WBF
F823.a
1867

Surgeon General's Office
LIBRARY.
Section,
No. 54370

OUTLINES

OF A

NEW THEORY OF DISEASE,

APPLIED TO HYDROPATHY,

SHOWING THAT WATER IS THE ONLY TRUE REMEDY.

WITH

OBSERVATIONS ON THE ERRORS COMMITTED IN THE PRACTICE OF HYDROPATHY;

NOTES ON THE CURE OF CHOLERA BY COLD WATER;

AND A CRITIQUE ON PRIESSNITZ'S MODE OF TREATMENT.

INTENDED FOR POPULAR USE.

BY THE LATE

H. FRANCKE,

DIRECTOR OF THE HYDROPATHIC INSTITUTION AT ALEXANDERSBAD, BAVARIA.

TRANSLATED FROM THE GERMAN,

BY ROBERT BAIKIE, M.D.

LATE MADRAS MEDICAL ESTABLISHMENT.

"Magna est veritas, et prævalebit."

Surgeon Gen'l's Office
LIBRARY.
W5437OC.
Washington, D.C.

NEW YORK:
JOHN WILEY & SON,
No. 535 BROADWAY.
1867.

WBF
F823oa
1867
Reel 176-46-2

PREFACE TO THE SECOND EDITION.

FINDING in my practice the necessity of a work which should explain to patients and others the principles upon which Hydropathy is founded, I have procured the republication of this valuable book, regarded as the highest authority in Germany, where the water treatment is so extensively known and practised. Myself a pupil of Priessnitz, and entertaining the greatest esteem for his wonderful genius and insight, I still regard Franke as having advanced far beyond him in the theory and practice of Hydropathy, and as having done more than any other writer towards establishing it on a scientific basis.

DR. R. KUCZKOWSKI.

89 AMITY STREET, June, 1867.

PREFACE BY THE TRANSLATOR.

The opinions held by an unknown individual can have no interest for the public; but, in the present instance, it may not be irrelevant to state the circumstances which have led to the publication of this little work, and how it comes that a member of the medical profession should be found assisting in the promulgation of doctrines so directly opposed to those held by his professional brethren in general.

In the course of a long service in the East, as a Military Surgeon in the East India Company's service, the translator, in addition to the ordinary routine of tropical practice, had more than the usual opportunities of observing chronic disease, particularly while holding the situation of Head of the Medical Staff on the Neilgherries, a Convalescent Mountain Station in the South of India. The conclusion which gradually forced itself on his mind, was, that these chronic complaints were, in a vast majority of instances, more the result of the nature and dose of the remedies employed to cure the acute affections which had preceded them, than, as usually supposed, of these diseases themselves. Experience, also, soon taught him that little was to be done in such cases, except to leave them to the gradual effects of climate, aided by careful attention to diet and regimen; above all, that any attempt to persevere in the use of drugs only produced further mischief.

This impression was still more strongly confirmed by dire experience in his own case—an aggravated form of dyspepsia—which resisted every mode of treatment, and repeated change of climate. The latter circumstance, also, showed that something more than mere climate was required for his cure; and, on his return to Europe, in 1844, he thought he had found this "something," on perusing Dr. E. Johnson's able work on Hydropathy. He accordingly placed himself under that gentleman's care; and, from his able treatment, derived great benefit, although the complaint was not eradicated. A slight subsequent relapse induced him to go to Graefenberg, where he resided eight months with very doubtful advantage. Fortunately for him, a German friend attracted his attention to the works of a former pupil of Priessnitz, M. Francke, (published under the assumed name of Rausse,) as enjoying a high reputation over all Germany, and being considered as embodying, in words, the crude and undigested ideas lying concealed in the mind of his master, Priessnitz. On perusal, they fully justified that reputation, or even more, conveying, to the translator at least, the first clear and definite idea of the theory of Hydropathy, to which he could not refuse his assent, however opposed to the whole current of his early prejudices, professional and acquired. They also gave him a distinct notion of the nature of his own complaint, and showed him that he had no chance of a cure in Priessnitz's hands.

He therefore left Graefenberg, and placed himself under M. Franck's care in Mecklenburgh, where he had just opened a new establishment. Under his judicious management he speedily rallied, and, by perseverance in the same mode of treatment, is now restored to a fair state of health.*

Personal intercourse with M. Francke, and attentive observation of his principles and mode of treatment, confirmed the high opinion he had formed of M. F.'s genius and talents, and encouraged the brightest anticipations as to the benefit to the healing art, to be derived from his future career. These anticipations were unfortunately blighted by his sudden death, which took place at Alexandersbad in July last.

Under these circumstances, the translator ventures to think that he is performing an acceptable service to the English public, and, at the same time, raising a monument to the memory of his departed friend, in laying before them such of his works as will enable them to judge both of his theory and practice. These works have already exercised an incalculable influence on public feeling and opinion in Germany, where the influence of medicine is daily declining; and there is every reason to believe that similar opinions will eventually make their way in this country, however startling they may at first appear.

To that numerous class, who, like himself, have suffered from that Protean malady, dyspepsia, and the effects of medicine, the translator would particularly recommend the perusal of the chapters on Mucous Obstruction, and the illustrative cases.

Part I. contains a popular exposition of M. Franck's theory of disease, applied to Hydropathy. In Part II. he has pointed out the practical errors usually committed in the employment of the Water-cure (to which are appended some illustrative cases); and in Part III. he has held out a warning against the mistakes of his former master, whose great, and, at one time, well-merited, reputation only now serves to give currency to the numerous errors into which he has himself fallen, and which, if persisted in, must, to use M. Francke's words, result in the total ruin of Hydropathy.

With regard to the execution of the work, the translator must express his wish that the task of translation had fallen into more competent hands. He believes he has, in general, succeeded in conveying the *meaning* of the original; but he is too well aware that his total inexperience in the art of literary composition, and the desultory habits arising from long ill-health and a very wandering life, have incapacitated him for doing justice to the author's *style*, which is considered, by the most competent judges among his own countrymen, as presenting a model of force, clearness, and precision.

To conclude: in justice to his own motives, the translater is bound to state, that, in undertaking this work, he was impelled by no prospect either of immediate profit, or ultimate advantage; and that he neither is, nor has he any intention of becoming, connected with a Water-cure Establishment.

London, March, 1849.

* A detailed statement of his case will be found in the Appendix to Part II., pp. 237—238.

EXTRACTS

FROM THE

PREFACE TO THE THIRD GERMAN EDITION,

BY THE AUTHOR.

Since I wrote my first hydriatic pamphlet, eight years have elapsed. The enthusiasm for the creation of Priessnitz, which seizes every one who succeeds in finding the way into this new intellectual world, at that time guided my pen. Enthusiasm is in its nature glowing but fleeting; it ceases to glow in time, and is quite extinguished, or it cools and hardens into a steadfast conviction, which must be rooted as well in experience as in reason and science. To such a conviction has my experience cooled and hardened in these eight years. The experience which I have collected in that period, first in private practice, and then in the establishments founded and directed by me, has furnished me with proofs that hydropathy is the only right method of cure, and that the theory of it, and of pathology, which I have laid down, is in all essential points true.

On the other hand, my experience, and the zealous inquiries of these eight years, have strengthened my conviction, that however hardly I had judged of the medicinal method of cure, I have done it no injustice, and have been guilty of no exaggeration. I am satisfied that in all diseases medicinal remedies can only produce increased mischief, although in acute diseases they may frequently *appear* to be useful; and I am further convinced that there is no disease, and no case of disease, in which water will not be of essential service.

This book contains physiological and pathological proofs that medicinal treatment must always inflict injury. It contains also the outlines of a new system of pathology, which is deduced as well from the results of the new method of cure, as from acknowledged physiological principles. Proofs are moreover adduced, that the pathology and therapeutics of physicians are in contradiction to that physiology which they themselves recognize and teach, and that my pathology contains nothing that is not a logical conclusion from known physiological principles.

Few readers will require to be warned that this book is no system of therapeutics, or imagine that with its assistance alone they can conduct water-cures. But many people, as soon as they have acquired confidence in the water-cure, think they may begin its practice at once, imagining that no special knowledge or experience is required for it. This is a dangerous error, which has already produced much mischief, as well to mankind as to the science. Even under the guidance of an hydro-

pathist at a distance, the result of the cure is doubtful, since misconceptions of many kinds cannot fail to occur. When by such misconceptions an aggravation of the complaint instead of a cure is the result, the patient blames the water, which brings the science into discredit.

Such misconceptions can only be obviated by a hand-book of hydrotherapeutics, which shall exhaust the subject and be available for general use. I am now engaged in the composition of such a hand-book, and hope, in the course of the year 1849, to lay before the public the first part of it, comprising the treatment of acute diseases.*

To prevent my being accused of general or indiscriminate censure, I must here remark, that when in this work I speak of physicians in general, and of the incorrigible nature of their errors and prejudices, I by no means mean, by this general mode of expression, to say, that there are not honorable exceptions. In all professions common minds form the great majority. In all professions there are some noble-minded men to whom truth is of more value than their own interest. Many physicians who love and and acknowledge truth have come over from medicine to water, and these conversions will, in future, become more common.

H. F.

Stuer, December, 1845.

* This book had, unfortunately, advanced no further than the Introduction when the melancholy event already alluded to took place.

CONTENTS.

PART I.

SECT.		PAGE
	OUTLINES OF PATHOLOGY	1
A.	Assimilative and secretive powers in general	11
B.	Appropriative and secretive powers of animal organisms in particular	13
C.	What is instinct?	17
D.	Definition of the terms, health and disease	23
E.	Division of the causes of disease into classes	24
F.	Classification of diseases themselves—various rules for classification	25
G.	Symptoms of diseases and classification thereof	28
H.	Proofs of the materiality of the causes of disease	29
I.	Proofs of the correctness of the division of diseases into curative and destructive	38
K.	What is poison? What is medicine?	40
L.	On the effects of cold water on the human organism in general	51
M.	Primary or curative diseases	54
	1. Mode of origin in general	54
	2. Hydriatic cure of primary disease	55
	3. Medicinal cure of primary disease	55
	4. The normal stomach	57
	5. Primary diseases of the stomach in general	60
	6. Cure of primary disease of the digestive organs in general	62
	7. Nausea and vomiting—diarrhœa	62
	8. Sliming up of morbid matter, particularly of poisonous substances	65
	9. Nature and object of fever	74
	10. The internal process of taking cold	77
	11. Cold drink when overheated	80
	12. Dysentery	81
	13. Cholera	85
	14. Primary inflammatory diseases in general	88
	15. Inflammation of the eyes—of the brain—of the neck (croup)—of the lungs	94
	16. Cough and catarrh	99
	17. Intermittent fever	100
	18. Concluding remarks on primary disease	103
N.	Secondary or destructive diseases	104
	1. General preliminary remarks	104
	2. The mode of origin and three stages of secondary diseases	105
	3. Cure of secondary disease	108
	4. Want of appetite—heartburn and eructation—hard and sluggish stools—false mucous obstruction—worms	110
	5. Exhausting diarrhœa—true mucous obstruction—indurations of slime, and indurations in the walls of the digestive canal—chronic inflammation, or suppuration in the digestive canal—cancer of the stomach	113

SECT PAGE

6. Mucous fever—nervous fever—putrid fever . . . 124
7. Nervous pains (neuralgia)—cramps 128
8. Hypochondria and hysteria—disgust for life, and suicidal mania 134
9. Rheumatism 138
10. Gout 145
11. Chlorosis—scrofula—rickets 152
12. Hemorrhoids 155
13. Aneurism, varicocele, varicose sores 155
14. Sleeplessness 158
15. Lingering fever—chronic night-sweats—dropsy . . . 160
16. Concluding remarks on secondary diseases . . . 162

O. Contagious diseases 163
P. External or surgical diseases 169
Q. Critical occurrences in the water-cure 173
R. What diseases are curable by the water-cure? 177
S. Challenge to physicians 177

ADDITIONAL CHAPTER.—On the lodgment of hardened mucus in the walls of the digestive canals 178

PART II.

OBSERVATIONS ON THE ERRORS USUALLY COMMITTED IN THE EMPLOYMENT OF WATER AS A REMEDY 187

Sect. I. Employment of medicines and abstraction of blood in the water-cure 191
II. Mistakes in distinguishing the applicability of strengthening cures and radical cures 194
III. Injurious influences during the water-cure. . . . 197
IV. Injurious occupations during the water-cure . . . 203
V. Employment of water of a wrong temperature . . . 205
VI. Errors in regard to the number and duration of baths, and also the quantity of drink 210
1. Full-baths 212
2. Bathing the whole body 213
3. Sitz-baths 213
4. Foot-baths 214
5. Douche-baths 215
6. Packings 216
7. Clysters 218
VII. Errors in regard to clothing and temperature of rooms . . 225

APPENDIX A. The best diet 231
Clothing 235
Baths 235
B. The best season for the water-cure 235
C. Cases illustrative of the treatment of mucous obstruction 236
D. Note on the treatment of cholera by cold water . . 239

PART III.

CRITIQUE ON THE HYDROPATHIC METHOD OF TREATMENT OF V. PRIESSNITZ, AT GRAEFENBERG, WITH PREFATORY REMARKS BY THE TRANSLATOR 241

PART I.

OUTLINES OF A NEW THEORY OF DISEASE

APPLIED TO HYDROPATHY.

. . . . . si quid novisti rectius istis,
Candidus imperti; si non, his utere mecum.
HOR. EPIST.

OUTLINES

OF A

NEW THEORY OF DISEASE.

A.

ASSIMILATIVE AND SECRETIVE POWERS IN GENERAL.

The power of appropriation, of assimilating foreign matter, of making it part of the body, is the fundamental groundwork, on which the system of nature is built.

This impulse, this power is the first, not only in all organic but also in all elementary bodies.*

In the beginning the earth was a motionless rock; on it air and water exercised their power of decomposition.

Assimilation is only possible through decomposition. In order to assimilate, air and water decomposed the earth-crust; thus arose the weather-beaten surface, capable of producing and nourishing organic beings.

As these beings, animals and plants, were destined to live in a world in which the elements continually exercise, on all substances, their power of decomposition and assimilation, so was it necessary from the beginning that in organic beings the same power should develop itself as guardian, as first and fundamental power.

Proofs of the impulse to assimilation in the elements are, among others—air decomposes water into vapor, in order to appropriate to itself gases therefrom; water, again, absorbs carbonic acid gas from the air; fire devours the oxygen of the air, it dissolves water into its two fundamental constituents,—hydrogen and oxygen, and

* The words "elementary bodies," "elements," are here used in their older popular sense, in which they signify water, air, earth, fire; not in the chemical sense, in which they signify chemically undecomposable substances, in contradistinction to compound or decomposable.

thus, while it makes them into flame, it converts water into fire; air swallows up many gases which fire sets free out of burning substances, and the air sucks gases out of the clod, the clod swallows oxygen out of the air. Thus are the elements in constant conflict with each other; each would wish to decompose the other, and appropriate its substance to itself.

Proofs of the conflict of assimilation between the elements and organisms are,—organic bodies draw oxygen from the air into themselves by the process of respiration, which is also inherent in all plants; the latter by the suction of their roots, animals by eating these plants draw into their own substance all that is assimilable in the earth. *Vice versa*, fire decomposes and assimilates to itself all organisms, and their products; the same is attempted on organic bodies by water and air, but is only partially attained during their lives by appropriation of their transpiration, entirely however after their death. The earth exercises this power on living organisms only conditionally and partially, namely, while they reside *in* the earth; as, for example, many animals do, and as is done by all plant-roots. The earth exercises this power on man, usually, only when he is dead, unless it be on those who use Dr. Graham's earth-baths, which Lichtenberg reckons as a part of the materia medica, perhaps because they sometimes do no harm.

Somewhat, however, of this power is exercised by the earth on those living men, who in the savage state reside in caves, or sleep on the bare ground; to this category belong especially most of the tribes in New Holland.

This power is a co-operating cause why, with us in the country, excitement often follows sleep on the bare earth, even when no catching cold comes into play; and when this is treated by the medicinal regime, it often degenerates into a real illness. We are accustomed to say, therefore, that the exhalations of the earth are unwholesome, but they are so only for the enervated, and those who are weaned from nature.

Proofs of the assimilative conflict between organisms themselves are, animals eat each other, and eat plants, *i. e.*, they appropriate to themselves, with the help of the stomach, so much of their substance as is assimilable. Plants, again, convert many parts of dead animals and plants, in the shape of manure, into their own substance.

Besides this power of assimilation, and that of reaction against external attempts at decomposition, every being, element, and or-

ganism requires to be exposed to the operation of foreign assimilating influences.

This is the fundamental position of the true doctrine of healing.

Proofs of this position are;—water stagnates and rots, when it is withdrawn from the decomposing power of air in motion; air loses its oxygen and becomes azote, when it finds no water, and no plants with which it can reciprocally contend for decomposition and assimilation; animals and plants get sick and die when their surfaces are covered, so that neither air nor water can act decomposingly on them.

When nourishment is withdrawn from an organic body, that is, when it loses the opportunity of appropriating to itself foreign substances, death follows from want of the efflux of juices (sap, blood); when on the other hand this body is withdrawn from the operation of external decomposing powers, sickness follows through stagnation and corruption of the juices from want of separation of the excretive fluids by the power of external assimilation.*

B.

APPROPRIATE AND SECRETIVE POWERS OF ANIMAL ORGANISMS IN PARTICULAR.

