we shall endeavour to shew that these effects can be rendered instrumental in the prevention, removal, or relief of disease. The induction of the crisis evinces, perhaps, more remarkably than any other circumstance, the power exercised over the system by this method. This is a tangible and sensible result which any one may witness. It requires no reasoning or philosophical knowledge; let a patient be once seen in the critical condition, and the observer cannot fail to be convinced that the frame before him has been subjected to a process which has produced an actual and important change in its physical manifestations.

The CRISIS becomes developed when the treatment has been continued a greater or less

length of time, with more or less activity and variety, according to the peculiarities of different constitutions. The crisis is a general excitement of the system, inducing the tendency of morbid action to the surface. It is characterized by various modifications of fever, succeeded by local pains, cutaneous eruptions, occasional furuncles, &c. Its nature, intensity, and period of duration, are subject to many varieties, frequently bearing some relation to those of the disease in the treatment of which it is excited. It is invariably productive of relief to the patient, and frequently precedes perfect restoration to health. In cases of long standing, it is the point at which the curative process often commences. After its development, the patient seems to have turned a corner in his malady, and to journey forward in the direction leading to health.

There is an unjust prejudice against the crisis existing in the public mind. It should be remembered that its severity generally depends on the inveteracy of the original disease. In slight cases it is frequently absent altogether; in others it is scarcely perceptible, or inconsiderable. Persons who have long laboured under painful or disabling maladies will scarcely object to the infliction of temporary inconvenience, which offers them their only chance of relief; other patients need hardly alarm themselves by the apprehension of sufferings, which it is improbable they will ever experience.

THEORY OF HYDROPATHY.

The operation of this method of cure may be so varied as to render it distinguishable into certain divisions, which correspond with a general classification of diseases. Dr. H. Klencke* makes five divisions; Dr. Piutti (*Der neue Wasserfreunde*. 1842. p. 12,) has remodelled this arrangement, and adopted only four divisions. In order to avoid minuteness of professional distinctions, and to render these remarks as intelligible as possible to the general reader, the operation of the water cure may be conveniently arranged under three heads:—1. Antiphlogistic. 2. Tonic. 3. Alterative. Any one practically acquainted with hydropathy knows that it operates, with astonishing efficacy, in the three modes here specified.

That being granted, it is only required to be shewn that all curable diseases can be classified under one of the above principles of treatment, in order to prove that hydropathy is universal in its application. This may be easily effected. Every disease must consist either in an excess, a deficiency, or an irregularity of the natural condition or action of the part in which it is seated. Each of these three modes of morbid action has its appropriate remedy in one of the

* Entwurf eines neuen naturphilosophischen Systems der rationellen Heilkunde. Von Dr. H. Klenke. 1840. p. 112.

effects of hydropathic treatment. Our meaning will perhaps be rendered more intelligible by the following tabular illustration:—

EFFECTS OF HYDRO-PATHIC TREATMENT.	CLASSES OF DISEASES TO WHICH APPLICABLE.
1. <i>Antiphlogistic</i> , or depressive of increased action.	1. <i>Excess of vital action</i> ; as fever, without prostration; inflammation, local or general; acute rheumatism; occasional acute attacks occurring in the progress of chronic diseases.
2. <i>Tonic</i> , or restorative.	2. <i>Deficiency of vital action</i> ; as debility, local or general; convalescence from diseases; nervous affections, dyspepsia.
3. <i>Alterative</i> .	3. <i>Irregularity of vital action</i> ; as local diseases of structure, chronic rheumatism, gout, neuralgia, constipation.

This classification of diseases and treatment might easily be shewn to be accordant with the doctrines of therapeutics, as taught in the recognised medical schools. It constitutes the theory of the operation of the water cure. It will be seen hereafter that some restrictions are necessary in its practical application. We proceed to make a few remarks on each of the three modes of treatment above specified.

Antiphlogistic.—The principal agents of this class are the wet sheet and cold affusion for general affections; and wet cloths for local inflammation; combined with the sitz-bath, drinking

cold water, and low diet. The bold application of this method produces a most powerful anti-phlogistic effect, so that the most violent fevers can be cured by it, and sometimes are so, in a surprisingly short space of time.

Tonic.—The remedies most serviceable in producing a tonic effect are—general baths, at first tepid, then gradually colder and colder; general ablution, shower bath, short sitz-bath, douches, exercise in the open air, and simple but nutritious food. The invigorative effect of this treatment is incredible. We have no hesitation in pronouncing it by far the most powerful tonic whose operation we have ever witnessed. We have experienced its beneficial effects in our own person, and have repeatedly observed it in others.