The essence of vitality (powers of life) in general is as yet undiscovered, still less the separation of vitality into genera, species, and individuals.

Single powers and processes of vitality in different species of beings, as for instance in the plants and animals of the earth, have been investigated, and we are accustomed to call the systematically

* The opponents of hydropathy will perhaps try to turn this fundamental proposition into a proof against it by saying, that in the conflict with the decomposing power of water, the powers of life are sooner exhausted than under the dry regime. This would be true if we used water continually in superfluity, which however is scarcely possible, as instinct opposes itself decidedly to this. Mouth and skin defend themselves equally against this excess, and indicate quite unmistakably and much more justly than the best water-doctor, the fitting number of baths and the quantity of drink, so soon as by the operation of the water-cure the ruined nerves of instinct are again brought into life and activity.

arranged doctrine of these processes, the physiology of plants and animals.

Among the hitherto known laws of physiology (we have only to do here with that of animals), one of the most generally important, and in regard to the art of healing decidedly the first, is the law of appropriation (assimilation) and separation (excretion). A necessary consequence of this law is the replacement of matter in animal bodies, which replacement extends itself even into the innermost and firmest parts, into the very bones; *i. e.*, all parts of the animal body take up, daily, foreign matter and convert it into their own property, they make it like themselves, hence the word "assimilate;" in like manner these bodies throw out daily something from their own substance, and in this way renew by degrees their entire contents.

Learned natural historians have brought forward learned proofs of the existence of the law in question, which, however, to the true thinker, are quite superfluous, as the single unlearned perception, that no animal organism can remain alive without nourishment (*i. e.*, can maintain itself, independent in its individuality, separated from the external world), gives the thinker the proof of the law of assimilation and secretion, and therewith of that of the replacement of matter in animal bodies.

For, if no part of the nourishment of animals passed into their substance, the whole of it would pass out again, unused, and would be superfluous; and consequently the many sufferings which arise from the want of, and the struggle for, nourishment, might have been spared them. This, however, is impossible, as in nature there is no contradictory law. If, however, much of the nourishment passes into the substance of the animal body, so, on the other hand, much must go out of it, as otherwise the body would, up to its death, be continually increasing as much in weight as it assimilates nourishment to itself. The secretions must, however, be distinguished into those which consist of unused, useless nourishing matter, and those which consist of matter separated from its own organism.

As, however, I live in an age more learned than reflecting, I must here put down some *learned* proofs of the replacement of matter in animals. Readers who do not care about learning will pass this over.

1. In anatomical researches, certain differences between older and younger bodies strike the eye distinctly; namely, an increase

of earthy and fibrous matter, and a diminution of gluten and moisture. This difference does not arise exceptionally from disease, but normally, and always from age.

2. The bones of animals become red when they are fed on madder.

3. The roots of the milk-teeth disappear.

4. The bones, in old age, diminish in circumference and weight.

5. Cartilage passes into bone, losing thereby a portion of its bulk.

The proof of the manner in which solid parts of animal bodies are turned into fluid, is not more difficult than the explanation of how solid parts are prepared from fluids; this last strikes the eye most strongly in the increase of the bones during the age of growth, being undoubtedly concocted, mediately and immediately, from blood.

The conversion of fluids into solids happens thus: at the extremities of the arteries, where they deposit serum in the fibres, the blood parts with its oxygen, which converts the fluid serum into solid matter.

The conversion of solid into fluid happens in the following way: the absorbents, or lymphatic veins, soften hard substances by damping them and then sucking them up; they carry the absorbed fluids out of the branches into the trunks, and empty themselves, through the main trunk of the absorbents (thoracic duct) in the posterior part of the thorax, into the left subclavian vein. After solid matters have in this way been made fluid, and been brought into the above-named veins, there occurs the excretion of the fluid through the organ of the skin, and further, by the assistance of glands, out of the orbits, the ears, and the nose, partly likewise through the bladder and rectum.

The processes, also, by which on the one side the formation, nourishment, and increase of the bones, on the other hand the removal of their separated parts, are carried on, have already been followed up and investigated in all their details by learned physiologists.

Numerous experiments, which are also confirmed by Troja's method, have proved that the formation, increase, and nourishment of the bones are carried on by the outer periosteum, but that absorption takes place by the inner or marrow skin. The following facts have relation to this:—

1. After destruction of the marrow skin, the corresponding piece

of bone dies away, whereupon a new marrow skin and a new piece of bone are produced.

2. The latter forms itself between the new marrow skin and the periosteum.

3. These two make together only one single very thick skin divisible into lamina.

4. The new marrow skin separates itself by degrees from the periosteum, by interposition of the new bone.

5. The texture of the marrow skin, at first very thick and dense, becomes gradually thinner, filled with fluids, and finally quite similar to the original skin.

6. The inner stratum of the new marrow skin, which exhibits alternate cavities and eminences, dissolves and destroys the old bone and absorbs it entirely. If we separate, with the point of a knife, the medullary skin of the end of an amputated bone next the body, the un-injured periosteum swells up; a stratum of cartilage arises on the outer surface of the periosteum, is intimately connected with it, and out of it the new bone proceeds.

The transposition of matter in organic beings, as well as in the elements, is an evident truth, which, so far as I know, since the discovery of this law, has never been disputed by any natural historian. This transposition in organic bodies is only possible by rendering fluid what is solid; on the other hand, by changing fluid into solid. This unceasingly succeeding transposition can only be effected by oxygen and hydrogen, as oxygen hardens fluids, and hydrogen softens hard substances, as has been proved by many concurring researches and experiments; among others, by the discovery first made at St. Petersburg, by Dr. Curssel, that muscular flesh hardens at the oxygenic-pole of the galvanic circle, and softens at the hydrogenic. Curssel has proved the dissolving power of the hydrogenic-pole, and the drying, hardening power of the oxygenic on many other substances.

From these premises, we now make the following deductions:—

1. Water, as is well known, consists of oxygen and hydrogen. 2. It follows, that these constituent parts effect the transposition of matter in organic bodies. 3. It follows, finally, that the undisturbed and normal transposition of matter is the fundamental condition of the life and health of organic beings. From these three data taken together we arrive at the deduction, that water is the essential foundation of health, and principal healing substance for

organic bodies, and therewith that the water-cure is the only true one, firmly and eternally founded on nature.

Those who by means of what precedes are not yet in a condition to fill up the small intervening links of the adduced, deductive reasoning, will find below these intervening links, and therewith the detailed proof of the conclusion arrived at.

C.

WHAT IS INSTINCT?

The law of assimilation and secretion which governs, certainly the terrestrial creation, and probably the whole universe, brings forth numerous collisions and conflicts to procure matter for assimilation, among the different beings inhabiting it. The very existence of animals of prey in the animal kingdom is a consequence of this law. Most important also are its philosophical consequences, particularly for the justification of optimism;—but this does not belong to *this* book.

To bring these collisions and combats for assimilation into accordance with the persistence and the propagation of races was, beyond doubt, one of the most important tasks for the creative principle, which has been solved with the most lofty, most admirable wisdom.

A host of dangers, from all sides and from all provinces of nature, threaten the existence of the young inexperienced animal (we shall now only consider this division of beings). How was it possible to impart to it protection against these dangers, as experience and knowledge are not innate? The assertion that the parents protect the young until maturity is, for many reasons, quite untenable. First, the fact is incorrect; in the natural state, the parents never remain with the young until maturity, and a host of animals never see their progenitors; namely, fishes, insects, and amphibia, which spring from eggs left by their parents to be hatched by the sun.

What a host of dangers for animals already lurks in the vegetable kingdom, from the presence of poisons! What a still greater host in the animal kingdom, from the presence of assimilating foes, commonly called predatory animals! How was it possible, there-

fore, in a creation where the law of assimilation dominates, to insure the persistence of species? It is only possible through instinct, which is implanted in animals by nature.

What is instinct?

This is a question full of meaning; the correct answer to which gives into our hands the proofs of the false and the lost in most of the throes and births of civilization among mankind, from the beginning of history to the latest times.

What is instinct?

This is an embarrassing question, which the learned of all ages have answered very differently, and the greater part of these highly learned explanations have, in the literal sense, been without sense.

What is instinct?

Ah! that is so simple, so easy a question, that every plain and unperverted understanding must always give the same answer to it. Instinct is a pure sensual power (faculty) in all creatures, to distinguish by their sensations, agreeable or disagreeable, what is suitable to health and life, from what is injurious to both; to seek the former and fly from the latter.

Not only has man this sensual power in common with animals, but of absolute necessity every animal organism in every star of the universe must have this power, if, as on earth, the law of assimilation and excretion prevails thereon.

Why does the new-born infant whimper for the mother's breast? He has a desire for it, because he needs it to support life; this is already instinct. Why are the smell and the taste of all poisons repugnant and unpleasant to the man of nature? To preserve him from their deadly effects through instinct. Even among civilized men there are still remnants of instinct. There is no poison, which, when unmixed with well-tasted substances, does not inspire every palate with disgust and fear, and impels it to reject it. Truly, indeed, when, a little poison is combined with a large quantity of wholesome matter, such as alcohol in wine mixed with the precious fruit-juice and sugar, then can the palate, at least the already corrupted, be deceived. The natural palate, on the first humefaction with any intoxicating liquor, is alarmed; for all sailors and discoverers, with one accord, assure us that every savage spits out, or at least swallows with reluctance and disgust, the first mouthful of intoxicating liquor. This is stated by all voyagers in the South Sea—Cook, Bougainville, Dumont, d'Urville, &c.

Truly is the first warning of instinct soon overcome by intoxicating drinks; the instinct-nerves are soon poisoned and the tippler is formed. That all savages, after long intercouse with Europeans, learn to combat this warning and to drink, is the consequence of their idolatrous respect for the thunder-gods, whom they seek to imitate in all things. Further, man and every animal to whom poisonous snakes are hurtful, feel instinctively, without help of experience or previous warning, a shuddering fear, a deadly anxiety, at the aspect of all such snakes, and either fly or cautiously kill them. On the other hand a pig, whom their bite does not injure, shows no fear, but seeks out and devours snakes as he does larvæ or acorns; so also the stork and crane. Proud king lion flies from the scorpion: in a cage he trembles before it, and crouches timidly in the farthest corner.

All warnings of instinct are purely innate and require no cultivation from experience, which builds up cunning. Instinct confines itself to absolute life-questions, and is absolutely infallible. Cunning presumes to look farther, investigates, and is very fallible.

As instinct is absolutely infallible, so is it absolutely necessary for the persistence of the species; every species of animal which has corrupted and killed instinct in itself is the prey of destruction; and it does not require much acuteness to perceive that the human race is ripening, or rotting, for destruction; salvation is only practicable if it reconquers for itself instinct and nature, which is yet possible.

At all events the race has many centuries before it previous to its extinction, though any race of mere animals would have died out in much shorter time had it renounced instinct; for throughout the whole chain of animal organization, the law holds good that the more perfect a species is in corporeal respects, in the same degree has it a more confined instinct, though at the same time it has a more extended capacity for cunning, for intellectual and voluntary functions: so that it finds in this last capacity a substitute, though a very deceitful one, for suppressed instinct. In the most intimate accord and connection with this first law stands the second—that the senses are less trustworthy for the guidance of instinct in proportion as they are nobler, more intellectual, and more extendedly perceptive; accordingly, in this order: feeling and taste nearly alike, then smell, hearing, sight. Of this an explanatory proof:—The young hare can sometimes be entrapped by the fox, when the latter dances round it in artfully imitated

hare-fashion, so long as the little hare is counselled by no other sense than sight; so soon, however, as it hears the voice of the rapacious beast, or smells him, it is undeceived, and makes its escape if it is yet time. On this account the old fox always tries to remain to leeward. This is already cunning, of which animals of the higher order are decidedly capable, and that often to an astonishing degree; but more of this does not come in here.

With these and similar fundamental traits in the essential constitution of animal organism, learned natural historians have but little occupied themselves. So much the worse!

From the explanation given of the nature of instinct, and the law of assimilation and secretion taken together, it follows that the means of keeping themselves alive and in health by their bodily impulses must have been revealed (imparted) to animals. Likewise, on approaching sickness, must the means of cure have been indicated to them by the same instinct. This follows as a consequence of the first; it is, however, equally a postulate of reason, that to the creatures of a *rational* creation the capability of a right choice of the means necessary to their welfare, must have been imparted in an infallible shape. This capability must have been imparted, in like manner, to all grades of the animal creation, and therefore it must consist in a revelation to the sensual feelings, not however in a function of intellectual activity, or in a result of experience, still less of real education.

It follows from what has been said, that animals on sickening have a sensible desire for the proper remedies, and in using these must have a sensible pleasure. This is actually the case in all primary diseases (for which see below), as on these occasions man, —still more animals,—has an evident desire to cool himself with water, and in using it finds sensible comfort. (Farther on I will show how the human instinct is partially corrupted by poisoning, and how in secondary disease it is no longer infallible, nay, frequently false.)

It follows, finally, from the natural arrangement in question, that any pretended remedy to which the instinct of one suffering from primary disease, and also of every healthy man, feels repugnance and disgust, must be a false and injurious one. Here is the second proof of the falsehood and destructiveness of medicinal treatment, and indeed the most convincing and infallible proof, for instinct is infallible.

The sum of all *practical* wisdom is the rule to follow obediently

the arrangements and the voice of nature,—which is the voice of God; the sum of all *theoretical* wisdom is the knowledge of the reasons why all arrangements of nature *must* be as they are. The sum of folly, and the sum of all misery, is the resistance to the arrangements of nature and the attempts to tutor and correct her.

In this unhappy direction of folly, no human or scientific aberration has been so ruinous as the medicinal methods of cure.

I foresee that, from confounding the instinct derived from nature with the fatal desires springing from moral and physical corruption, many voices among my readers will raise themselves against the precept, that "man should follow implicitly the voice and impulses of nature."

"How," will they say, "should we follow blindly our inclinations and sensual lusts, and level with the dust the barriers which religion and the State have reared against them?"

Ah, speak not so harshly! Old women's longings, Cretin lusts, are no voices of instinct. You must first of all suppress all these lusts of destruction, all these passions of corruption, and give yourself up to the simple ways of nature. If you yourselves have not heart and will for this, you should at least bring up your children, through a natural diet, to be strong, handsome and happy men. They would then require no "emeutes," no conspiracies against the "powers that be," for there is no State which forbids men to live simply and naturally, and to follow all instinctive inclinations in regard to diet. Where is the despot who would forbid men water, who would force them to swallow medicinal poisons, fire-water (spirits), spices, excitants and intoxicants?

"But the sexual impulse belongs also to the impulses of nature; are we to give ourselves up blindly to this?"

Truly, this is a fundamental impulse in man, and truly it is strong and inexhaustible in the man of nature, and truly the natural man should follow this impulse wholly and without reserve. But think well on this,—*You* should not do so, for *ye* are unnatural men, and more brutish than any brute; for you often desert the woman whom you have seduced, and leave unprotected the child whom you have begotten, when they both most need protection. Think also on this,—that you injure yourself when you follow this impulse beyond moderation, for with your corrupted diet, the desire is stronger than the capacity,—while with the diet of nature they are both in perfect concord. And think of this, thirdly,—that the natural man belongs by nature to that class which lives

together for life in marriage—nay, in monogamy,—(in all classes of animals we find monogamists, among snakes, mammalia, birds, and most of all is man an "inseparable.") The St. Simonians, and all other fools who have preached the community of wives, did not know the depth of human nature, did not even know history. At no time, and in no nation, has polygamy existed as a rule among the *people;* even among the Turks, polygamists are the exception, and are only to be found among the rich and mighty, as are concubines among the same class with us. Monogamy is as much a fundamental trait in human nature as it is an indispensable basis of civilization and humanity.

Every man brought up in the diet of nature, that is, every perfectly healthy and strong man, free from vice, who has no wants produced by corruption and vanity, can support a wife and children, if not in his own country, certainly beyond seas.

The present generation is scarcely capable any longer of this metamorphosis from corruption to the normal and primitive state of man; he, however, who after he has atoned for the lusts of destruction, and swallowed the poisons of the doctors, yet has strength enough to be healed, gets two kinds of experience,—namely, first, that the diet of nature brings with it severe privations and dull repugnance, so long as the body is chronically sick and poisoned in its instinct. But secondly, when the body is regenerated by the conflicts and sufferings of "crises," that then this diet affords more comfort and pleasure in one year than the diet of corruption and refinement in a whole life.

Now, then, lastly. If instinct in relation to diet should be the unscathed and sacred FOUNDATION of all endeavors after civilization, it is not meant thereby that it is to be the *building* also; it must rather be the ground wherein the tree of civilization strikes fast root, the earthly ground which offers earthly nourishment to the tree, so that it may elevate its crown and raise it to the heavens, that it may have the spring sap to develop the blossoms of humanity.

But, indeed, the further consideration of this tree of blossoms belongs rather to any other book than to this treatise on ulcers and purgatives.

D.

DEFINITION OF THE TERMS HEALTH AND DISEASE.

Before I proceed to define the ideas of health and disease, I must remark that, in reality, there are no separate genera and species; that individuals, of each genus and species have dissimilarities among themselves, and that the passage from one genus and one species to another is so imperceptible, that in certain individuals and concrete cases it cannot be, with certainty, defined to which genus or species they belong. This is specially the case in the various diseases, and even the boundary between health and disease is, in reality, often variable. In one word, the ideas of genera, &c., have not been taken from reality, and thence carried over into the human mind; but, on the contrary, have arisen in the latter, and been carried over into reality, because without them the mind cannot operate. Those who desire to read more on this subject, I beg to refer to my work, soon to appear, "Introduction to the Practice of the Water-cure," wherein I was compelled to penetrate into the depths of the themes of genera, and ideas of genera.

The constitution of vitality in organic beings may, in regard to duration, be regarded as double—namely, the powers of life may be of such a kind, that, by the labor of appropriation and separation and the conflict with the assimilating power of the external world, it by degrees wears itself out, and finally expires. Organic beings which are endowed with this species of vitality, can only effect the continuation of their race by propagation and birth. Of this kind are the organic beings of our planet.

We can very well imagine that, in other globes, and particularly in the independent stars which we call fixed stars, there may be material organized bodies whose vital power does not wear itself out, and therefore does not expire. Propagation may be spared among such beings, as without it the race can continue; and, indeed, it *must* be left out, as the impulse thereunto is incompatible with a higher nature, and because, probably, no constantly equal, and eternally durable, vitality in individuals is compatible with the capability and exercise of procreative power.

Among all the physiological and psychological laws known to us, there is none which establishes a contradiction between the ideas of the immortality and the materiality of a being.

According to these two essentially different forms of vitality, the ideas of absolute health are quite as essentially different. The idea of the absolute health of a being endowed with vitality not self-consuming coincides with the endless duration of the life of this being. The conception of the absolute health of a being, with necessarily self-consuming vitality, is quite different. This conception is chiefly connected with two characteristics—namely, first, with the absence of pain during life; and, secondly, with the harmony of all the functions, and simultaneous diminution of the energy of all functions, on the approach of that age which lies between the meridian of life and death. To the conception of the absolute health of a being, with necessarily expiring vitality, belongs also the condition (which, in fact, is already comprehended in the two first-named characteristics), that the late death from age comes without conflict or pain. Such a death deserves the name of a normal or healthy death; while on the contrary, every death accompanied with struggles is a death of sickness.

It is undeniable that such absolute health occurs in but few individuals among the animals of our planet, even in a state of nature, if we include under the idea of sickness all the innumerable slight injuries occasioned by external agency. If these are not included, we find absolute health in a state of nature, much more frequently, but by no means universally, since on our earth animals, even in a state of nature, are subject to epidemic maladies, which probably have their origin in a periodical corruption of the elements. Of this, more hereafter.

E.

DIVISION OF THE CAUSES OF DISEASE INTO CLASSES.

If we take the idea of disease, in the widest sense of the word, then the causes separate into four classes—viz.:—

1. Injuries from external objects.

2. Disturbances of the balance of the functions from over-exertion of single organs; as for example,—those of sight, thinking, or propagation.

3. Disturbance of the balance similarly from injurious and terrifying affections of the mind.

4. Affections of the animal organs from foreign (morbid) matters in their substance. Foreign morbific matters separate into two grand divisions—viz., first, matter from the body itself, which has become foreign to the organization, but is not normally and quickly expelled, from a failure in the conditions of excretion, of which much will be said farther on; secondly, in such matters from the external world as are brought into the body by the organs of the skin or stomach, and which, from the first, are unassimilable (poisons).

The causes of disease in Nos. 2 and 3, are very seldom present alone; they are almost always combined with those of No. 4. In the very rare cases where they are present alone, all that is required for their cure—if this be at all possible—is to remove the causes. We shall not, in this book, take any notice of these two classes existing alone as such; first, because they actually so seldom occur; secondly, because there are no positive, but only negative, methods of cure for them; and, thirdly, because they are wanting in all symptoms of reaction. (See below.)

A fifth class of causes, which consists in insufficient nourishment and over-exertion of the whole body, is excluded from the province of this book, because these injurious influences only produce wasting of the organic body, and no disease—namely, if they are present alone, without connection with the great cause of disease, morbid matter in the body.

The fourth class, as by much the most important, will be first treated of in this book, and then will follow the first class, as a sequel.

F.

CLASSIFICATION OF DISEASES THEMSELVES—VARIOUS RULES FOR CLASSIFICATION.

In the already quoted "Introduction to the Practice of Hydropathy," I have pointed out, at length, that in reality there are no *classes*, but only *cases* of disease or individual diseases, of which no two are exactly alike, though often resembling each other, and according to this resemblance forming natural groups, not however distinctly separated from each other. The human

mind has divided these groups into classes, or into genera and species, because it cannot work without ideas of this kind. I have pointed out in the said "Introduction" that no system of pathology is possible without classification of diseases into genera and species, and that on the other hand no system of pathology, with such a classification, can, from the very nature of the disease, have any *practical* applicability.

The divisions of diseases into genera and species may be based on very various norms (rules of classification); a classification norm is the sign-post which gives the right direction to a division into genera and species. We can, for instance, erect the duration of a disease into a standard of division, or the constitution of the morbid matter, or the part of the physiological system in which the disease has its seat—the system of glands, nerves, muscles, or bones—or the anatomical part of the body which suffers—head, breast, belly, &c.

If the division into classes and species of disease existed in reality, a single classification norm must be discoverable, from which the construction of the whole system of pathology might be worked out strictly and exclusively. The fact that pathologists have not succeeded in the division of diseases according to a single classification norm, in strict truth and sequence, is very naturally explained by the circumstance that the division into various genera and species in reality does not exist. The endeavors of many pathologists to arrange and build up their systems according to a single classification norm, testify to the want of understanding in these learned folk, and their misapprehension of the truth that in reality there are no *classes* of disease. Such systems bear on themselves the double stamp of constraint and untruth. He who has discovered that the classification of disease is in reality an untruth, but that it is an indispensable crutch for the operations of the human intellect in its search after knowledge, plagues himself not a single instant to bring the whole domain of pathology under a single norm, and he decides for the choice of various norms, not by laboring after philosophical strictness, but having regard only to being easily understood by his readers.

An objectively true and objectively exhaustive system of pathology is therefore, in the strict sense of the word, an impossibility for the human mind (as, indeed, strictly speaking, a system of *truths* is only possible in the domain of mathematics). We can, however, speak of a system of pathology in the relative sense, if

we understand thereby a doctrine arranged according to norms of classification, and, as regards the matter at least, subjectively exhausted. I have not, indeed, attempted to give in this new edition such a system, because I cannot spare the necessary time; I have, therefore, styled this book only "Outlines of Pathology," *i. e.*, a sort of introduction to pathology. In a later edition—but only after a series of years—I intend to put my hand to the completion of these sketches into a system. In the present edition, I have devoted more time to the development of the processes of sickness and cure, according to their causal connection, than to the description of the characteristics of disease. Accordingly, in this book, diseases are divided into four classes, viz.:—

1. Curative diseases.
2. Destructive diseases.
3. Contagious and epidemical diseases.
4. External or surgical diseases.

It appears accordingly that in this division three different classification norms are used.

Curative diseases coincide, for the greater part, but not altogether, with those which physicians call acute; and destructive diseases with those which are generally comprehended under the name of chronic diseases.

Acute diseases, according to the explanation of physicians, are "those which do not last longer than four weeks, are generally combined with fever, and keep the patient to his bed. Chronic diseases, on the other hand, are those which generally do not keep the patient to his bed, whose duration is extended beyond four weeks, and which, generally, are not combined with fever."

The inapplicability of this classification norm is at once obvious, if we consider that a minute or an hour's difference in the duration of a disease can form no essential point of distinction. Above all, the duration of a disease is a norm which scarcely, or not at all, can characterize its nature, and consequently does not go into the depths of pathology.

For reasons which will be found at length farther on, I have adopted my present system, using the terms curative and destructive, or primary and secondary, disease, insead of acute and chronic, as in the earlier editions of this book.

G.

SYMPTOMS OF DISEASES, AND CLASSIFICATION THEREOF.

In the following section, H., the materiality of the causes of diseases will be treated of and proved; in this place we must presuppose and assume, without proof, the dogma that the causes, if not of all, at least of nearly all diseases are *foreign matters* present in the diseased organization. According to this dogma, disease consists in the infection of the interior organization by foreign matters, which are generally of a sharp, corroding, or putrefying nature, and are more or less poisonous.

The indications of disease which admit of perception, we call the signs or symptoms, well knowing that we use these words in a sense different from that of medical terminology, which cannot be otherwise, as we have here to do with quite a new pathology. Disease is perceived by the sick man himself through the medium of his general feelings, and through the senses of sight, smell, hearing, and sometimes taste: by the observing physician through one or more of the last-named senses only.

The symptoms of disease separate, according to their internal essence, into signs of the organic combat against the morbid matter, and into destructive workings of this matter on the organic body. We will name these first, reactive symptoms, since they arise from reaction of the organism against morbid matter. Reactive symptoms also arise from an attempt of the organism to cure itself, to throw the morbid matter out, and might, therefore, also be named curative signs, if we did not require this term for a subdivision, namely, for those which constitute the characteristics of the success of their reactions, *i. e.*, the victory of the organism over the morbid matter. But reactive symptoms also comprehend those which are merely *attempts* of the organism at rejection of the morbid matter, even when these fail.

In every internal disease, not produced by external injury, all severe pain, and every severe (acute) inflammation, are decidedly reactive symptoms.

The second class of symptoms consists in destructive workings of the morbid matter on the organization, and we shall call these destructive, or passive symptoms. For the reactive, the name of active would be perfectly correspondent.

Passive or destructive symptoms consist in organic destruction by suppuration through fistulous and cancerous sores, in organic or cartilaginous transformations, ossifications, enlargement, contraction, accumulation of fluids (dropsies), moreover in convulsions of various kinds, &c.

Reactive symptoms, in their completeness, totality, and highest power, are only to be found in primary or curative diseases. They aim at a radical cure, a complete rejection of all morbid matter. But also in destructive diseases there are, up to the time of death, incomplete reactive symptoms, *i. e.*, symptoms of the working of the organism against the extension of the morbid matter, a combat, not for radical cure, but for the maintenance of the *status quo*, for putting off as long as possible the defeat. We require, therefore, a distinction between the reactive symptoms in primary (acute) and secondary (chronic) diseases; and we shall call the first absolute, or total, the latter relative, or partial, reactive symptoms.

After having, in what precedes, built up this scaffolding of classification and terminology, we can, in what follows, enter on the subject itself, as we now understand each other. I feel clearly how tiresome all this must have been to the reader, but it could not be avoided; we require always classification and terminology, which must be reconstructed when a group of new truths are to be ushered into the world.

H.

PROOFS OF THE MATERIALITY OF THE CAUSES OF DISEASE, OR OF THE EXISTENCE OF MORBID MATTER.

The whole system of pathology rests on two fundamental propositions, namely:—

1. That foreign material substances are the causes of complete diseases (see immediately below), and

2. That the totality of disease separates into the essentially different classes of curative and destructive diseases.

In the special pathology, farther on, will be found the detailed proofs of both these propositions with regard to each single disease. We have here to bring forward the *general* proofs which are

furnished by philosophy, physiology, and daily experience, *i. e.*, perception by the senses; so that farther on, in the special pathology, on giving a detailed statement of the processes of sickening and recovering, the basis of the collected inferences of this book may be at hand, without which the reader might consider the ulterior conclusions as floating in the air, or as *petitiones principii.*

In this section we have only to do with the first of these fundamental propositions, and shall speak of the second in the next section.

When I say that material foreign matters are the cause of all complete diseases, I understand by *complete,* those which are combined with reactive symptoms, or in which such symptoms have already occurred. To reactive symptoms belong especially all kinds of pains and inflammations. From this explanation it appears, how seldom we meet with incomplete diseases not combined with morbid matter. It is a very rare case that a man falls sick without ever in his life having had pain or inflammation, and that his illness likewise comes on and goes off without these two symptoms. We might also name the incomplete, or reactive-less diseases, Dynamic, and the complete, Chemical (in relation to the causes); but I could not adopt these names in bringing forward proofs of the existence of morbid matter, if I wished to escape the reproach of reasoning in a circle, even if only a formal one.

In a later edition of this book I shall devote a special section to incomplete diseases; now I have no time for it, which want of time also forces me to leave unconsidered those abnormities which have their origin in congenital, false conformation of the body and its organs, and which likewise are without reactive symptoms, and, moreover, are not capable of cure.

Accordingly, in this edition, when we speak of diseases in general, we mean those combined with reactive symptoms, or complete diseases.

For the existence of morbid matter, or the materiality of the causes of all complete diseases, we can bring forward two different proofs. One, namely, a philosophical proof, from an optimist point of view; the other, a proof from experience, taken from perception by the senses.

a. The philosophical proof.

If the causes of disease are material substances, man may keep out of their way, as these matters can only get into the interior of his body in a way which is perceptible to his senses, and which

excites in every sound and unpoisoned man repugnance, disgust, and even horror, since instinct rises up against it.

This feeling speaks plainly against all acrid and poisonous substances, if these are introduced into the body, either by the throat or through the skin.

If the causes of disease are material, or substances more or less poisonous in the interior of the body, man has, therefore, a Mentor and protector against them in himself: and thus it must be, if we do not assume that man is a sort of being spoiled in the creation, which would, consequently, imply a complete bungle in the general creation. Only fools can believe this—the wise man finds, the older he is, the deeper he penetrates into the spirit of creation, a clearer justification of apparent evil, and more grounds for the assumption of a Supreme Wisdom. The evils that torment mankind are no consequences of creation, but of perverted employment of our own powers and free will. Thus, it must be, every being must bear in itself the capability of happiness.

On the assumption of the so-called dynamic theories of pathology, which since Haller's time have prevailed in medicine, the ability of man to preserve himself from disease disappears entirely, and these theories, therefore, looked at from a philosophical point of view, are necessarily untrue. According to them, the germs of disease get into the body in a way which is not perceptible to the senses, or develop themselves in it in such a manner that man has, in none of his faculties, a protection or warning against them.

Besides, these like other dynamic theories have this effect, that they are all more or less cloud-pictures, which present nothing distinct to the mind, and which are written out in learned words, as is usual when no clear, intelligible account of a thing can be rendered either to ourselves or to others. "Dynamis" means power, and we understand by "dynamic," what refers to the higher powers, and above all to the first source of power, the vital principle, of which we know nothing. In this way it has happened that the word dynamic very frequently is put as synonymous with the idea of what is to man unknown. It would be doubtless more honorable to acknowledge a gap in our knowledge; but it sounds more learned, and imposes on fools, when we come forward with "dynamic" flourishes: but to higher intelligences all this appears as folly. If we combine with the word dynamic, the idea of what refers to the first source and internal essence of our powers, the word is then to us synonymous with what is unexplored; in mathe

matics alone has the word dynamic a fixed, clear and defined meaning, when we indicate thereby the explored powers, and movements of the heavenly bodies exterior to the earth.

Human physiology, in all that relates to the inner essence, to the origin and principal activities of the powers of life, is only a blank sheet; also, in the relations of the nerves to the superior power, and in the essence of the nerves themselves, it presents only a blank sheet. Physiology has penetrated most deeply into the laws of assimilation and secretion, and in this province has not only brought to light doctrines capable of proof, but also effected a combination of the propositions into an organic union, into a system.

The pathological doctrine of the physicians is built on the blank sheet, and sways about, without a base, in the air. As little as medicinal therapeutics has it any pretentions to the name of a science, and consequently its rationality can only be defended by those who have no idea of the essence of a true science.

My doctrine of pathology is built on proved and undoubted laws of physiology, and stands therefore on a firm foundation.

b. A proof from experience of the existence of morbid matter has been a thousand times furnished by the water-cure, since in it, from all sorts of crises, morbid matter has been excreted in such a way as to be perceptible by various senses. In by much the most numerous cases, during a well-conducted and successful water-cure, there arise critical eruptions and boils. That these exanthemata discharge morbid matter, and that they (with the help of water) only arise in those people who have morbid foreign matter in their bodies, needs no proof to the unprejudiced, and was not doubted even by the doctors,—till the discovery of the water-cure by Priessnitz.

At first it was maintained by some of these learned doctors, that the coincidence of these symptoms with the water-cure was only accidental; when this position became untenable, resort was had to the assertion, that the same effect would be produced as a necessary effect of water on even healthy skins. This, however, is so well known not to be a fact as scarcely to require contradiction. No eruptions nor sores occur in cases which are too weak to throw out a crisis, and are consequently incurable; thousands to their sorrow have experienced this. Further, no such phenomena occur in cases where the nerves are shattered, when these, from ignorance on the part of the hydropath, (as happens but too often

—I could name several such,) are treated with too cold water, and which thus obtain no cure, nay often experience an exacerbation of the complaint. Certainly no boils occur in the water-cure, in cases that have no morbid matter in them. This, in truth, is a rare occurrence, but it is proved to evidence in single cases. I may cite among others that of the Norwegian Captain Ramm, who, a Hercules in strength and health, came to Graefenberg, on account of incipient blindness, which had arisen entirely from overstraining his eyes, not from poisoning,—(Captain R. was captain of engineers, and had for many years made the most minute drawings with a magnifying glass). During a six months' course of water-cure, with the strongest use of douches, &c., this Hercules had no trace of eruption or sores; truly, also, he remained uncured, as was probably to be expected. A fourth class of patients get no crisis because they are cured by stinking perspiration; these cases are not at all rare, and have occurred often in my practice.