Alterative.—This term is not unexceptionable; but it is perhaps the best that can be devised. This is that branch of treatment in the progress of which the crisis is developed. The agents most powerful to this effect are sweating followed by cold-bathing; the douche, sitz-bath, compresses, drinking water, and diet, are important auxiliaries. The explanation given by Priessnitz and writers on the water-cure of the phenomena produced by this mode of treatment is the following:—They say that diseases consist in the existence of a morbid substance in the system; that the hydropathic treatment causes the elimination of that substance; that the superficial affections attendant upon the critical

period are the manifestations of that substance on its transit out of the body ; and that when its expulsion is perfectly effected—and not till then—the patient is completely cured. Medical readers will readily recognise the insufficiency of this hypothesis. We may remark that we have seen the crisis most conspicuously developed in a remarkably healthy child of three or four years old, who had never experienced any serious illness, but who had taken some of the hydropathic treatment in company with a relative. In this case there was an abundance of cutaneous eruption ; but of course no “ morbid matter ” could be expelled from a frame where disease had never existed. Some other explanation, therefore, is necessary to shew how the critical phenomena are produced ; and which will be applicable to the cases of healthy as well as of diseased subjects.

That explanation I believe to consist in the doctrine of counter-irritation. In the crisis a new disease is created in the system, by which nature is stimulated to a curative effort. In the beneficial influence of this new effort the previously existing disease is comprehended. On the same principle teeth are often cut during an attack of scarlet fever, as remarked by Drs. Gregory and Tourtual, and as familiarly known to practitioners ; the fever excites nature to exert herself, and the hitherto obstinate gums participate in the advantage of her exertion. This is exactly the case with a chronic disease,

which is removed during the restorative disposition excited in the system by the hydropathic crisis. The crisis itself is artificial—a new disease excited by the treatment ; but it is harmless, and soon departs, carrying away with it the chronic affection under which the patient was previously suffering.

This is not an occasion on which to enter minutely into hypothetic speculations, and the above remarks are only made in order that scientific persons may perceive that the operation of cold water can be explained without having recourse to an unadmitted hypothesis.

Hydrotherapy has been too much regarded as simple and uniform in its operation. The truth is, that it effects almost every change which drugs can effect, only by safer and more certain means. For instance, the internal purging of calomel, aloes, and scammony, is substituted by the external purging of the dry blanket or wet sheet ; the counter-irritation of a blister or mustard poultice is replaced by a similar power exercised by the compress ; the tonic effects of cinchona, gentian, or iron, are represented by those of the cold bath, douche, or sitz bath. This comparison might be further pursued if necessary.

The application of hydrotherapy, thus regarded, requires as much skill and knowledge as any other remedial method. What it really professes is, to possess more power than other remedies ; to leave the system, not only radically cured of all morbid taint, but unimpaired by the

injurious effects sometimes produced by drugs ; to remove an old disease without superinducing a new one, and without communicating to the patient an unwholesome habit of body, as too often follows the use of opium, calomel, aperients, &c. ; and, more than all, to be able to cure or relieve many diseases in which other treatment has failed, even when employed by its most eminent professors.

In order to shew more forcibly the fact that hydropathy operates in a manner accordant with scientific medical principles, let us illustrate the above remarks by a supposed case. Take, for instance, chronic rheumatism. In this malady the morbid phenomena are combated by the solvent and eliminating action of daily perspiring, instead of the cupping and mercurializing of other systems ; this is seconded by the counter-irritation of douches and compresses, which represent the blisters, liniments, and ointments of the apothecary : the cure is completed by the tonic action of cold bathing, appropriate diet, water beverage, and exercise, which answer to the bitters and other nauseous tonics usually administered. Is not this strictly consistent with the best principles of medicine ? If space permitted, the same might be shewn of most other diseases.

The effect of drinking cold water must not be overlooked in a sketch of the theory of hydropathy. It is essential as supplying to the system the constant drain which is kept upon it by the

transpiration. It is of service, also, in purifying the mucous membrane of the intestinal canal, and imparting a tone to the same part. It dilutes the acid fluid which it finds in the stomach, and carries away all noxious matter. The organs of taste, as well as of digestion, experience its beneficial influence. Food becomes more agreeable to the palate as well as more welcome to the stomach.

USES.

All medical science is grounded on observation. Facts are the basis of every correct opinion. To facts, therefore, the reader must be referred for positive demonstration of the benefits resulting from hydropathic treatment. These are to be found in great number; recorded in works which have proceeded and are still issuing from the German and French press. Instances will there be found of unexpected restoration from diseases apparently incurable, and which had withstood the efforts of the most enlightened and distinguished physicians in Europe and America. These cases are often narrated by the alleviated sufferers themselves, thus affording unquestionable evidence of veracity.

It is well remarked by Dr. Moritz Strahl, of Berlin, (“*Die Kalten Wasserkuren,*” &c., p. 4,) that the rank, as well as number, of persons frequenting hydropathic establishments in Germany is a point of considerable importance. The society

at Grafenberg consists of grand dukes, princes, earls, marquises, counts, barons, ambassadors, bishops, ministers of state, professors, generals, admirals, &c. The same remark is more or less applicable to all similar institutions.* It is important to bear this fact in mind, because persons in such stations are always in a position to command the best medical assistance. By placing themselves under Priessnitz or his disciples, they shew that hydropathic treatment is regarded by them as preferable to any other method. Another consideration is, that they form the most enlightened class of society, and that they are in possession of the best information respecting medical as well as other subjects ; and, moreover, that their proceedings are frequently directed by the counsel of the ablest physicians in their respective countries.