The doctors who make the above assertion usually quote the cases of washerwomen, whose hands get chapped from washing. To this is to be replied,—first, that washerwomen put their hands in winter alternately into hot and ice-cold water, which, when frequently repeated, is an abuse of the hands; secondly, that irritating substances, such as soap and ley, here co-operate; and thirdly, that the said women, after such injurious abuse of water, do not get eruptions and sores, but cracked hands, producing the highest degree of brittleness of the skin, up to bleeding and formation of small holes. This allegation regarding washerwomen, therefore, is only excusable in a *washer-wife*.

Apart from experience, besides, it is sufficiently clear from human physiology that no eruptions or sores can arise, in a perfectly healthy subject, from the use of water, which is one of the mildest substances imaginable, and that they always produce a more or less acrid, irritating feeling, which can only be produced by irritating matters, or devouring sore-mites (acari). We shall include eruptions and sores under the name of exanthems, and say, then, that acrid and poisonous substances are the causes of all non-contagious exanthems: on the other hand, that living animals, invisible to the unassisted eye, give rise to contagious exanthems, which will be treated more at large below.

The critical exanthems which arise in the water-cure, vary according to the acrimony of the matter which they excrete; they are often so acrid that they decompose linen bandages in a few

weeks, and always so much so, that they occasion itching, burning, and pricking. The substance of the human body may become putrid in certain diseases, but it can never exercise a corroding power on the same organism in which it is produced. The causes, therefore, of the non-contagious critical exanthems must be foreign corrosive matters, which already, before the water-cure, were lying in the body, and which, by the decomposing and, above all, slime-decomposing power of the water, are conducted from the interior to the skin, and there thrown out. As to the, at first sight, inexplicable processes by which foreign and poisonous matters can be retained for years in the body, without immediately destroying it, the most detailed physiological proofs of this fact will be given in the course of this work.

So much on the subject of critical exanthems, as proofs of the existence of material morbid matter. These examples appear, as was observed, not in every patient in the water-cure, not even in every one who is cured thereby; on the contrary, the cure is often brought about by other critical evacuations, in all of which, however, the existence of material morbid matter becomes perceptible to the senses. These evacuations consist in stinking clammy sweats, or secretion of urine of abnormal smell, and throwing down a peculiar deposit, in diarrhœa, which excites a burning feeling in the rectum, in vomiting of matters which have a sharp, medicinal, poisonous taste, in a flow of acrid saliva, &c.

All these crises are proofs of the existence of morbid matter.

Here is the proof in relation to stinking sweat:—First, in all nature there are only two substances which stink, viz., poisons and putrefying substances. Secondly, transpiration and sweat on a healthy skin are quite destitute of smell, or, at least, do not stink, because a sound man does not sweat poisons, and because excretions would be separated by a healthy skin before they pass into putrefaction. Thirdly, it follows, that if sweat and transpiration stink, it is because they are abnormal, and contain either poisonous or putrefying substances—accordingly, also, morbid matter; that is, substances which are foreign to, or have become foreign to, the organism.

Some readers may, perhaps, object to the second proposition, that all sweat, even in healthy people, smells ill. This is, however, only the case if it is left to dry and putrefy, instead of being washed away; in other words, it does not stink in breaking out, r. t gets a smell afterwards, on passing into putrefaction. It is to

be recollected, also, that I speak of healthy, cleanly people, and that no one can be called cleanly who does not wash his whole body daily, and that healthy people are hardly to be found under the old regime. Any one who, at a reasonable age, goes through the water-cure till he is perfectly cured, and then adheres to water-diet, will find that his sweat and transpiration have no trace of unpleasant smell.

Clamminess of the sweat is also a proof of its containing morbid matter. This is occasioned by a secretion of slime, by the help of which the bad stuff is enveloped and transported to the surface.

A similar course of proof to the above is applicable to stinking and irritating fluxes of saliva, as also to urine containing abnormal precipitates.

Every one who is acquainted with the water-cure knows that no cure, of either a chronic or an acute disease, ever occurs without one or other of the critical excretions above mentioned; consequently, not without proof, perceptible to the senses, of the existence of material morbid substance. In general, several of these critical phenomena present themselves, and very often, in chronic cases, all of them, without exception, break out one after another in the course of the cure.

Most frequently these various excretions in the water-cure have a distinct taste of the medicines which the patients had taken long ago—often as much as fifteen or twenty years before. In vomiting crises, this happens frequently as regards taste;—as regards smell, these occurrences happen most frequently in critical sweats; occasionally, also, in exanthems, in critical flows of saliva, of urine, and other excretions. Here it is to be remarked, that the people about the patient have observed this as often as he himself has, so that the imagination in these cases cannot come into play. Almost always such facts are observed by the servants (male and female) attendant on cure-guests, who speak of them with astonishment.

This has occurred repeatedly in my institution, and so often everywhere, that any one can satisfy himself of the truth of these assertions, by asking persons who have undergone the treatment under the guidance of a *capable* hydropath. (This can seldom happen with *incapable* water-doctors, as in falsely employed water-cures no crises appear.) If desired, I can point out numbers of

such people, who are, moreover, men of the most undoubted veracity.

Very frequently, persons who many years before had undergone a course of mercury, in the water-cure get a new flow of saliva, which tastes and smells so decidedly of mercury, that it is not only perceptible to their own senses, but is distinctly recognized by the people about them. This fact demonstrates infallibly, that the mercury had lain for years in the body as a foreign substance, and that in the cure it is thrown out partly by saliva, partly by sweating and exanthems. For it is well known, that every sensation of smell is only produced by the coming into contact of small material portions of the thing smelt with the olfactory nerves. It has also occurred, that by evaporating the evacuations of critical sores in the water-cure, mercury and other metallic poisons have been chemically produced and made visible. In various hydriatic writings are to be found a number of such facts.

Thus much for the philosophical and experimental proof of the materiality of the causes of disease, and the existence of material morbid substances in the interior of the sick body. In the course of this work I shall establish, on numerous physiological grounds, that morbid matter not only can exist, but from the false diet, and false mode of healing in the old regime, *must* necessarily arise and exist.

If it is granted that morbid matter exists, and that the water-cure expels it in various ways, the truth of the water-system, and the falsity of the medicinal methods of cure, is at once established. On this account physicians dispute most decidedly these facts, and often ridicule them.* To this I reply, first, from their own point

* *Note by Translator.*—The opinions advanced in this section met with the most violent opposition from the faculty in Mr. Francke's native country (Mecklenburgh), who, by the way, from all I could learn, are at least half a century behind their medical brethren in France and England, in every respect, but particularly in their doctrines regarding diet and the management of the sick-room. In the controversy which ensued, they appear to have had recourse to the most unworthy means of damaging their opponent's cause, by misrepresenting his arguments, and aspersing his character and motives, which partly accounts for the bitterness of feeling against the faculty so often displayed in this book. In a later publication, Mr. Francke has devoted a special treatise to the consideration of "The Absorption and Deposition of Poisons and Medicaments in Living Animal Bodies," which he intends introducing into future editions of the present work, as an amplification and corroboration of his views on the subject. In the first chapter of this treatise he attacks and overthrows the dynamic theory of the operation of medicaments

of view, that before Haller's time, medical theories rested on the basis of "morbid matter," that the most celebrated professors of that time taught this doctrine; and secondly, that long after Haller, and up to this time, a number of physicians acknowledge not only the so-called "disease from the use of medicine," but also that medicinal matters remain in the body of the patient. I may refer, among others, to Dr. Kohn and Dr. Granichstädten, in their writings on hydropathy; and those of Dr. Herr, professor in Friburg. The latter, in his "Theory of the Operation of Medicines, Friburg, 1846," p. 8, says:—

"We find single remedies, after they have been employed in any way, lodged in the firm parts of the body. Thus, in those who have taken preparations of mercury, the metal shows itself in the brain, the muscles, bones, &c. Lead is found in the liver, muscles, and spinal marrow. Copper lodges likewise in the liver. The passage of madder into the bones is well known, as also that certain bitter substances communicate their taste to the flesh. It requires no explanation, that when medicines lodge themselves in a firm part, they can only get there through the circulation of the blood."

Sufficiently known and ascertained facts could be here adduced in plenty, as proofs of the lodgment of medicines and poisons in the body; among others, that workers in quicksilver are frequently so impregnated with the metal, that a piece of gold laid on their tongues turns white; that quicksilver has been taken, in quantities of a drachm at a time, out of the skeletons of people to whom it

(*i. e.*, their operation through the nerves), as advocated by his opponents; and establishes that they are absorbed into the blood, and act through the circulation. In the second chapter he quotes a host of authorities, including almost every eminent physiologist and chemist of the present day, from Mascagni and Tiedemann, to Orfila, Christison, and Liebig, to prove that almost every imaginable poison and medicinal substance has been detected in the various solids and fluids of the human body. In the third chapter he demonstrates that these substances, when used as medicines, are not always rejected by the living organism. And in the fourth chapter he treats of the adhesion of hardened slime to the walls of the digestive canal. The latter chapter, as being new to the English public, is given entire in the Appendix. The subject of the third is discussed shortly in another section. But I have not thought it necessary to introduce the argument on the first two subjects here, as Mr. Franeke's opinions do not differ materially from those taught in our own medical schools; added to which, the discussion, from its purely technical nature, would have been out of place in a book intended, as this is, for popular use.

had been administered for syphilis; that in the metal coffins of such people mercury has been found, after putrefaction of the body, &c. All these facts are recorded by physicians in various writings, and we can scarcely attribute it so much to ignorance as want of candor, when they are attempted to be denied, as an argument against the water cure.

After having thus proved the existence of foreign matters in sick persons, it must be remarked that, in the course of this work, it will be shown that these matters are not the *effects*, but the *causes* of disease.

I.

PROOF OF THE CORRECTNESS OF THE DIVISION OF DISEASES INTO CURATIVE AND DESTRUCTIVE.

The existence of destructive diseases needs no demonstration. Accordingly, in this section, we have only to do with curative diseases.

First of all, we will borrow a proof of the healing character of primary disease from the optimist views of philosophy.

We have shown above that the causes of disease must be foreign matters, because man can keep out of the way of external morbid matter by help of his instinct. Not so of dynamic. But when, in spite of the warnings of his instinct, man, by perverted diet and false methods of cure, brings morbid matter into his body, the human organism exhibits itself as being more perfect when it has at least the relative capability, and makes an effort to throw out of itself such matters by abnormal activity, than when, without this capability and without making this effort, it is suddenly destroyed by such substances. Consequently, the existence of curative diseases, as they do not contradict, but correspond to, the physiological laws (particularly the secretive power), is to be called a postulate of reason. But I lay no great weight on this proof, as the construction of man in relation to disease is already stamped as a perfectly reasonable one, by the fact that the Creator has implanted in him an instinct *against* morbid and *for* wholesome substances.

If, however, the medicinal method of cure were the true one,

man must have been inspired by his Creator with a horror against what is necessary for his cure—viz., medicine. In this way, the creation of man would have been a contradiction; and, for my part, I should have conjectured that not the great God, but a learned councillor of medicine, or at least a "doctor medicinæ promotus," had concocted the human race.

Secondly. We will draw attention to various facts, as proofs of the existence of curative diseases; that is, of the curative character of primary or acute disease.

The proper form of a curative disease is a pure, rapid, and quickly-decided inflammation.

Experience teaches us that only strong people get pure and strongly-marked inflammatory disease; that people of very weak or much-injured organization, particularly those of weak nerves, do not get inflammatory disease; no more do drunkards, when they are already reduced, and have their nerves destroyed by their vices; that pregnant women get these diseases more readily than those who are not pregnant, but otherwise of similar constitution. Be it remarked, I speak here of acute inflammations.

These propositions are quite undisputed, and are well known to all physicians, as well as to all observers of disease.

From these facts, it is already probable that inflammatory diseases are curative. But more decisive proofs of their curative character are given us by various results of the water-cure.

1. In the hydriatic treatment, inflammatory diseases are those which of all others are the quickest cured, and which in the shortest time produced the largest quantity of critical excretions of morbid matter.

2. Secondary (chronic) diseases in the water-cure go through the following stages:—

a. If a sick person, with an active skin, strong nerves, and good digestive organs—that is, of a strong constitution—comes into the water-cure, after having, shortly before (for in this way he may be still strong), taken into his system much morbid matter—namely, medicinal poisons—such a patient speedily gets some inflammatory form of disease, and by it the morbid matter is expelled, perceptibly to the senses, in exanthems, sweats, and other evacuations.

b. If a patient, with a constitution already much shattered, pale, meagre, or unhealthily bloated, comes under the cure, he requires, first, a considerable time for strengthening his whole organization,

for getting firm flesh and a healthy color, before inflammatory appearances come on, which then run their course as above stated, and end in the expulsion of morbid matter.

In one word, it is a truth established by many thousand cures, that chronic illness is very seldom cured otherwise than by conversion into acute, which then, by help of water, results in the perceptible excretion of the morbid matter, by sores, eruptions, sweats, diarrhœa, &c. (In water establishments, not only the act of excretion is named a crisis, but also the abnormal excitement of the body which precedes the actual excretion, and which is accompanied almost always with fever, generally with pain and inflammatory symptoms.) From these facts, it is sufficiently clear that primary or acute diseases are radical curative efforts of the organism, and therefore, according to their intimate essence, deserve the name of curative diseases.

K.

WHAT IS POISON?—WHAT IS MEDICINE?

PRELIMINARY REMARKS.

1. When, in this work, absolute poison is spoken of, such substances are meant as, if introduced into the stomach (not into the veins) in a certain dose, prove fatal to all human beings.

2. When we speak of medicine, without further addition, we mean always thereby allopathic medicine.

DISCUSSION OF THE SUBJECT.

The word poison may be used in a more extended or in a more contracted sense; in the first, it indicates generally matters injurious to human health; in the second, substances only which speedily kill. Further, the word poison may be used in the figurative and in the strictly literal sense: in the first, it means the injurious or fatal effects of the external world on man, in whatever manner exercised, whether chemically, physically, mechanically, or morally. In all discussions, we take the word poison always in the strict literal sense, which refers entirely to the chemical operation of a material substance on the human body. When

we mean mechanical or dynamic poisons, we shall always employ these affixes.

Poison, in the narrower sense of the word, is a substance which, introduced in sufficient quantity into the human body, kills every man without distinction, if the substance be not thrown out again by instant vomiting. As to the expression, "sufficient quantity," we must establish a convention regarding it which may be variously arranged. The natural measure for the "sufficient quantity" appears at first sight to be a weight equal to that of an ordinary meal. But in all strong persons it is impossible to introduce such a quantity into the stomach; and on this account we will take the second natural measure, namely, the quantity of a common mouth ful, and say poison, in the strictest sense, is a substance which, taken in this quantity, is fatal to every man, without distinction, if not thrown out by vomiting. It is clear, that to obtain a distinct boundary between poison in the *stricter*, and the same word in the *wider* sense, a fixed weight must be put in place of the mouthful, which however we here omit, as in this place not the result, but the demonstration of the boundary is of importance.

Poison, in the more extended sense, or the class of mild poisons, is a substance which, by its chemical effects, produces in every man, even the healthiest, distinct symptoms of sickness, when this substance is eaten to the extent of an ordinary meal.

What are named relative poisons, that is, substances which are wholesome to the healthy—but partly by their chemical operation, partly by their quantity, or quantitative effect, are injurious, or even fatal, to individual sick or weakly men, do not come in here, and must be completely excluded in our explanation of absolute poisons. What is absolutely poisonous to man is again a relative poison to other classes of organisms. In reference to the collective creation there is no absolute poison; but in reference to each tribe of animals, and especially to mankind, there are many absolute poisons —and here we speak only of man.

To those who, from this explanation of poison in the extended sense, or milder poisons, try to deduce the nullity and falsity of my doctrine, because I have not given a distinct division between poison and no-poison, I answer in two ways:—1st. I repeat that, for the relative measure of an "ordinary meal," a definite, absolute measure of weight could be easily substituted, and that thus the division would be more distinct; but that here we have nothing to do with the result of the division, but only with the demonstration

of it. 2ndly. I bring forward the often-repeated, full of meaning, and undisputed statement, that in nature, and in objective truth, there are nowhere distinct boundaries between genera and classes; and, therefore, there are in truth no genera, nor classes, in the strict sense of these words.

It is impossible to place a purely natural, and always definite boundary, between poison and what is not poison, but only a conventional one. Just as little is it possible to place anywhere else a distinct boundary; for example, between a tree, a bush, and a shrub. He, therefore, who says there is no poison because there is no division between poison and no-poison, must also say that there is no tree, because there is no distinct boundary between trees and bushes; and that there is no white or black race of men, as there are no distinct boundaries between both races; in short, that there is *nothing*, because there are no distinct divisions in nature.

As between all creatures there are imperceptible transitions and connecting members, there must also be a copula, or indifferent point, between poison and no-poison; and this transition substance must, under certain circumstances, be injurious; under others, innocuous; nay, wholesome. In relation to mankind, this transition is formed by culinary salt and spices; that is, unmixed with other matters, these substances are injurious; mixed with certain articles of food they are not so, or at least not in all countries. Sugar does not belong to these transition substances; for pure sugar, without lime or other additions in refining, is injurious to no healthy man, to whom in talking of absolute poisons we refer, no less than to the sick.

The mixture of salt and spices with nutritive matters brings us to the chapter of the mixture of relative poisons with other substances, and to the question of their injuriousness in the mixture. The answer is easily given in a definite form, namely, such matters as, when taken unmixed, occasion symptoms of sickness, are innocuous if, when mixed with nutritive matters, their taste in this mixture is distinctly perceptible, and yet agreeable to a healthy man. By healthy men, I understand those from whose diet all artificial or poisonous matters, and all stimulants from foreign climates, are excluded.

If we add this explanation to the above-given definition of poisons, we have thereby found a division, which points out the place of transition substances, salt and spice.

The next question in the definition of poison is, do those matters

which in the alleged quantity produce either sudden death or sudden symptoms of disease, also produce absolutely injurious effects, and consequently continue to be absolute poisons when taken in smaller quantities? Logic as well as physiology answer this question in the affirmative. Before, however, going into it, we must remark, that the question has brought us imperceptibly into the domain of medicine, and that before answering it, from logical and physiological grounds, we must first of all give a definition of "medicine."

What is medicine? The word, literally translated, means a remedy against disease. In this extended and original sense we do not take it here, as indeed it is no longer used in this sense. The word, in the present day, has this extended meaning only in the figurative sense, which is excluded from our discussion.

The words medicine and medicament, in the strict and modern sense, are synonymous with the idea of those substances, the sale and preparation of which form the privilege of the apothecary, and which hence get the name of officinal substances; the nature of these substances is defined by the laws of the land, and consequently is an exclusive one. Nevertheless, only those matters belong to the apothecary's "*officina*," under the term medicine, which are destined to operate chemically; not so those which are meant to act mechanically, such as leeches, cupping instruments, and lancets.

If we go through the list of those substances, the sale of which is withdrawn from ordinary shops, and given over as a privilege to apothecaries, we find very soon that this list, in many countries, contains *only* poisons of various kinds; in other countries, again, for *the most part*, poisons. There is no single poison which has not been given by doctors against disease; and this, too, with the consent of the laws. I stand, therefore, on my lawful rights, when I call medicine "poison;" and I shall presently prove I am also physiologically right.

Ever since, in my hydriatic writings, I have openly reproached physicians with using poisons, and poisoning their patients (meaning by this, naturally, poisoning through error, not by design), the latter try, by all sorts of subterfuges and justifications, to convince laics in the art of healing, of the falsity of this reproach; but they are unlucky in their logic, and take good care not to appear openly in print with such pretended corrections of my writings and views, as I have begged these gentlemen earnestly to do.

The first (orally expressed) objection of these doctors, is the assertion that there is no poison; that every substance, under certain circumstances, can become poisonous to particular individuals. This is true with regard to relative poisons, not so with regard to absolute poisons, as I have distinctly shown—referring, of course, only to the introduction of such matters into the stomach; as regards their introduction through the skin, or into a wound, it would be just as easy to establish a definition.

Their second objection is the assertion, that the quantity of a substance stamps it as poison; and that the same substance, which is a poison if used in large quantities, becomes a remedy if used in a smaller quantity.

First, a word on the logical falsity and impossibility of this assertion. If a substance, which in a certain dose produces death, is given in a smaller dose, every *à priori* conclusion in logic must lead to this, that the smaller quantity will produce only a less strong effect, that is, a more protracted death. All analogies from the sciences of chemistry and physiology speak for my conclusion, and against that of the doctors. In the domains of chemistry and physiology the law holds good, that in diminishing the mass the nature of the substance remains the same, and that its chemical operation is in like measure diminished, but still continues similar —never contrary. We may, therefore, with perfect justice call the assertion, that the chemical operation of small doses of poison is opposed to that of larger ones, a physiological and chemical untruth, as it contradicts all the known laws of these sciences; and this assertion has not even the shadow of a foundation.

Immediately below we shall take up this assertion, and controvert it, in the special physiological point of view, but first put in the remark, that, pre-supposing the truth of this false proposition, it must also be confirmed by the animal instincts. But experience teaches us the contrary, viz., that the instinct of man, as well as of animals, exhibits the strongest repugnance, even to the smaller doses of poison, which do not produce instant death, and which by doctors are used as intended remedies, and which repugnance scares them from taking such substances. Farther on, I shall show that the warnings of instinct, being purely natural, are not only infallible, but are absolutely necessary to the continual existence of a race on the earth.

We arrive at a physiological contradiction of this assertion of the doctors, if we consider the physiological laws and processes

according to which poisons exercise their destructive powers on animal, and specially on human organisms.

The human body is, in truth, no simple chemical body, but in the healthy state it is a simple physiological body. There ought to be, when it is to remain healthy, no matters in it which can resist its assimilating power, and thus become foreign to it, laying, by their extraneousness, impediments in the way of the organic functions. Everything that, in a proper state of division and fluidity is brought into the stomach, or for a longer time into contact with the skin or a wound, passes wholly, or partially, into the interior of the body; nay, by means of the circulation, into all, even the most remote parts of it. There is neither doubt nor dispute as to the truth of this physiological axiom.

There is no substance which, when introduced into the body by a large or small opening in a vein, can be assimilated by the organic power of the body.* Every such substance, therefore, so introduced is something foreign to it. The veins have no organs of assimilation.

It is otherwise with the human skin; this can digest two substances, namely, water and air; but everything else absorbed by the skin cannot be assimilated by it, and remains foreign and injurious to the organism.

The strongest and most comprehensive power of digestion and assimilation resides in the stomach and bowels, and on this account they are named exclusively organs of digestion.

From what we have stated of the construction of the veins, it follows that everything introduced immediately into them is a poison for the human body, at least in the extended sense of the word.

From the nature of the human skin, it follows that all fluid or half-fluid substances, except water and air, brought into contact with it for a long time, are poisons in both senses of the word.

I bring this forward expressly to forestall the objection to my definition of poison, that even water may become a poison if introduced into a vein, namely, in explaining absolute poisons, only those come into question which, introduced into the stomach,

* *Note by Translator.*—Is not water an exception? The experiments of Stevens on transfusion would seem to prove that water can be introduced into the veins, not only with impunity, but sometimes with advantage. Perhaps Mr. Francke would regard this as a general corroboration of his argument.

have a deadly or injurious effect on all men. This objection, therefore, as to substances which are injurious when introduced into the veins, is one that falls to pieces of itself, and originates in confusion of mind.

What substances can the healthy human stomach digest?

The only infallible and universally comprehensive answer that can be given to this is taken from the manifestations of instinct, and runs thus:—"Every substance for which the sound, unperverted palate feels an appetite." This answer is infallible, and proves the hurtfulness of all medicines.

If, however, we inquire into the chemical constitution of matters agreeable or repugnant to human palates, we can give an equally infallible and exclusive answer.

There are three properties above all which define the digestive capability of all substances.

1st.—They must not have passed into putrefaction. If they have, and are, notwithstanding, eaten, they pass as putrefied juices into the body, and become, thereby, foreign and injurious to it.

2ndly.—They must be of such a nature as to be readily separable into infinitely small parts by the gastric juice, diluted with water. All matters, therefore, which resist this separation, as stones, earth, and metals, are indigestible.

3rdly.—The substances must be less acrid than the gastric juice, because in all nature the law holds good, that the stronger vitality overcomes and appropriates to itself the weaker. This law is most important, and as a consequence of it, there must have been given to man a very powerful acidity of the gastric juice, if it is to have the capability of dissolving a number of different substances. This power of the digestion is produced partly by the glandular secretion of the stomach itself, and still more by the bile flowing into the duodenum. We must, therefore, eat nothing which is stronger than the gastric juice, and in this instinct guides us securely; as, to unperverted tastes, a very unpleasant burning and pricking is produced by such matters.

The first class of indigestible substances forms a transition between poison and no-poison, and is, therefore, relative poison.

The second class is already absolute poison, and comprehends partly those poisons which are toxicologically named astringent poisons, partly some of those which are called mechanical poisons, and work mostly by stopping up the small vessels.

The third,—by far the most important and most dangerous class,—consists of those called in toxicology corrosive and narcotic poisons. They operate destructively by their corrosive and narcotic powers, against which the organism reacts by secretion of slime and adduction of blood (inflammation).

The destructive poisons of the corrosive and narcotic classes are used by doctors as remedies against all active diseases, which are mostly primary, but also sometimes secondary in their nature; as, for example, severe cramps (convulsions), which belong to the class of secondary active diseased phenomena. The corrosive poisons are not used by doctors against insidious atonic diseases; they employ in these cases the narcotic poisons only, in diluted and weak forms; on the contrary, narcotics, when given for acute disease, are employed in an unmixed, generally concentrated and sublimated form.

Corrosive and narcotic poisons form the most drastic medicines; all of them, when not diluted (as is done by homœopathists, but never by the allopathists), are much more acrid than the gastric juice. Accordingly, their digestion, even in the smallest allopathic dose, is an impossibility; consequently, absolute poison never ceases, by reason of the smallness of the dose, to be poison, and can never be a remedy, because it can never be digested.

Absolute poison, in the smallest allopathic dose, never loses its disgusting and horror-exciting power on the palate, and is consequently designated as poisonous by instinct quite as much as by the laws of physiology and experimental chemistry, in conformity with all experiments made in these sciences.

Doctors, who would be too glad, in defence of their art against my attacks, to be able to make out the poisons they employ to be not-poisons, and who say that a substance can become poisonous from quantity, adduce the reverse proposition, that wholesome matters, taken in superabundance, may become poison. Against this I allege :—

1. The unconditional reversal of a proposition is, as is well known, logically inadmissible; and this is a logical blunder bearing the stamp of untruth in itself.

2. Substances wholesome in themselves, but in superfluous quantity, exercise on healthy men not only a chemically, but also a mechanically injurious effect, by extending, and consequently relaxing, the organ in question. These substances, in superfluity, belong accordingly not to the chemical, but to the mechanical

poisons; and the whole objection rests on a change of the divisional norm, proceeds from mental confusion, and is wholly untrue.

3. Substances in themselves wholesome, but difficult of digestion, may become injurious to a diseased organ of digestion, by their chemical effect, because the organ has not the normal power, and thus become relative poisons; but, in this section, we are not treating relative, but absolute poisons. Were, however, this not the case, this objection would be inoperative in support of the false proposition, that poisonous substances, by diminution of the dose, lose their poisonous properties, and assume a contrary healthful nature. It is quite clear that substances difficult of digestion, for which the whole strength of a healthy stomach is required, may be indigestible in a weak and diseased stomach, and thus become a relative poison. But the reverse of this proposition—namely, that substances or poisons which the healthy cannot digest may be digestible by the sick, and become real remedies—is a logical and physiological untruth.

From the results of this discussion on poisons we derive the correctness of my definition—viz.: every substance which passes into the human body without being digested is at least a relative poison: every substance which is absolutely indigestible by any man is absolute poison.

From this definition we get the explanation of the manner in which poisons exert their evil effects on the organism—namely, because they remain as foreign substances in it.

After having established the existence of absolute poisons, and that they are not rendered not-poisons by diminution of the dose, I must say a few words on the mixing and combination of poisons.

1. MIXTURE OF POISONS.

In the question, if by copious admixture of wholesome substances with poisonous, the noxious effect of the latter is removed, we can only take homœopathy into account, if we put the question in relation to methods of cure; for allopathy never mixes its poisons to such a degree as that they lose their poisonous properties, which can be proved by chemical tests as well as by taste. It is also by no means the wish of allopathists to dilute the poisons used as medicines, so that they should lose their natural and chemical

properties—they seek rather, by sublimation and extraction, to strengthen these effects.

Homœopathists, on the contrary, mix their medicines to such degree, that neither by chemical art, nor by the human nerves of taste, can anything of the original poisonous qualities of the substances used be discovered. They use for this purpose water, and this is certainly the only substance which in general, by copious admixture, may *perhaps* deprive poison of all injurious effect; and most certainly does so, so far, that it is no longer discoverable by the senses or the art of analysis.

Hahnemann, the creator of homœopathy, found occasionally, from a mixture of $\frac{1}{1000000}$ poison with $\frac{999999}{1000000}$ parts of water, injurious effects; and, according to his experiments, these ceased only on the decillionth dilution—that is to say (to put it in an intelligible light), if all the waters in the earth, all seas, and rivers, were put into one vessel, a single drop of allopathic poison put into it, and the whole well stirred, a draught of this, according to Hahnemann, would still have poisonous effects. It belongs not to this place to show how such a prodigious dilution can be made with a few buckets of water; but the thing is correct, and is to be found in homœopathic books.

For my part, I do not presume to decide if, by such dilution, the poison is absolutely deprived of all power; if it is possible, it is only by dilution with water, and not with solid substances. One thing is certain, that such an *un*poisoning by water is only possible when the unperverted delicate palate cannot detect in the mixture the most remote taste of the poison. In homœopathic doses of a decillionth dilution, no taste of the poison is to be detected, and I believe that they are absolutely innocuous. I hold true homœopathy to be an absolute *nothing*, and have therefore always held this method of cure, as compared with allopathy, in great veneration, and as a blessing to the human race.

We may designate allopathy, as the art of poisoning and mischief, with the sign — minus; hydropathy, as the true art of healing, with the sign + plus; and then homœopathy will be the mean point between them, or point of indifference.

After having thus refuted all the arguments of the doctors against my allegation that they treat their patients with poison, and thereby poison them, I must, in conclusion, say a word on the

2. COMBINATION OF POISONS,

Since a justification of the treatment with poisons is attempted to be deduced therefrom by some physicians.

A poison combined (gebundenes Gift) with a non-poisonous body, is so named when it can only be produced by a chemical metamorphosis of the substance wherewith it is combined. All poisonous power is wanting in combined poisons, and they obtain their name therefrom.* A combined poison is accordingly a no-poison; as neither can the organs of taste perceive it, nor do the remaining organs suffer any evil effects from it. In my opinion, the words "gebundenes Gift" are ill-chosen, and arise from a chemical error. The poison is not present as *poison* in the combined body, but matters are there present which, by chemical processes can be changed into poison. Thus, for example, prussic acid can be set free or fabricated (truly in very small quantity), by a chemical process, from human blood. Alcohol is obtainable from most fruits, by fermentation and distillation; and from the elements of water—viz., hydrogen, carbonic acid, and oxygen—various active poisons can be prepared. But in all these there is no poison present, only matters which can be converted into poisons.

So that when, from this thema of combined poisons, arguments are taken by doctors for curative procedures with free poisons, there is at bottom a confusion of ideas of which no one who has studied chemistry should be guilty.

From the presence of combined poisons in the blood, in the elements, &c., we can deduce a justification of treatment with *combined* poisons only; that is, substances without any efficacy. It is well known that the doctors use their poisons only in the free, or uncombined state.

As mechanical poisons, to which belong pieces of glass, points of needles, &c., are excluded from this chapter on chemical poisons, I was obliged to exclude, according to my pathology, contagious poisons also, because they, as will be shown further on, belong likewise to the class of mechanical poisons. They consist (as I shall prove in a section regarding them) in small invisible an-

* *Note by the Translator.*—The original words here, "gebundenes Gift," have no proper equivalent in English; they mean combined, bound, or restrained, perhaps rather undeveloped, poisons.

imals, mostly mites, (as in the itch,) which propagate themselves by generation, and produce the symptoms, the contagious sores and eruptions, by eating around them.

I think I have thus refuted all the arguments with which doctors attempt a contradiction of the fact, that they use poisons as remedies. Should I hear any new arguments of this kind, I shall submit them to criticism also.

L.

ON THE EFFECTS OF COLD WATER ON THE HUMAN ORGANISM IN GENERAL.

PREFATORY REMARKS.

The word cold, as regards water in its general relation to man, comprehends a considerable scale of degrees. It is seldom colder than 0° of Reaumur, as it then becomes ice. Above this, in higher degrees of heat, it must, in relation to the human body, be called, in common parlance, *cold*, so long as it does not reach blood-heat (98° F.), and warm when it exceeds this.

In hydropathy, we require terms for smaller divisions of the scale. Water warmer than 77° F. is never used by Priessnitz. We shall call water up to 54° *cold*, betwixt this and 77° chilled (abgeschrecktes), and that above 98° warm.

DISCUSSION OF THE SUBJECT.

In explaining the effects of water under 77°, we have to consider, first, the coldness, and, secondly, the chemical composition of water.

1. Cold in a high degree, and long continuance, has on the human organization a fatal effect, by absolute deprivation of heat. In a less degree, and shorter duration, it effects a partial abduction of heat, which is brought again into equilibrium by the organism through adduction of blood to the cooled part. To produce this equilibrium an abnormally strong afflux of blood to the cooled part is necessary.

The first operation of cold, therefore, is the expulsion of the blood from the part of the body exposed to it. The reaction of

the organism produces increased warmth of the cooled spot. This reaction is often called an after-effect of cold.

If we expose any one part of the body much oftener than the rest to a short cooling, the flow of blood must thereby be gradually directed specially to this cooled spot, and habituated to remaining in it. By the increased afflux and efflux of the blood, the part, or the organ in question, must be specially nourished and warmed. For the law holds good, that the reaction always far exceeds in duration the first effect of cold shortly applied, and exceeds it also in strength when the organism is strong. The reaction in people of strong nerves is so much the stronger as the difference of temperature between the body and the cold is greater, and the more sudden the passage from warm to cold.

It follows from this, that in cold we have in our hands a means of regulating, at pleasure, the circulation of the blood, and that where the cold is most applied, thither also the powers of the organization, its blood and heat, are mostly directed.