The usefulness of water as a remedy was not

* Amongst other proofs of the sanction which the system has received in Germany, it may be stated that the Austrian government, after having instituted a rigid inquiry into the system and treatment of Priessnitz at Grafenberg, placed that establishment on the list of privileged national baths.

The Duke of Saxe-Gotha has appropriated to the purpose of a hydropathic institution a beautiful castle, formerly the favourite residence of Goethe.

The King of Bavaria sent to Grafenberg the Count de Rechberg, accompanied by Professor Cœrtel ; and upon their report has assigned one of his buildings for a hydropathic establishment. It is said to be his intention to institute hydropathic professorships in the universities of Munich, Erlangen, and Wurtzburg, already rendered illustrious by the names of Stromeyer and Wagner.

first discovered by Priessnitz. He has the great merit of reducing it to a systematic method of treatment, and of skilfully availing himself of many new and valuable means of application. Many medical writers had previously recorded strong opinions and striking facts in favour of its use, both externally and internally, in the treatment of diseases. But these valuable portions of medical literature have been either overlooked or neglected. The writings of Dr. Currie, Dr. Gregory, and many others, at the commencement of the present century, contained unanswerable proofs that fever can be more successfully treated by the external application of cold water than by any other means. The method which they adopted had been allowed to fall into almost entire neglect, until attention was again attracted to the subject in other countries.

Strong opinions in favour of the use of water, as a remedial means, have been also given by other writers of no small celebrity. Hufeland, in his celebrated work on the Art of Prolonging Life, thus writes:—"Much has been said and written on panaceas or universal remedies; but I believe that the most certain and the most convenient panacea is to be found in each spring of pure water, in the ever young and vivifying breast of nature." It will be remembered that this writer was one of the most learned and distinguished physicians of modern times.

The following passage is extracted from an

article by M. Ratier, in the *Dictionnaire de Médecine et de Chirurgie* :—“ Considérée comme moyen thérapeutique, l'eau est d'une efficacité incontestable : c'est bien souvent à elle seule que sont dues certaines guérisons dont on fait honneur à toute autre chose. Elle diminue la chaleur fébrile, elle active les secretions et les exhalations, et en modifie évidemment les produits. Il y aurait de l'avantage à ce que les medecins répandissent dans le public ces idées, et à ce qu'ils ne prescrivissent pas, en ayant l'air d'y attacher une grande importance, des tisanes, aux quelles ils n'attribuent eux mêmes aucune efficacité ; il faudrait que l'on ne refusât pas, ainsi que l'on a souvent occasion de le voir, un verre d'eau *pure et fraîche* à un malade qui le sollicite instamment pour appaiser la soif qui le dévore. *On peut dire sans exagération qu'il est peu de maladies dont l'eau, employée convenablement, ne puisse etre le remède, ou dans lesquelles elle ne puisse concourir puissamment à la guérison.*”*

* So great is the importance of the above passage, that we shall probably be excused for appending a translation, for the use of those to whom the French language may not be familiar :—“ Considered as a remedial means, water possesses an incontestable efficacy : to it are often due cures of which other remedies have the honour. It diminishes febrile heat, excites the secretions and exhalations, and sensibly modifies their products. It were better that physicians disseminated these ideas among the public, and that they ceased to prescribe, with the air of attaching importance to them, potions to which they themselves do not attribute any effect : it is not proper, as is so often done, to refuse a glass of *pure*

Quotations such as these might easily be multiplied if necessary. The above are sufficient, as shewing that the value of water was appreciated by some men of undoubted talent and extensive experience. But their suggestions were buried in the crowded archives of medical literature, and were seldom made available in practice, until Priessnitz demonstrated, on so large a scale, the practical benefit to be derived from them.

There are three modes in which disease may be combated by human efforts—it may be prevented, removed, or alleviated.

That the *prevention* of a large portion of the diseases which exist in the world would result from a general adoption of the prophylactic means of the water cure, there cannot be a question. The use of water as a beverage, the employment of regular cold ablutions and friction of the skin, combined with wholesome diet and sufficient exercise, would ensure the natural performance of their functions on the part of the bodily organs, and render the system much less susceptible to the influence of morbid impressions. Of this truth all intelligent physicians are aware.

That existing diseases can be *removed* by *and fresh* water to a patient who anxiously solicits it to allay the thirst which consumes him. *It may be said, without exaggeration, that there are few diseases for which water, properly administered, cannot be the remedy, or which it cannot powerfully contribute to cure."*

hydropathic treatment, is demonstrated by multitudes of cases, which want of space alone prevents us from citing.

We wish, however, to make a few remarks on the *alleviating* power of hydropathy. The public generally regard the water treatment too exclusively as a means of cure. They forget that many cases which cannot be cured may be relieved. Most incurable cases of rheumatism, gout, paralysis, and chronic dyspepsia, are of this nature; and many such patients are found in all hydropathic establishments. The relief which they experience is almost certain and universal. Nearly every such patient describes himself as better, very soon after adopting the treatment; and the amount of amelioration is generally so great, that he is abundantly thankful for the trial which he has made of the new system.

A question has been raised whether hydropathy is universal in its application? I have no hesitation in replying to this question in the negative. In this I am supported by the most respectable writers, both French and German, as well as by the cautious practice of Priessnitz himself. The proper character of the water-cure is well expressed by Gross (*L'Eau Fraiche*, &c., p. 181), who says—"That which is now determined, and which experience has proved by evidence, is, that cold water, without being a panacea, a universal remedy (which does not and never will exist), produces the most salutary effects in the treatment of diseases, not of this

or that malady in particular, but in general of the most part of known and curable affections ; and that, being properly employed, it cures more cases, with greater facility, more promptly, and more certainly, than any other medicinal substance.”

There is one class of diseases which experience and theory combine in shewing to be inappropriate subjects for the water-cure. They are, advanced stages of affections of the lungs and heart. These cases are universally rejected by Priessnitz, who has learned to distinguish them in a rude, but generally successful manner, by some of their most obvious external manifestations. Baldou records a case in which a gentleman was cured of a pulmonary affection at Grafenberg, through having concealed it from Priessnitz, who would not otherwise have treated him. This case, while it shews the necessity of scientific knowledge in the physician, does not invalidate the propriety of the exceptions above mentioned.

The reason why organic diseases of the heart and lungs are those in which the water-cure is inapplicable is, that those organs are directly affected by sudden changes given to the direction of the blood. When the blood is collected in the internal organs, by the application of cold to the surface, a weak heart or degenerated valve might give way under the increased burthen it would have to bear.

The same remark applies to the lungs, al-

though the consequences in this case are not likely to be so sudden as in the former. But before these diseases are perfectly developed and established, when there is only a tendency to them in the system, the water treatment will be found the most efficient means of preventing their further progress. In order to decide correctly on these points, the physician to a hydro-pathic institution should, before all things, be provided with an accurate knowledge of auscultation ; without this aid his diagnosis will always be uncertain ; with it he can very rarely be misled.

A second class of cases in which the water-cure need not be so strongly enforced are, those which are readily and safely curable by other means.

There are three classes of chronic patients which seem to be peculiarly benefited by the water treatment. They are—1. All persons suffering from gout, rheumatism, paralysis, neuralgia, and other chronic affections of the external parts. 2. All persons labouring under disorders of the digestive system, whether seated in the stomach, liver, or any portion of the intestinal tube. 3. All sufferers from nervous affections. We mention the above three classes, because our own experience has shewn more especial proofs of benefit resulting in their treatment. But cures or alleviation are constantly being effected in all kinds of chronic disease.

We have already shewn (p. 27) in what man-

ner the treatment operates in the cure of diseases comprehended in the first of the above three classes.

Affections of the digestive organs.—The hydropathic diet and water-drinking are assuredly important agents in the cure of these maladies. Most valuable assistance is also rendered by the sweating. It is remarkable that, among so many writers on the water-cure, none should have perceived that perspiration constitutes in these cases a kind of external purgative.* How many persons are kept in a tolerable state of health by constantly taking calomel, senna, aloes, or other active aperients? Some persons take a dose of this kind every day. To such persons we have no doubt the sweating and water-drinking would prove an excellent substitute.

Sweating possesses one great advantage over internal purging. The latter procures its discharge by stimulating a membrane which has an important function to perform, and is intimately connected with many organs which are mainly instrumental in the performance of the vital processes. The stomach, the liver, and

* The operation of purgatives is of two kinds. One is that of emptying the contents of the intestines. A more important one is that of removing a portion of the serum of the blood. It is this latter effect that is so necessary, in congestions of the head, giddiness, loss of memory, and chronic disorders in general. It may be defined to be diminishing the quantity, without impairing the quality of the blood, an effect which sweating is obviously calculated to produce.

the intestinal canal, are directly irritated by this mode of treatment, and experience has shewn how materially they suffer by its long continued operation. It may be said that habitual purging resembles habitual dram-drinking ; both produce temporary relief and enjoyment, but their beneficial effect soon vanishes, and requires renewal, while their permanent effect is to weaken and undermine the organs on which their stimulant influence is exerted.

The eliminating action of hydropathic perspiration is exerted without the danger of producing this serious mischief ; its operation being confined to the skin, no other important organ is directly or indirectly affected. It procures the excretion of animal fluid in the most simple and harmless manner, and yet this simple process, combined with the drinking of cold water, will be found more than equivalent in beneficial result to the questionable method above referred to. Of course we are speaking of the constitutional action of aperients.