The reaction against the cold of the air, however, is much less in proportion than that against cold water, because water, from its composition, exercises a more decomposing effect than air; and, therefore, an increased reaction, and greater afflux of blood, is called forth by cooling a part with water than with air.

Enervated people, inclined to rheumatism, can, for this reason, not be hardened by the coldness of air alone, but only in combination with that of water. People whose nerves are shattered can bear no considerable degree of cold, and must, therefore, use water much less cold than those with sound nerves.

Air, water, cold, are also called excitants (stimulants), the favorite word of the doctors. It is in this case rightly employed, though somewhat superficially, because the process of excitation is not designated. "Means of reaction" would be a term of stronger distinction. Here we will adhere to the word stimulant.

If stimulants are continually to fulfil the end of strengthening single organs or parts of the body, they must bring nothing into it that is unassimilable. All medicinal stimulants are unassimilable, and on this account they always depress still lower the organ to which they are applied, instead of elevating it, and at last totally ruin it. Daily experience shows this, and physiology explains this phenomenon most clearly. For when the parts to be strengthened are gradually more and more loaded with matters, which they cannot convert into their own substances, and

which are lodged in them as something foreign, or rather acrid, and therefore inimical, a disturbance of the flow of blood, and still more of the excretions must necessarily follow. One of the chief stimulants with doctors is alcohol. This recognized poison is absolutely indigestible, foreign to the chemical nature of the human body, and by degrees totally ruins the organ into which it is introduced, from its acrid, poisonous properties. By washing weak parts of the body with spirits, by applying brandy especially to the eyes—in short, by the use of any alcoholic substances, the organs treated them are by degrees more and more weakened.

Strengthening the whole organization is only possible by expelling the morbid matters, and affording wholesome nourishment.

Strengthening one particular organ, *i. e.* an elevation of it above other organs, or a change of the relation of one organ to another, is only possible by the use of reagents; and as all medicinal stimulants, as was already shown, produce in the long-run, a poisoning and depression of the organ excited by them, this change can only be produced by the natural stimulants of air and water, and the greater or less degree of cold therewith combined.

2. The chemical constitution of water in relation to the human organism is already discussed in sections A and B, in its most important features, and requires only a few words more here.

Water is the only solvent in nature, as is already confessed by most physicians, particularly by Hufeland, in his "Makrobiotik." Water is, moreover, the only drop-like fluid in nature;* all other fluids consisting of water, and more or fewer solid particles. On this account, these other fluids possess the general power of solution in a less degree than water, because, first, the best part of this power is already expended on the solid particles; and because, secondly, the latter prevent the solution of other substances, and the penetration of the water into their smallest openings and spaces.

We have seen above, that the human body unceasingly separates excretory substances from itself, and requires new matter for its nourishment by assimilation. Both functions can go on in a normal and perfect way only by the internal and external use of water.

a. Nutrition is doubly assisted by water; first, because by drinking water the mass of food is separated into its smallest parts, which is necessary for its absorption in the ileum and jejunum;

* In a later work, the author observes, that this is not philosophically correct, as quicksilver is also fluid and drop-like (tropfbar), but this does not affect the general scope of his argument.—*Translator.*

secondly, the water which is drank and absorbed in these intestines, and before its excretion performs the circuit of the heart and blood-vessels, supplies oxygen to all even the most distant parts of the organism, which is necessary for the formation of firm parts out of the blood. Oxygen, it is true, is partially introduced into the blood by respiration; but partly, also, especially in disease, where a quite abnormal quantity of it is suddenly required in some single part of the body for its cure, it is taken from the water which has been drunk.

b. For excretion, water is also indispensable. By its pure fluidity it penetrates the whole body, and by means of its hydrogen it becomes the medium through which the organism, when necessary, makes what is firm, fluid, and thus capable of being excreted.

Thus, water, by its chemical composition, is the best means for perfect nourishment of the body, and replacement of all excretions, and all substances wanting in its single organs; besides this, it is the only means for expelling all those particles which are burdensome to the body, whether fluid or solid. If we take into account that cold water is the best means for correcting the circulation, and restoring the disturbed equilibrium of the separate organs and functions, we must indubitably come to the conclusion, that water is the most important of all curative means. The others are, fresh air, exercise, wholesome nourishment and healthy employment;—when not combined with these, water can do nothing—and without organic power in the patient they are ALL useless.

M.

PRIMARY OR CURATIVE DISEASES.

1. MODE OF ORIGIN IN GENERAL.

The human body is engaged in the constant labor of excreting and forming anew the whole mass of juices, flesh and bones. In a series of years, the body of a healthy man is so entirely replaced, that, even to the smallest atom, not a particle of the old remains.* Physiologists assume the period of complete renewal very variously, as occupying from two to seven years.

* This does not seem certain as regards the brain.—*Translator.*

As the body is incapable of remaining at rest, and must continually separate and renew—the conditions for satisfying this necessity must be afforded it. For renewal are required suitable articles of nourishment; and for normal undisturbed excretions are required daily contact with the air and water, so that these elements may exercise their power of decomposition on the skin, and suck out of the pores what must be taken away, if the body is not to stagnate and sicken.

If these conditions of health are for a long time only incompletely and partially afforded to the body, it loses gradually the normal energy of all its functions. If, in such a state of depression, an extraordinary attack from any quarter is made on the body, or one of its organs, it can no otherwise react and defend itself against this attack, than by extraordinary abnormally increased straining of its powers; that is, by primary sickness.

There are only two sorts of disease to which a healthy man on air and water diet is exposed. 1. Epidemic and climatic disease, produced by the deterioration of the elements. 2. Contagious diseases, small-pox, &c.

All other diseases are only possible through the customary perversion of diet, and false methods of cure.

2. HYDRIATIC CURE OF PRIMARY DISEASES.

The abnormal sick-like endeavors of an organism to drive out morbid matter, are the signs of reaction, or symptoms of acute disease. The water-doctor supports and encourages these symptoms, and attains thereby, surely and radically, the cure which is their end and aim, through diarrhœa and vomiting, in the diseases of the bowels; and in all others, by sweats, eruptions, ulcers, and critical excretion of urine. Further on, the special process will be explained by examples.

The result of every primary disease cured by water is a state of health *better* than that previous to the illness. General or local weakness, or sequelæ of any kind, never occur; after a few days, the person so cured can expose himself to the labors and exertions to which he was equal before his illness.

3. MEDICINAL CURE OF PRIMARY DISEASE.

When poison is introduced into a body during the acute curative struggle, the latter must employ a portion of its powers to

react against the enemy, to throw it out, either by vomiting or purging, or by enveloping it with quickly-prepared mild slimy matter, in order to dilute it, so that it may not corrode and destroy. The strength and the juices which the organism in this way sacrifices to slime up the medicine must be withdrawn from the curative struggle with the original enemy. By this is occasioned a diminution of the symptoms; and if the poison is introduced in sufficient quantity and repeated doses, the organism must then turn all its forces against this dangerous foe, and give up entirely its original struggle, so that the symptoms altogether disappear. Then, according to the dictum of the doctors, is the disease cured. When the body, treated in this way, at a future period, tries again to cure itself, and pushes the symptoms, they call this a relapse, and poison it anew, until either death or disappearance of the symptoms ensues.

In most primary cases, a similar effect is produced by abstraction of blood. These "tappings" must be so arranged according to the strength of the patient, that all power and capability of getting up the acute hot struggle are taken from him, on which the disease is "cured."

Every unlucky wight who in this way is poisoned and tapped by the old art of healing, is told by his instinct that his doctor errs egregiously when he calls him cured; that something foreign and inimical has taken up its quarters in his body; and every one of these much-to-be-pitied people requires a long time to renovate his strength, and must observe a painful regimen. Instead of this, every one healed by water can, after a primary disease, in a few days do what he likes; eat as much as, and what, he likes, and exchange the air of his room for evening or night air, as he chooses. In hydriatic treatment, it is even a rare case that the patient loses his appetite for more than a day or two.

From the nature of the effects of poison in acute diseases, as above explained, it follows that, in many cases, it is indifferent which sort of poison is chosen—it is more a question so to arrange the dose, that it sufficiently paralyzes the organism without killing it. Experience confirms this fully. Even the apparently peculiar curative effects of the so-called "specifics" rest on nothing but their general poisonous qualities. For example, quinine cures intermittent fever, and was long considered the only specific against it. In later times, it has been discovered that arsenic and belladonna suppress fever much more efficaciously, because they are more deadly

poisons. In this way, one can cure, allopathically, several diseases by one and the same poison.

But there are many exceptions—namely, in all those primary diseases whose symptoms present themselves in one organ or system of the body, the suppression of these symptoms and of the curative struggle will be effected most quickly, and with relatively the smallest doses, if one chooses that poison which, in the same organ in a healthy man, produces contrary symptoms (contraria contrariis).

On these grounds it is explicable why almost every doctor has a favorate poison with which he cures everything—one taking mercury, another opium, &c., &c.—That is, every physician, in his experiments with his favorite medicine, comes to the result that it in most cases effects the same as the medicine prescribed by the "science" for each different case, and every one then concludes that he has discovered the universal panacea.

Indisputably is mercury in most cases the most advantageous of these all-curing remedies, as it develops latest its destructive properties; and thus the doctor, in the opinion of the poisoned, is free from all blame for his future sufferings. On this account, mercury, in later times, has become the favorite remedy; and it may yet come to pass that children shall come into the world with ptyalism and carious bones!! to such a degree, even to the very roots, is the sickly European race poisoned with mercury.

What has hitherto been said of medicine refers only to allopathy. Since, by the results of the water-cure, the materiality of all causes of disease has been irrefutably proved, homœopathy must be regarded as a "non ens," as a chimera, whose effects rest only in the imagination. Nevertheless, the inventor of this chimera has great merit with the human race, for it is an important link in the chain of things—it is the transition from medicine to water.

When, in future, in this book, we speak of medicine, we always mean thereby allopathy.

4. THE NORMAL STOMACH.

In our stomach-poisoned Europe, one has scarcely a correct conception, not to say many examples, of the constitution of a stomach in normal strength and health.

The stomach of the man of nature has the following qualities:— First, great power of extension and contraction; it can starve for

several days without injury, and, *vice versa*, can receive the quantity of nourishment for several days at one meal, without indigestion. Further, when poisonous or absolutely indigestible matters are introduced into it, it rejects them with great ease and energy; and, when filled with food beyond the uttermost power of digestion, it rejects it likewise. On this account, indigestion, or death from the utmost swine-like overloading of it, is wholly impossible. In temperate and northern climates, for healthy stomachs the frequent use of fat is wholesome,* and necessary to the healthiness of the whole digestion.

The healthiest stomach, on water diet, retains these properties till death; but without daily drinking of water, the life-long healthiness of stomach and retention of strength are impossible.

Cold water, by the reaction which it excites, gives the stomach the high-enduring degree of warmth, without which perfect energy of this organ is impossible. The sound stomach of the water-drinker longs often for water to cool and refresh it; but precisely by this cooling is its elevated temperature again renewed and maintained. *Vice versa*, in a diet of warm and exciting artificial drinks, the stomach desires at certain periods a repetition of this artificial warming, by which its normal state of heat is, however, more and more diminished. Such a stomach is in the morning "faint," when it does not get its coffee, and thereby a "tone." To a water-stomach, the feeling of faintness is unknown.

Water alone is able to keep the stomach and bowels during life free from obstruction with mucus.

Water acts in a highly vivifying way through its constituents, oxygen and hydrogen, which gases are the true spirits of life and fire.

Water is, directly and immediately, by its decomposing power, the first of all digestive means. Lay a piece of raw flesh in wine, brandy, beer, bouillon, or soup, or in bitter "stomach drops," and observe whether one of these fluids or water dissolves it best. One ought to be ashamed to be obliged to speak of such things, which every cook knows, and from which every child's understanding can draw the conclusion, and make the application. But the stupidity of the old regime has so filled men with prejudices, that one must demonstrate the simplest truths at length.

* A sick and medicine-poisoned stomach must avoid fat, as also in the beginning of the water-cure, until it is considerably strengthened

If all my arguments do not suffice, look round in the kingdom of life. Have you ever heard of a wild animal with diseased stomach, unless, indeed, it is a little pug, who takes his soup and coffee regularly with his mistress? If any one objects that man is not a beast, I reply that, as regards his body, *he is.*

The water-cure heals and restores the most wretched stomach to such a degree of energy as is seldom found in the so-called healthy man of the *ancien regime.* I know many people who, from the utmost weakness of stomach, have, by means of water, arrived at such a degree of strength, that the heaviest meal never annoys them; that they make no difference between light and heavy food; that they can eat greasy pastry, or even fat, in spoons-full, without suffering the slightest inconvenience.

The true water diet, by which such great things are effected, is mostly the contrary of that of the *ancien regime.** Water and raw milk are the only drinks, the dishes are cooled or cold, all artificial excitants, all bitters, everything from foreign zones, and, above all, everything medicinal, is strictly excluded. We see that this diet is as near as possible an approach to nature, to the diet of the natural man.

The wholesomeness of water for the stomach is thus established. A word more on the wholesomeness of the most simple, unexciting articles of food.

Digestion, assimilation of what is foreign to the human body, is only possible when the gastric juice has more sharpness and a higher vital power than the mass to be digested. It follows, that simple food is easier to digest than sharp, spiced, piquant articles. Nevertheless, simplicity must not be carried to such a point as to call forth, in the uncorrupted palate, a feeling of unpleasant insipidity. Undeniably, man requires more piquant food than most animals. He is like the animals which eat fruits, and requires therefore, especially, food which contains much saccharine matter. To the man of nature, sharp, burning spices, bitters, and, above all, alcoholic drinks, are quite foreign.

A correct decision on the wholesomeness or unwholesomeness of food is given by the uncorrupted instinct; above all, by that of the child which springs from healthy parents, and which has never been obliged to eat anything which was unpleasant or repugnant to it, still less what excites disgust and horror.

* *Note by the Translator.*—See "Chapter on Diet," in the Appendix to Part II.

The apparent promotion of digestion by excitants and piquant sharp things, by much salt and spices, rests on an easily explainable misunderstanding. These things excite the salivary and gastric glands to a momentarily increased secretion of juices, and this abnormal reaction, intended to conduct away and subdue the excitant, creates a feeling of false hunger — but it does not strengthen; on the contrary, it weakens. Excitants are to the stomach what the spur is to an overwearied jade—is anybody such an ass as to believe that spurs strengthen the horse?

5. PRIMARY DISEASES OF THE STOMACH IN GENERAL.

We very seldom find chronic disease of a simple kind. Secondary disease generally is composed of affections of several organs.

Above all, we seldom find secondary disease with sound digestion, because, naturally, the stomach and bowels are organs which are the most and the first affected and disturbed by the use of poisons. Through medicine, diseases of the stomach have become as common in Europe as they ought, in relation to the latitude, to have been rare.

Disease of the stomach is not only as frequent as is recognized by the doctors, but much more so; for many diseases have their roots in the digestive organs, and their symptoms in other functions—therefore the doctors direct their cure to these other functions, because they always labor at suppression of the symptoms.

For these reasons, because the stomach rather predominates over all other organs than is subject to them, I place its affections first.

The "old regime" labors with such pertinacity, from birth upwards, at relaxation of the human ganglia and digestive canal, that one is almost tempted to consider it as intentional, for it is difficult to believe in the honesty of such enormous misconceptions.

Immediately on its entrance into the world, the unlucky babe is welcomed with a drink from the camomile-pot, and forthwith the nursery resounds with the screams of belly-ache. Along with the mother's milk, or after weaning, boiled cow's milk is given—perhaps the doctors and nurses will one day hit on the bright idea to milk the mother and boil the milk! Warm, nay *hot* soup is given to the child—and, to crown the work of stomach-ruin, medicine is poured in as soon as the organism begins a struggle against so many perversions, that is, as soon as a symptom of primary disease presents itself.

Put lion-cubs on such a regime, and you will soon have a race of young lions with gripes and convulsions !

Not only human understanding and instinct, but the latest experience, gives the irrefragable certainty, that children on a diet of cool or cold food, without soup, with raw milk and cold water as their only drink, seldom or never get disease of the stomach, colic or worms.* When such children by mistake get anything unwholesome or poisonous, they reject it with great energy by vomiting and purging; that is, be it remarked, when one leaves them to nature, only assisting it with cold water, but above all, no medicine.

On the contrary, the unlucky martyrs of the old poisoning and effeminating systems have before them a childhood of many sorrows, a life without health. When by the triple-alliance of stomach-ruiners, the energy and activity of this important organ are depressed, on the very next so-called oversight, or overstepping of the prescribed boundaries of pampering, a disorder sets in, which can only be removed by extraordinary efforts. If food a little beyond the accustomed quantity, or a little heavier than usual is taken, the stomach is not in a condition to operate on it; it remains lying till it is putrid, and then recourse must be had to extraordinary efforts, to a primary disease, and vomitings or purgings come on. Instead of assisting this healthy process with water, it is suppressed by physic; and as soon as this has occurred, the organism must by sliming-up and hardening the bad matter, which it wishes to reject, settle it down within itself, and here we have the commencement of chronic suffering.

In general, children are distingnished from grown-up people by their sound stomachs,—very naturally, as the poisoning by physic works late and slowly, though surely. Most men believe, however, that it lies in nature that the child's stomach can bear more than a grown-up one. "Such a young fellow can eat anything," we hear often said. The *old* fellow who says this, ought rather to be able to do it himself, as nature has given all grown-up creatures stronger organs than young undeveloped ones.