Besides this peculiar aperient action, the whole system of hydropathic treatment exerts an alterative and invigorating influence, both directly upon the digestive organs, and indirectly upon them through their relations with the rest of the system. It conveys a tone and energy to the whole system, the renovating influence of which is reflected to any particular suffering organ. By drinking largely of cold water, the lining membrane of the stomach and bowels is purified

and invigorated ; morbid secretions are removed, and acrid substances are neutralized.

Diseases acquired in hot climates are especially appropriate subjects of hydropathic treatment.

Nervous affections.—In these cases recovery is chiefly occasioned by the change which is effected in the direction of the vital energies, by the continued operation of gentle perspiration, and by the bracing influence of the cold bath, douche, and exercise, aided by wholesome diet, and drinking water. It will be perceived, that under this treatment all luxuries and pernicious indulgences must be relinquished ; all enervating habits must be discontinued ; the patient is roused from sleep at four or five o'clock in the morning, and is consequently ready to retire to rest at nine or ten in the evening. He avoids all stimulant and artificial diet ; his personal comfort compels him, several times a day, to take active exercise ; the rules of the institution and the exigencies of his own case force him to activity ; he is obliged to hasten to his baths, his exercise, and his meals ; until, after a short period, what was at the commencement an irksome task, becomes a grateful duty, which both habit and inclination urge him to perform. There can be no greater contrast than between the energy and activity of his new habits, and the torpor and listlessness from which they have aroused him. An important auxiliary consists also in the operation on the patient's own mind of the novelty of the system.

He has been wearied by a succession of physicians, and of medical treatment; he found the latter, not only constantly failing of its purpose, but consisting merely in the repetition of the same thing under different names; he is now subjected to a totally novel method, and with characteristic credulity his confidence is awarded to the novelty. In this confidence, and in the improved tone of the whole system, a strong foundation is laid for curative operations; the patient regards his prospects in a more cheerful light, which, in some cases, is nearly all that is wanted, since a morbid view of his own condition is a characteristic feature of the malady.

The foregoing classification is far from comprehending all the chronic diseases against which the hydropathic treatment may be successfully directed. The cases mentioned have been selected for particular observation, because they include the classes that have been submitted to the treatment in the greatest numbers, and because they are admirably adapted to illustrate the reasonable and scientific manner in which disease is combated by hydropathy. Congestions of blood in the head, giddiness, loss of memory, heaviness, headache, and other cerebral affections, are almost invariably benefited by the treatment.

The success of hydropathic treatment is, however, much more remarkable in acute than in chronic cases. In severe inflammation of organs or parts, it has displayed a power incomparably

greater than that exercised by the lancet and the apothecary. But of this subject it is not my purpose to treat.

Fever.—There is no more remarkable fact in the history of medicine than the carelessness and neglect shewn by the profession towards the facts published by Dr. Currie and others respecting the treatment of fever by cold affusion, nearly half a century ago. We find epidemic after epidemic thus treated, with wonderful success, in several parts of Europe; Dr. Gregory, the respected professor of Edinburgh, narrates the interesting details of the cure of scarlet fever in his own children by this means; and individual instances are furnished from all quarters in proof of the established fact, that the febrile paroxysm, whatever be its nature, is more rapidly and safely removed by the external application of cold water than by any other means. Notwithstanding the abundance and authenticity of these convincing facts, the system of treatment which they were adduced to support is almost entirely neglected and discarded. In its place we find an endless variety of treatment, grounded on hypothetical speculations as to the nature of fever. The schools of medicine, on this subject, abound as much in unseemly contention as though the science were of a less inductive character. Ploucquet, Clutterbuck, Marcus, and others, contend that fever is a modified inflammation of the brain. Broussais, and a host of French and other followers,

as strenuously maintain that it is inflammation of the mucous membrane of the intestines. Laennec has shewn that similar inflammations exist in the pulmonary organs. Dr. Copeland contends that fever is a disease of the organic or ganglionic nerves; and Dr. Stevens has written a large work to prove that it consists of a deficiency of neutral salts in the blood.

Each of these theories has originated a separate mode of treatment. Clutterbuck and his school practise copious depletion; which their antagonists denounce as sanguinary and destructive. M. Broussais treats fever as gastro-enteritis, scrupulously abstaining from purgatives, because they irritate the intestinal canal; while Dr. Stevens, an equally high authority, asserts outright his belief that this treatment is exactly calculated to produce the disease it is intended to combat, and thus he accounts for the ascertained greater prevalence of gastro-enteritis in France than in any other country. He says, very rationally, that by abstaining from purgatives we allow the morbid secretions of the alimentary canal to accumulate and irritate the part of the mucous membrane with which they are in contact; so that, in his words, "it would be a wonder if they did not sometimes produce gastro-enteritis." The treatment which he recommends is large doses of neutral salts, which few other practitioners adopt.

Dr. Currie's method of curing fever was by applying cold water to the surface of the body.

Patients were taken out of their beds, and cold water was dashed over the naked body. The same method was adopted by Dr. Gregory. Other persons immersed their patients under water. Priessnitz envelopes them in a wet sheet, which is renewed as often as it becomes warm. This is his plan when the febrile action is perfectly developed. When called to a patient in the early stages of the disease, he applies active friction to the extremities in a half bath, by which he often succeeds in warding off the impending fever entirely. Perhaps the following narrative is the best illustration we can furnish of the treatment of fever by cold water.

Dr. Milius, medical inspector of the port of St. Petersburgh, and senior physician to the Naval Hospital, writes, that when he entered upon his duties in that hospital, he found that from the first to the fifteenth of July, 1803, fifty-six persons had died of fever in the institution, under the ordinary medical treatment. Being desirous of ascertaining the effect of Dr. Currie's treatment, he had the subsequent patients immersed in cold water, as fetched from the river. The whole body was dipped in the water up to the neck, while an attendant poured water on the head. Having thus treated one hundred and sixteen severe, and generally dangerous cases, from the fifteenth of July to first of December, 1803, he found the success immeasurable; not a single death occurred, and no evil consequences ensued in any case. He remarks that in almost

every case cold immersion was the only means practised, and that in none was medicine externally or internally employed.*

We hope that the numerous facts, of which the above is only an example, will not long be neglected, while the medical profession is idly disputing about its favourite dogmas.

Diseases of the skin are among those most successfully treated by hydropathic means; also primary and secondary syphilis. Diabetes, cancer, scrofula, diseases peculiar to women and children, chlorosis, and anæmia, are all diseases of which hydropathy offers the best means of treatment.

Insanity is a disease on which a few words may be said. The experiments which have been made in this disease are so few that little attention has been given to them; but they have

* For the satisfaction of the learned, we subjoin the latter part of the report in the original words:—"Aus dem Auszuge der Kranken—journale des St. Petersburgischen. See hospitals, die sehr genau gefuhrt werden, ergiebt sich, dass seit dem 15 Julius, 1803, bis 1 December, bei 116 schwer, und meistens sehr gefahrlichen Kranken, besonders am hitzigen und Nervenfieber, an denen die Versuche gemacht wurden, die Besserung unmittelbar nach den Tauchbadern erfolgte, und kein einziger gestorben ist. Auch hat sich bei allen diesen keine, selbst geringfugige uble Folge geaussert. Ich muss anbei noch bemerken, dass ich fast bei allen blos die Tauchbader allein brauchte, und gar keine Arzeneimittel weder innerlich noch ausserlich angewandte." Vide Beobachtung uber die grosse heilkraft des untertauchens in kaltes wasser. Von Dr. Milius.

almost always terminated with some degree of success, and it is very desirable that the treatment should be more extensively applied to this malady. The persevering application of the sweating process and cold-bath, with the douche and head-bath, appear to offer considerable hope of success ; in proof of which a few instances have come to our knowledge, in Germany, in which the most violent mania was in this manner tranquillized. It cannot be too strongly urged upon the attention of persons connected with the unfortunate subjects of this malady, that they have now presented to them a mode of treatment which offers the prospect of relief, if not of actual cure.

SAFETY.

It is imagined by persons who have not witnessed the operation of the water treatment, that some of its means are attended with danger ; it is supposed that weak persons and delicate constitutions are unable to undergo its operation without injury. Nothing is more groundless than this fear ; many thousand persons are annually submitted to its application in the various establishments of Germany. Among them are individuals of every age, of both sexes, of all varieties of constitution and temperament, presenting every possible gradation of physical power, even to the most infirm, and labouring

under every description of disease. Among this large number, which comprehends every diversity that the human frame is capable of presenting, accidents are much less frequent than under any other mode of treatment; indeed, they are almost unheard of. The weakest children and the most delicate females are daily subjected to the morning-sweats, the plunge-bath, and the douche, without the least injury, and with constantly increasing strength.

It is generally and correctly supposed that a person should not plunge into cold water when considerably heated by exercise. In that case, however, there is something more than an elevated temperature on the surface of the body—the nervous system is excited; the muscular exertion has produced an accelerated circulation; the pulse is quickened; and the respiration hurried; shewing that the heart and lungs are encumbered with an obstacle which they are obliged to exert themselves to overcome. In this condition of the body and its organs, it is easy to understand how the application of cold to the surface may produce the most disastrous effects; the superficial vessels being constricted by the influence of cold, their contents are driven upon the vessels of the internal organs, and, if those organs be already in an engorged and excited condition, their serious injury is not an improbable consequence.

The circumstances are widely different in the heat and perspiration induced by the hydropathic

method ; by that, the temperature is simply elevated through the non-escape of the caloric generated in the animal system : the woollen coverings are bad conductors of caloric, so that all which is generated in the system is collected on the surface ; hence results the perspiration. In this case we find no excitement, no increased activity, the circulation is tranquil and undisturbed ; reason, therefore, would lead us to conceive, as experience has taught us, that a transition from this state to a low temperature might be made with perfect safety. The only questions to be previously determined are—whether the patient possesses sufficient strength to create the requisite re-action ; and whether the several organs of the body are in a condition to withstand the burthen imposed upon them by the afflux of blood during the application of cold to the surface. If not, the cold-bath after sweating is improper. These questions must be decided by a physician at once conversant with general pathology and with hydropathic treatment.