* This truth is now, I believe, generally recognized in England, where, of late years, a much more sensible and natural mode of managing children, as regards diet, &c., is beginning to prevail, than is yet to be found in Germany. —*Translator.*

6. CURE OF PRIMARY DISEASE OF THE DIGESTIVE ORGANS IN GENERAL.

All these diseases are cured certainly and quickly by water. The aim of all these cures, inflammation of the bowels not excepted, is the resolution and subsequent abduction of the morbid matter by vomiting and purging. No real cure is possible without this result. If the acute struggle ceases without this, it is most certain that the morbid cause is chronically lodged in the stomach and bowels.

It is very clear how water heals all these diseases. It is the only fluid which can dissolve the viscous, slimy, morbid stuff; secondly, by its cold and power of decomposition, it calls forth the necessary high activity of the organ in question; and thirdly, it gives the stomach and bowels the distention which is necessary to produce purging.

(Respecting the operation of medicinal purificatory remedies see below.)

The cure in all these diseases consists in drinking water, bandaging,* clysters, and sitz-baths.†

The quantity of drink, the number of clysters and sitz-baths, vary according to the nature and degree of the disease as well as the constitution of the patient. Generally, the quantity of drink and the number of clysters are indicated by the instinct; the number and duration of the sitz-baths must be defined by the water-doctor, if the patient himself has not the necessary hydriatic knowledge.

7. NAUSEA AND VOMITING.—DIARRHŒA.

Nausea can arise from disorder and malformation, from ossification or suppuration of the digestive organs, and particularly of their nerves; this description of nausea belongs to the secondary or destructive diseases.

Here we speak only of primary nausea, which is caused by morbid matter in the stomach. This may be of various kinds, as was explained under the head of poison. When poison, in the wider or narrower sense, is introduced into a strong stomach, and water

* Umschläge, wet bandages round the middle.

† *Anglicè*, hip-baths.

or milk, or any mild dissolving fluid is drunk, there arise always nausea and vomiting, from the efforts of the organism to rid itself of the morbid matter. For vomiting, a certain degree of muscular power in the stomach is required, and therefore a very weak organ, or one which has been ruined by medicine, cannot at all, or only imperfectly, purify itself in this way. Vomiting is caused by a powerful contraction of the lower parts of the stomach, and the raising, thus produced, of its contents upwards. The opinion often given by doctors, that a difficulty of vomiting after taking emetics is a sign of a strong stomach, is totally false: it is that of a weak one. The stronger the stomach the easier and more violently it rejects all poisonous matter by vomiting, if its curative efforts are supported by water and milk. For poisons which are not strong and morbid matters not extremely poisonous, water-drinking is all that is necessary for their complete rejection by vomiting: for stronger poisons, however, much raw, sweet milk must be drunk, so that the poison may be enveloped, and prevented by the cheese-like coagulation of the milk from exercising its corrosive power on the walls of the organ. This corrosive property of poison, if it is of the more violent kind, paralyzes and convulses the stomach to such a degree that it cannot effect, or only superficially effects, the curative vomiting.

Another species of matter besides original poison produces, likewise, primitive vomiting; namely, when a stomach, although not weak, is overfilled with indigestible food and drink, or fluid mixed with poisons (particularly intoxicating drinks), and is not in a condition to digest them, it endeavors, some hours after eating, to get rid of them by vomiting, and this is preceded by naseau. In this case, not milk, but water alone, must be drunk, as nothing here is required except the mechanical effect of fluidity to rinse the organ.

Every poisonous medicine, and every poison, produces vomiting in a strong and healthy stomach, when water and milk are drunk after them, and when their quantity and quality are not such as to occasion instant death.

But when morbid or poisonous matters are brought into the stomach, and are not expelled by vomiting, because the requisite quantity of water and milk (or some other mild fluid, such as decoctions of innocent herbs in water, which, however, act less beneficially than water or milk) has not been drunk, a powerful

and healthy organ of digestion gets rid of the morbid matter, at least partially, through the intestines, by means of a diarrhœa.

Namely, when the morbid matters have reached the ileum and jejunum (the two absorbing intestines), the instinct of these organs perceives, by an unpleasant or corroding feeling, the injurious nature of these substances, and probably absorbs less of them than if they were sound or digested matter. They must, however, absorb a considerable quantity, and thus convey them into the blood and the whole body, because, in virtue of their construction and activity, they cannot voluntarily remain unaffected by the peristaltic motion; still less can they completely shut up the absorbing vessels. (The Constructor of the human organism has, in implanting an instinct in the human palate, fulfilled His duty in relation to protection from poison. If man, nevertheless, in spite of his instinct, swallows the poison, this is an error which springs—the same as vice—from free-will, and which can in no wise be laid to the blame of the Creator.) That part of the poisonous and morbid matters which thus, through the small intestines, penetrates into the large intestines, produces in these last a feeling of pain or uneasiness; the morbid matters exercise their destructive power, and the bowels, therefore, endeavor to rid themselves, as soon as possible, of their contents, which is only possible by the secretion of much fluid. By means of this, the bowels endeavor to wash themselves quickly clean from these morbid matters, which, however, seldom fully succeeds without the help of water, by means of the enema-syringe. It is in itself evident that the bowels, through this abnormal secretion of fluid and slime, which are necessary for the production of the primary diarrhœa, must, during the short period of the curative effort, be extraordinarily desiccated, and that, on this account, the injection of water into the rectum is an essential help, and a support to the reactive symptoms.

Primary diarrhœa, from morbid matter eaten shortly before, always lasts only a short time. The critical diarrhœa, which occurs in the water-cure when morbid matters—generally acrid medicaments—are set free into the bowels out of old indurated slime, may last weeks and months; nevertheless, it is a pure curative disease, and, in virtue of this character, belongs to the class of acute diseases; but in virtue of its duration for more than four weeks, it belongs to that of chronic diseases. We see, from this example, that the words "acute" and "chronic" are not adapted to our division; it must, however, be remarked that the words "primary"

and "secondary," in their correct translation, are likewise not always so exactly corresponding as the words "curative" and "destructive" diseases, and that we accordingly use them arbitrarily, in a sense which corresponds to our nosological division.

There is a destructive diarrhœa which is no curative effort, which arises from utter ruin of the absorbent intestines, and carries atrophy along with it. The principal mark of distinction between this secondary and the primary diarrhœa, spoken of above, consists in this, that in the curative diarrhœa a feeling of burning and dryness presents itself at the anus, (produced by the expulsion of the acrid matters,) but, on the contrary, in the destructive diarrhœa this feeling is entirely wanting.

Between the two kinds of diarrhœa of which we have just spoken, there is a species of diarrhœa, apparently forming a medium, but, in reality, belonging to the first class, and which is produced by a sudden and complete change in diet. The gastric juice always assumes that quality which is the best adapted to the digestion of the articles of food usually eaten; if, suddenly, a different description of food is used, which demands a different constitution of the gastric juice, the unusual food cannot, at first, be so easily and fully digested, and the stomach only by degrees undergoes the necessary change to enable it to secrete the corresponding species of gastric juice. During this period of transition, the body gets rid, by diarrhœa, of the undigested unusual articles of food, which often pass into a species of putrefaction. Such a diarrhœa least of all requires positive treatment; in general, it suffices to let it alone, not to disturb it; and, above all, *no medicine*. Water-drinking according to thirst, and one or two clysters daily, are, at most, all that is required.

Diarrhœa of this kind, from the unusual nature of new articles of food, occurs frequently after the sudden weaning of children, but still more frequently on first settling in a foreign climate, more especially in emigrating from cold to warm or hot climates, in which all productions have a different constitution from those in the north, which difference extends itself even to the productions of the same species of plants.

8. SLIMING-UP (VERSCHLEIMUNG) OF MORBID MATTER, PARTICULARLY OF POISONOUS SUBSTANCES.

When poisonous and indigestible matters cannot be expelled in the manner described above, by vomiting or diarrhœa, they must

either remain lying in the digestive canal, or they must be conveyed into the blood, and through the circulation to the most distant parts of the whole body.

The manner in which the organism protects itself for a time against poisonous matters and which it cannot expel, and which it is compelled to retain, so that they may not at once, by their corrosive power, destroy the parts to which they have penetrated, appears at first sight inexplicable.

The organism which cannot expel poisonous matters out of its interior by vomiting and purging, conveys them into the blood, and in this way gets them out of the digestive canal, if the digestive organs have the requisite strength thereunto. If they lose this power, the poisons and morbid matters remain in them, and attach themselves firmly, enveloped in indurated mucus, to the walls of the stomach and intestines.

We will first of all take up the question, what the organism does with poisonous and medicinal matters, when these are conveyed by the circulation into the innermost parts of the body, and when it has not the powers and the means to rid itself of them by eruptions and sores (of which we shall say more below).

How is it possible that the body can give lodgment to acrid poisons for a long time, retaining apparent health? How comes it that these poisons do not corrode the flesh and bones in the interior, since, when driven out on the skin, they eat away the latter in sores, and even attack the linen bandages?

The anatomist's knife gives us no information on this head, because all morbid matter—whether it be medicinal poison or acrid juices from acrid articles of food, or stagnating and excretory substances from the body—is divided into such small atoms that no eye can detect them.

Equally little information on the subject is given us by the old pathology, which indeed gives information on nothing except its own insufficiency and inconsistency. If we turn over the leaves of the allopathic systems of pathology, we stumble, in almost every disease, on the edifying confession: "With regard to the causes and mode of origin of this disease, the greatest pathologists entertain diverging and almost contradictory opinions." Very easily explainable; for errors are at variance and in the plural, while truth alone is at one and in the singular.

Nevertheless, in spite of the contradictions of these celebrated pathologists, it is possible, by combination, to find the solution of

this problem with such decided certainty, that it can be doubted by no one except by those who think they have an interest therein.

What does the human body do, when large visible masses of extraneous matter are driven into it, by external violence; for instance, a musket-bullet? Its first attempt is to expel the foreign mass by suppuration; when this is impossible, or it is prevented doing so by plasters and pills, it adduces to the part a quantity of slime-like juices, envelops the ball therein, and forms round it a net in which it holds it and the poisonous qualities of the lead prisoner. Exactly the same process is gone through by the organism with the small poisonous and morbid matters which are forced upon it by the digestion, or through the pores of the skin, when it is disturbed in its attempt to expel them by acute efforts.

This theory rests on this imperturbable principle of nature in the elementary and organic world, that under similar circumstances she always acts alike. Therefore this theory loses nothing of its certainty, because we cannot recognize with the eye and expose by dissection the morbid particles with the surrounding net, on account of their minuteness.

Many bodies exist without our being able to see them. The itch-mite has only lately become visible through optical artificial aids to the eye. The small infusoria remained long unknown, and now, by the hydro-oxygen microscope, these formerly invisible dwarfs are magnified to the size of crocodiles and elephants. In all probability we shall at a future period succeed in so exposing the morbid matters in dissected bodies to the eye, as that the individual atoms shall become visible. The totality of these matters, however, already produces a collective effect on the eye through the abnormal color which it imparts to the flesh of an animal which has died of a chronic disease. When these foreign matters have a distinguishing color, first the mucus, and secondly the flesh, takes on something of it. If, however, this color is one which does not readily strike the eye (as is usually the case), then the flesh gets from the whitish color of the mucus a pale, abnormal reddish hue. Butchers have already observed that the flesh of those animals which, in spite of good feeding, will not get fat (which can only arise from chronic disease) has usually an abnormal pale whitish color.

The difference of color of the inner flesh, in healthy and chronically sick men, would show itself still more characteristically

if we were to examine dead bodies of both kinds on a field of battle.

The flesh of game has always an uniform blood-color, because in the green republics of the forests there can be no chronically sick, for there are no doctors, no apothecaries, and no manufactories of intoxicating drinks.

We will now discuss the second question of this chapter, namely the settling down of poisonous medicinal substances in the digestive canal itself.

A powerful organ of digestion, as we have seen, gets rid in one way or other of the morbid matters which are forced upon it. If, however, the use of medicine is long persevered in, the walls of the stomach and the digestive canal, by the continual secretion of slime to which they are forced in order to protect themselves against acrid and corrosive medicines, are by degrees dried up, and a partial destruction of the mucous-glands and nerves is produced by the medicines. In these spots, which are the most dried up and destroyed, the masses of slime first of all settle themselves, and harden by degrees into those stone-like masses which are usually named tartar. The tartar which settles on the teeth of people with foul stomachs is nothing more than indurated mucus. The more now that the use of medicine is persevered in the more slime is produced, mixed with the medicine, and settles itself along with the latter firmly in the walls of the stomach and bowels. In this way many men carry about with them a small apothecary's shop in their belly. It is clear that the medicines which are in this way held fast in slime and tartar, since no decomposing power, neither water nor air, can get at them, must retain their peculiar power and taste until they are again exposed to the decomposing power of the elements, which, in the life-time of the patient, is only possible through the water-cure. If water does not dissolve this indurated mucus, its solution and the decomposition of the medicines contained in it takes place only after the putrefaction of the body by the decomposing power of the elements.

It is a fact well known to physicians, that in very weak organs of digestion, medicines remain untouched. I recollect, that long before the water-cure was known, the physician then attending me for an intermittent fever would give me no cinchona in substance, because in my very weak stomach "it might remain lying as a crudity." This appeared to me at the time so impossible that I

inquired of other physicians with regard to its possibility, and received an affirmative answer. I also looked into medical books and found it confirmed.

I have proved that the settling down of medicines in hardened slimes is fully explained by the laws of physiology. The contrary would be a contradiction in physiology; it is an impossibility that weak bowels, which have been allopathically fed for a long time with acrid poisonous medicines, should uninterruptedly preserve the power of rejecting these poisons and the mucus which they produce. Many of my readers may imagine that the fluids afterwards drunk must dissolve the mucus, and that it cannot therefore remain for a life-time. To which I reply as follows:—

First of all, confirmed experience teaches us the contrary; namely, in dissection we find, not unfrequently, indurations in the digestive canal, which require a long time for their formation, but over which many fluids have passed without dissolving them.

Secondly, of all drinks water alone has this dissolving power, and only then when somewhat more is drunk than thirst requires. For what thirst requires is quickly absorbed, and has therefore no time to dissolve a tough, still less a stone-like mass.

Thirdly, the digestive canal retains for the purpose of solution this large quantity of water so long as is necessary for dissolution only when it has the strength to expel the dissolved slime with the poison. If it has not this strength the solution would then be a misfortune, and the digestive organs in this case get quickly rid of the superfluous water and admit of no solution, as a consequence of instinct which is implanted not only in the palate but in all organs.

It follows from this, that the solution of the indurated and petrified slime is only possible through the water-cure, and *that*, without this, the mucus must remain in the body as an indurated mass until death.

Not every medicine has the effect of producing such sliming-up and infarction of the digestive canal, and others do so only in the degree that they are more active poisons, and have been repeated for a long time. We can always reckon upon indurated slime in patients who have taken many medicinal purgatives and astringents, because these remedies dry up the digestive canal to an extraordinary degree. Especially does laudanum lodge itself in the intestines.

It is self-evident that those portions of the stomach and bowels

on which the slime-masses are settled must die off organically, and pass into induration and cartilage. We shall return to this farther on.

In the above, it is proved that the medicines in the hardened slime must retain their peculiar power and taste until the slime is dissolved, and the poisonous substances exposed to the elements. There is, therefore, in the assertion that patients in the water-cure, during a vomiting crisis, have sometimes brought up medicinal substances which they had taken years before, and in the allegagation that these substances had retained their peculiar taste, and often the same color—there is, I say, nothing in these assertions that is contradictory to the laws of physiology.

The weaker the stomach is, the less changed are the taste and the strength of the slimed-up medicine. If, however, the stomach is somewhat stronger, it attempts at least a relative modification of the poisonous matter, by its peculiar secretion, before it resigns itself to its fate—*i. e.*, to retain the poison with the mucus in itself. If any one in the water-cure gets a vomiting crisis, and can distinctly taste a medicine formerly swallowed in the morbid matter brought up, he may reckon with certainty that the crisis will last a long time, and will not cease until the rejected morbid matters lose their marked medicinal taste. What is first brought up in such a crisis is naturally the poison last taken, and the last excretion is what has been first swallowed and first settled down in the stomach. At first, however, the stomach has still the power to produce a relative modification of the poisons taken, excepting the very strongest, which indeed, can never amount to actual digestion, but which somewhat diminishes the strength of the poison, and deprives it of its peculiar taste, in this way, that it converts it into a more or less acrid, but always undigested and poisonous acid.

The theme of sliming-up is one of the most important in pathology. The actual sliming-up, by abnormal secretion from healthy mucous glands, can only be produced by acrid poisons, which only in rare cases come from other hands than those of the doctors, whose so-called slime-dissolving remedies are in reality slime-producing.

When we say of certain articles of food and drink that they produce slime, this is not the real sliming-up—*i. e.*, production and secretion of slime from the mucous glands—but a passing over of the digested mass into a slime-like substance, from want

of power, especially from defective solvent power in weak digestive organs, which again always has its origin in poisoning and deficient supply of water.

We shall hereafter speak at more length on the slime-dissolving and purifying remedies of the doctors.

I cannot conclude this most important theme of sliming-up or mucous obstruction until I have overturned an objection of the doctors against the year-long presence of morbid matter in the body.