The effect of the above remarks has been well expressed by Dr. Carle Mundé, in his work, entitled, “ *Die Grafenberger Wasserheilanstalt, und die Priessnitschen Kurmethode, &c.*” (5th edit. p. 212.) He describes the effect of exercise or medicine to be that of “ *forcing*” perspiration, (*schweisstreibendes*,) while he denominates the hydropathic method, as “ *enticing*” it, (*schweissziehendes*.) These terms are sufficient to mark

the difference between the two modes of inducing perspiration.

Another idea generally entertained is, that too much sweating must reduce the system, and that the patient must become emaciated and debilitated under its operation. This is equally erroneous. When the treatment is skilfully applied, the powers of the system and the nature of the affection being duly estimated, it will be found, in all cases of debility or emaciation, to produce an invigorating effect; it reduces the frame only in cases of obesity.

The venerable M. Diepenbrock, dean of Ratisbonne, gives the following statement of his own case, in a letter published by him in the *Gazette de Munich*, as quoted by M. Gross:—" J'ai moi-même été un de ces matadors de sudation; moi-même durant tout l'hiver j'ai sué tous les jours pendant trois à quatre heures, par pintes et par pots, et me suis plongé immédiatement après dans une eau froide comme glace, à une température de l'atmosphère de 25° au dessous de 0', (of Reaumur) et malgré cela mon corps a gagné plus de 30 livres d'une chair solide et musculeuse, et j'éprouve un sentiment de vigueur que jamais je n'avais connu auparavant." (p. 56.)

It may be added, that of 7219 cases treated by Priessnitz, in the ten years ending 1841, only 39 deaths occurred, and that they were chiefly in cases already hopeless when they went to Grafenberg.

AGREEABLENESS AND FACILITY OF
APPLICATION.

Let it not be imagined that the water cure is disagreeable, or that the patient has anything to "go through" in submitting to its operation. When its use is once commenced, when the skin has overcome its first shrinking from contact with cold water, and the glow of reaction has been once experienced, it will not be pronounced painful or unpleasant. On the contrary, it is exceedingly agreeable. It is the most common of all events at hydropathic establishments, to hear patients speak of their delightful sensations after taking a plunge bath or a douche; and if chance, occupation, or absence prevent the taking of a bath at the usual hour, the loss is always regarded as a deprivation of one of the principal enjoyments of the day. It may be confidently affirmed, that few things can communicate a more delightful impression to the human feelings, than the reaction succeeding a douche or a cold bath after sweating. Experience alone can give an adequate conception of this sensation. The reaction usually commences as soon as the patient has left the water.

There are certain incidents of the water cure which are calculated to excite anticipations of unpleasantness. Among these, being enveloped in a blanket deserves especial notice. We can truly affirm, that to us its effect is exceedingly agreeable. It produces a kind of semi-slumber,

during which the time passes with wonderful rapidity, and with positive enjoyment. We have heard that opinion stated by numbers of other patients, many of whom were our own fellow-countrymen.

In the subsequent plunge bath, the contrast is so great that the impression is quite different from the ordinary sensation of cold. Some persons describe it as resembling the application of hot water. It is scarcely necessary to remark that it is agreeable ; which results from a desire for cold having been created by the long continuance of elevated temperature produced by the blanket. Suitable arrangements being made, the water cure can be rendered as agreeable in winter as in summer. Fires in the sweating, dressing, and bath rooms, prevent any inconvenience or unpleasantness being felt from the cold.

The practicability and general facility of application of the hydropathic system can be personally examined at the institutions already in existence. But it may be remarked, that the arrangements should be adapted to the necessities of the different cases ; and that patients should experience no difficulties whatever. They should meet with attendants competent to assist and direct them in the various branches of treatment ; and to supply them, at the proper periods, with whatever the physician has directed. It will be found on trial, that the water cure is far less difficult of application and tolerance, and that it

is infinitely more agreeable, than any other system of medical treatment.

In further corroboration of these assertions, it may be stated that most patients, on leaving the institution, express an intention of continuing the treatment, notwithstanding their health is perfectly restored. We are personally acquainted with several gentlemen and ladies, who have persevered with both the treatment and the diet, at their own residences. They feel it to be necessary to their comfort; by relinquishing it they would give up a valuable enjoyment, besides an important instrument of health and cleanliness.

DRUGS.

A drug is a substance capable of exciting a change in the organs or functions of the animal frame; the term comprehends all substances answering to that definition. There is therefore considerable truth in the remark of Dr. Frankel, (*Aerztliche Bemerkungen*, &c., p. 7, *et seq.*) that water, as employed by Priessnitz, is as powerful as any drug in the Pharmacopœia; since it may be stimulant or sedative, tonic or depressing, astringent or aperient, sudorific, diuretic, &c., according to the manner of its administration. Thus far there is a similarity between water and drugs; but there the resemblance ceases; they are essentially different in the fact, that water is always harmless, while most drugs are more or less

injurious, in their immediate or subsequent effects. To satisfy our readers of this latter truth it is sufficient to enumerate the names of arsenic, opium, turpentine, prussic acid, corrosive sublimate, calomel, foxglove, hemlock, henbane, and iodine, as drugs frequently employed in medical treatment.

Besides the injurious properties of drugs themselves, the public are exposed to another, but no less serious danger, from peculiar methods of administering them. Thus, we find one man professing to cure a class of diseases by a remedy in doses which another pronounces poisonous. (*Christison on Poisons, Art. Digitalis.*)

The nauseous qualities of drugs is another objection to their administration. There is no doubt that much mischief is often perpetrated by the disgusting doses which are forced upon children and patients in a prostrate condition; as, for instance, in the last stages of fever. (*Vide Tourtual. Praktische Beitrage zur Therapie der Kinderkrankheiten, vol. i. p. 3, et passim.*)

A fourth reason for endeavouring to find a substitute for drugs is the uncertainty of the benefit of some of those most commonly exhibited. We find nation disputing with nation on the use of a drug, as if they were discussing a point in politics, or any other department of science, in which assertion and not proof is the manner of arguing. (Compare the treatment of thoracic inflammations by Laennec with any English writer on the same subject, particularly

with reference to mercury. See also Hope, on the Heart, where he says, speaking of the established treatment of aneurism—"I must frankly avow that, were I personally the subject of aneurism, I would rather take the chances of the disease than of the treatment." Third ed., p. 477.)

The fifth and crowning objection to drugs is, that they are generally useless. All their beneficial effects may be obtained from water. The two following facts will illustrate this statement :—

An English gentleman of the author's acquaintance, suffering from a painful disease, had been in the habit of frequently taking opium to procure relief. After the second day of his residence in a hydropathic establishment, he was able to relinquish this habit entirely; although, at that time, his malady was not otherwise improved.

Another English gentleman, many months a companion of the writer, had taken active doses of purgative medicine nearly every day for a year, by the advice of an eminent London physician. He was affected with "torpor of the bowels and liver." He went to a German water establishment last summer, and has not taken a dose of medicine since. His bowels are now perfectly regular. What drugs effect by a violent, local action, water effects by its healthful influence upon the system in general.

CONCLUSION.

Our object in this publication has been to draw such a sketch only of the hydropathic system as can be easily and rapidly read, and as will make it intelligible to the community at large, as well as to the members of our own profession. The plan and size of our work have necessarily confined each division of it within very narrow limits, so that we have not attempted to give more than an outline of the theory and practice of the water-cure ; but we hope that outline is so broadly and distinctly marked, as but little misapprehension, if any, can arise in the mind of the reader on any of the points which we have endeavoured to elucidate.

We have pointed out the ordinary methods of treatment in their several varieties ; including the subjects of sweating, bathing, ablution, sprinkling, injections, compresses, drinking cold water, diet, exercise, and clothing ; we have described the reaction which takes place after the use of the above-mentioned means, and the effects which generally result from the use of them ; we have endeavoured (we hope not unsatisfactorily) to account for the phenomena which they present upon the acknowledged principles of medical science—a point which has been entirely overlooked by many writers on this subject, and not very satisfactorily treated on by others, but which is, nevertheless, of the utmost

importance to the progress and final establishment of hydropathy.

Under the title of Theory, we have endeavoured to shew, upon sound scientific principles, how cold water, if skilfully applied, is, with a few practical exceptions, competent to eradicate or alleviate all curable diseases, whether acute or chronic. Under the head Uses, we have pointed out the classes of disease to which it is most applicable, and on which its beneficial influence has been most especially exercised. The safety, agreeableness, and facility of application of the water cure have also been shewn, and a few remarks have been made on the injudicious use and injurious effects of drugs; but as the latter subject does not form an integral portion of a hydro-pathic treatise, we have spoken of it with great brevity, and rather from a sense of duty than from inclination.

Our readers will doubtless regret, with us, that the same reason which existed for curtailing our remarks, under each of the above-mentioned divisions of our subject, has altogether prevented our submitting to them a "list of cases." When, however, we repeat that Priessnitz alone, in the ten years ending 1841, had treated more than seven thousand cases, of which thirty-nine only terminated fatally, and that of those nearly every one had been pronounced hopeless before being submitted to the treatment; and that there are nearly a hundred other largely-frequented establishments, in each of which the practice has

been eminently successful ; it will be obvious to the intelligent reader, that it would be no difficult or laborious task to collect a volume of important and authentic cases. Each hydropathic institution of twelve months standing would furnish materials for such a work. But the experience of every day, while it increases the number of cures, diminishes the necessity of publishing them ; for they are already so numerous and so universally admitted, that even those who will not be convinced by them dare not attempt to deny them.

THE END.