From the nature of poisons, we have seen that when brought into the body, and not immediately rejected by vomiting, they either attach themselves to the walls of the digestive canal, enveloped in hardened slime, or are absorbed and carried into the blood. By the circulation, they are conveyed into all the most various and most remote parts of the body, and are there deposited along with the other constituents of the blood appropriated to the nutrition of the body and replacement of its excreted matter.

When, now, many doctors, in order to combat the water-cure, deny this, they not only contradict the laws of physiology which are taught from their professional chairs, but they take away from their own medicines all pretentions to efficacy. If medicines do not pass into the blood, and thereby into the body, they could have no further effect than, at most, on the digestive organs into which they are first introduced.

If the medicinal and poisonous matters really pass into the blood, not in their medicinal quality, but rather fully deprived of their poison, perfectly digested, made similar to the blood which is prepared from ordinary nutritive substances; then, in this case again, they could have no medicinal effect, and in general no other power than every normal article of food designated by instinct as agreeable.

It follows, that the doctors, when they maintain the possibility of assimilation in poisons and medicaments, contradict not only the laws of physiology, but also themselves; since they, by this assertion, deny them all medicinal operation in all diseases whose seat is elsewhere than in the digestive canal, and yet which operation they at all other times maintain, and upon which their whole art of healing is founded.

The more shrewd among the doctors have very well understood this double contradiction, and allowed that medicinal substances are conveyed, as such, by the circulation into the whole body, but

also usually assert that these substances are again quickly expelled by the transpiration.

This essentially false assertion must be contradicted before I close this chapter.

The blood is carried into all, even the most remote firm parts—as, for example, into the bones—by the circulation which is carried on by means of the enormous muscular power of the heart, in order that the substances which are worn out, and therefore to be excreted, may be replaced by new ones from the blood. So long as poisonous and medicinal substances are yet in the blood of the great vessels, they can exercise little or no injurious effect, because they are mixed with the healthy particles of the blood, because in the blood itself there are no nerves, and because they are conveyed rapidly along by the vessels. So soon, however, as the blood has reached the place of its destination through the innumerable fine capillaries, it is there separated by the organic power, more or less, into its constituents, and out of them are prepared various juices and substances which the organism requires for its nourishment—the matter of hair, bone, muscle, nerve, marrow, semen, &c. In all these firm and in all these fluid substances are deposited the very small, and therefore very numerous, particles of poison which have got into the circulation, and by it have been conveyed into all parts of the body. So soon as, in this way, the particles of poison have been separated from their mixture with the blood, and have reached the firm and organically living parts of the body (the blood is not yet an organically developed body, but the material for the organic formation of the human body), they then immediately begin to exercise their poisonous and destructive power, which, however, is for a time restrained by the organism, which, from the mucous glands everywhere to be found, secretes mollifying slimy juices, and surrounds the poison therewith. The work of sliming up is immensely easier, and requires much less power than that of expelling the particles of poison through the skin.

This expulsion through the skin, in a case of poisoning of the body by medicines, can never take place quickly, and never without the help of water. It is impossible that it can take place quickly, because those parts of the body, into which these particles have penetrated along with the blood intended for nutrition and for replacement of the excretions, are not inclined to excrete immediately again the newly deposited matter, on this account, that the excretions from organically vivified parts of the body can

only normally occur after a considerable time, and then only when these matters have become excretory by being worn out. Those substances which are to-day made a part of the organic body, are normally excreted only *after* all others which are already in the body. The older is always excreted before the younger. Thus the assertion that medicines are again quickly expelled, is contradictory to physiology, and therefore a decided untruth.

Without the assistance of water, the complete expulsion of poisonous substances through the skin is never possible, not even slowly, if this poisoning is so considerable as it usually is in most allopathic cures; on the other hand, for the expulsion of homœopathic medicines, certainly no assistance from water is required.

For the transpiration of poisons through the skin, however, much more strength in that organ is required than for the transpiration of excretory assimilable matter, and therefore the former is much less possible without water. By far the greater number of poisons, when they are conducted from the interior to the skin, produce, in most men, sores and eruptions, which occasion a violent burning and pricking in the skin. The production of these critical poison-evacuating exanthems, without a water-cure, is very rare, and only possible in extremely robust persons. But the maintaining of these exanthems, until the complete purification of the body, is, even in the strongest people, impossible without the use of water, because every skin by such an excretion of poison is by degrees dried up, and at least partially disorganized, if the acridity of the poison is not mollified by dilution with water, and if the skin is not frequently bathed in water and allowed to absorb it, in order to replace the partly drop-like, partly elastic fluids which it must produce in abnormal quantity to convey away the poisons. The critical exanthems, partly by effusion, partly by transpiration, discharge so much acrid and corrosive matter, that it produces the most frightful pains, and, on a small scale, false formations, similar to those from inflammation (treated in the dry way,) when they are deprived of water.

The less violent poisons can, indeed, be expelled by many skins (particularly by very fat and coarse ones) by transpiration, and without exanthems, but likewise not without water. The burning, tickling, and itching which are excited by critical transpirations and sweats of this kind, must likewise be cooled with water, in order that the acrid matters, which produce these feelings, may not by

degrees dry up the skin, and thereby render it incapable of the abnormal activity requisite for expelling the poison.

Besides this, the necessary purification and keeping open the pores in such critical transpirations, sweats, and exanthems, can only be attained by frequent moistening of the skin with water.

Lastly. The skin can only obtain its abnormal consumption of oxygen and hydrogen, which, as above shown, must take place in every abnormal activity of the body, from water.

In all these demonstrations of the impossibility of excreting poison without the help of water, we have only referred to the skin, and have shown that the excretion is not even then completely possible, when the poison has *reached* the skin. At a later period I will prove that it is equally impossible for these matters to reach the skin from the interior of the body, without the internal use of water, and that, too, in abnormal quantity.*

9. NATURE AND OBJECT OF FEVER.

By the thousands who in every century dedicate their whole life professionally to the cure of disease, endless time and trouble have been expended on the investigation of the nature and causes of Fever. But, alas! the riddle has not been resolved, in spite of so many counsellors and counsels.

Hahnemann is of opinion that it will, perhaps, never be conceded to mankind to get at the bottom of the intimate nature of Fever and chronic disease. If, however, he says, any man ever succeeds in this, the solution will be so simple, so self-evident, so divested of all learned subtlety, that it will captivate every human understanding, and fill it with perspicuity. Most assuredly will it do so!

Fever is—"but, wretch, what art thou about? The secret which science in two thousand years has not been able to unriddle, over which Boerhaave and his famous contemporaries have bitten their wisdom-teeth blunt, wilt thou break open and decipher it?" Well, then, with all due modesty, I cast my eyes down, and blushingly beg for indulgence to my learned stupidity, and stammer forth: Fever is nothing more and nothing less than the effect of every

* *Note by the Translator.*—For further observations on this important subject, see additional chapter at the end of Part I. See also Part II., chap. 6, sect. 7. *c.*, for the treatment of mucous obstruction, and Appendix to Part II. for illustrative cases.

violent effort which surpasses the normal and persistent powers of the body.

If you run quickly, or have a severe wound in your body to be healed, or beget a child, or bear a child, you get fever from this exertion just as much, but not so long, as when your body reacts violently against an interrupted transpiration, or is striving to convey morbid matters from the interior to the skin.

There are only three necessary characteristics of fever, which present themselves after every violent effort, namely, heat of body, acceleration of the pulse, and a dry tongue, which, after long continuance of the exertion, produces violent thirst. All other symptoms of fever, are not symptoms of the fever, but the effects of the morbid matter which ought to be expelled by the fever. On this account these other symptoms are as changeable and various as the nature of the morbid matter, and as the organs on which these matters have been thrown. If these, from the interrupted transpiration, have got principally into the brain, then we have inflammation of the brain; if into the lungs, then we have inflammation of them; if into the nerves, nervous fever.

Physicians, it is true, presuppose many other characteristics of fever, namely, rigor before the heat; moreover, depression of the whole power of the organism; and, finally, disturbance of the functions of digestion and evacuation. But, first of all, the rigor is not the fever, but the preparation for the fever, the onset to it; secondly, the depression of the organism arises less from the fever than from the disease, of which it is a re-active symptom, and this depression is no less sensible in a water-cure that in a medicinal, and is, consequently, a partial effect of the remedies. I know cases in which people with fever in the water-cure have gone a couple of miles, or more, to get to a bath in the open air, and this, too, with the best effect, even in rough weather. It is not uncommon in critical fever, in the water-cure, that patients during the whole time eat with better appetite, digest and excrete better than is done by many men under the old regime in their healthiest days. The disturbance of digestive activity is, accordingly, by no means a necessary effect of the fever, but of the medicinal treatment.

In all these active diseases it would scarcely require a proof, that the causes of them are foreign, material substances in the body, if the so-called science had not so stultified mankind, that they rather believe the puppet in the professorial chair, than trust to their own internal, infallible natural feelings. Does not the mis-

chief in all these diseases sensibly lie in and upon the sick organ; does it not prick, and burn, and compress? In inflammation of the breast what oppressive anxiety, and what stabs, as if with red-hot daggers, as if an Etna lay upon the lungs, and its fires were glowing in them. "Here it is, here it pricks, here it burns!" cry the patients. "Not at all," says science, "you are quite in error; these are no foreign bodies which torment you; they are rather"— but here the breath and speech come both to an end. The most sagacious and most celebrated physicians have honestly confessed that they know nothing of the intimate nature and processes of disease. But the shallow-minded content themselves with sounding phrases without sense or consequence, as they hear them from the chair, and with credulous devotion they learn all this nonsense by heart, and pay themselves and their fellows with false coin, which weighs nothing, but makes a clatter.

We are accustomed, in common life, to name only that state of body, fever, which, without external and voluntary effort of the patient, is produced by abnormal, physiological activity in his interior, and which, accordingly, is a symptom of disease. We will assume the word fever, without further addition, in this same sense as a fever from disease.

In all abnormal efforts of the organism, more oxygen and hydrogen are consumed than in the normal state. In order to abstract more oxygen from the air, the lungs inspire more quickly than usual, whereby is produced an acceleration of the heart and pulse; and from this accelerated circulation of the blood arises the fever-heat. The fever-thirst arises very naturally from the abnormally great consumption of oxygen and hydrogen. Both these substances are, as was shown above, the fundamental conditions of all assimilation and excretion, since only by hydrogen can the solid be converted into fluid, and by oxygen the fluid into solid.

In this way the nature of fever is simple, and easy to understand. The causes and the object of fever will be explained farther on. Let my explanation of fever be compared with those hitherto given, and it will be seen that mine alone has unqualified pretensions to the predicates of simplicity and clearness.

And I have had the satisfaction of seeing that a number of writers have borrowed from me, and, consequently, concurred with me in the definition given, which was before me totally unknown. That they have at the same time made no mention of me as the

author of this definition, and have somewhat the air of giving themselves the merit of it, is a phenomenon which has been a thousand times repeated, and which naturally proceeds from the vanity of little minds. In the majority of hydriatic writings, whether by physicians or laics, which have appeared since the first edition of this work—and in particular in that of M. Munde—my definition of fever is adopted.

10. THE INTERNAL PROCESS OF "TAKING COLD."

"Taking cold" plays a principal part in the pathology of physicians, as well as of laics. We have hitherto, with regard to the internal processes arising from taking cold, had not so much incorrect, as indeed no conceptions; these processes have been first disclosed by my pathology.

If a human body is quite free from morbid matter (foreign, more or less poisonous, substances) the taking cold could only have the effect of producing disease when the nerves are peculiarly weak, and this disease could only consist in nervous excitement, relaxation, or convulsions. But in a body free from foreign substances there are no diseased nerves, and, consequently, these morbid appearances, from taking cold, can never take place when there are no foreign matters in the body.

The skin can only complete its necessary office of excretion when its pores are open, and when it is warm. These two conditions can only be continuously maintained by cold water. It is true, the warmth can, for a time, be maintained when the exhaled atmosphere of the skin is retained around the body by covering it thickly with bad conductors of heat. But this mode of keeping it warm has two disadvantages: first, that the pores, which must not only expire but also absorb, can then bring into the body only corrupted air; and, secondly, that in this artificial retention of the transpired heat, the warmth-producing power of the skin becomes by degrees weaker, and requires, consequently, a continual increase of clothing.

Since, under the old dry regime, the skin cannot generate in itself the necessary heat for transpiration, the latter stagnates as soon as the usual artificial helps are not sufficiently afforded to it. This stagnation of the transpiration is the so-called "taking cold," which, however, as already said, can only induce disease when there are present in the body morbid matters, *i. e.*, matters

foreign, or which have become foreign to it, and are not transpired in time.

When under such circumstances the transpiration for a time stagnates from insufficient warmth of the skin, the course of the transpirable matters takes an abnormal direction towards the interior of the body; or at least the fluid mass, which ought to be transpired, remains abnormally long in the interior of the body, and by its fluidity sets loose many of the particles of slime in which the foreign, and particularly the poisonous substances, are bound up. The morbid matters thus set free from the surrounding slime, must necessarily, by their corrosive and acrid properties, produce pain in those parts of the body with which they come in contact. The organism in such a setting free of morbid matter from slime may act in two ways, namely, it may either attempt to conduct these matters to the skin, and there excrete them, or it can surround them anew with fresh secreted slime. This first effort towards radical cure is attempted by the organism the more strongly and actively the stronger it is. The second shift is at once had recourse to by a shattered organism, but by a strong one only when its efforts at a cure are suppressed by medicinal treatment, *i. e.*, either by abstraction of blood, or by poisoning.

A necessary consequence of the definition I have given is the deduction, that in presupposed treatment of these diseases by water, the act of taking cold, *i. e.*, the setting free of morbid matters out of the surrounding slime by means of the abnormally long retention of transpiratory fluids in the body, may become in the true sense of the word a curative means, a means for radically expelling the morbid matters. This deduction is perfectly correct, if we presuppose strength of the skin and of the whole organism sufficient for victorious endurance of the conflict, and hydriatic treatment.

The inventor of systematic hydropathy uses for the purpose of intentionally "giving cold," or dissolving of mucous obstructions, by long retention of the transpirable fluids, those half-baths, which in my Therapia, shortly to appear, I have called "Fever-exciting half-baths." These half-baths are employed for the conversion into tonic of atonic diseases, *i. e.*, diseases without pain, and without symptoms of reaction. They ought never, however, to be employed where the nerves are much shattered, and where the skin is inactive. Moreover, none but a perfect master of hydropathy should employ them.

The stronger an organism beset with morbid matter is, the more quickly comes on the acute attack after taking cold, so much the more purely and strongly impressed has this attack the inflammatory character, and so much the freer is it from nervous symptoms.

In robust persons, the acute attack comes on a very few days after taking cold ; equally quickly, or even more quickly, comes on the crisis in the water-cure after the fever-exciting half-bath.

But the unfortunates whose nervous system is shattered, never get inflammatory attacks after taking cold, because, for their production, good, or at least moderately good, nerves are requisite. These unfortunates suffer after taking cold mostly from increased nervous pains, still less from rheumatism, and not at all from inflammatory affections. An organism with shattered nerves can do nothing more than forthwith again envelop in slime the morbid matters accidentally set free. But this in itself so slight an effort, brings, in connection with the contracting effect of the taking cold on the nerves, an exacerbation of the nervous pains. It follows from this that people of weak nerves must, under all circumstances carefully guard against taking cold, even in the water-cure, until the nerves, by means of water, have obtained strength and health.

From this explanation of the difference of the effects of taking cold on healthy and diseased nerves, it is clear that that method of cure which gradually converts rheumatic and inflammatory predispositions into nervous must be completely false and ruinous; and that, on the other hand, that mode of treatment which completes the opposite conversion must be decidedly the true one. In thousands, nay, in millions of examples, has medicine gradually produced the former fearful change, and not one single time the last named, which conducts to cure. Only water, only the natural art of healing, is able to produce so blessed an effect, which then is always the transition to a perfect cure.

Every one who does not follow both the inner and the outer water regimen cannot exhale sufficiently quickly the substances which have become foreign to his organism, and has therefore morbid matter in him, and can, by taking cold, get an attack of disease. No wild animal, no savage, can get disease from the most violent taking cold—*i. e.*, exhalations suppressed entirely for a time—because no old foreign matters are present in his body. When the external cold reaches so abnormal a degree that the

organism cannot react against it, it is then possible that such a healthy being may, by abstraction of all heat, be benumbed, or may freeze, but it can never get an attack of disease from returning warmth.

In order to attain so enviable a degree of hardening and incapability of taking cold, it is not necessary that we should turn savages; much rather can we remain quite tame and gentle, and yet be as healthy as the tiger or the polar bear, if we are converted to water diet. Such a degree of health is insured to the new-born child, if he is brought up in the water diet. For him, however, who has grown up under the old regime, water diet alone will not do it, before he has regenerated himself by a water-cure.

If any one wishes to ascertain if he is really healthy and free from foreign matter, he can best put it to the proof by intentional exposure to severe cold. This, however, is only admissible when, to prevent all consequences, a water-doctor is at hand, and when the experimentalist is at least approximatively, or what would in common life be called robustly, healthy.*

In a healthy organism, which has already for a long time adhered to water diet (without, however, being quite pure), there will break out, probably in the next night after taking cold, a violent critical sweat, and so there will be an end to the matter. In a healthy person, under the ordinary diet, an acute disease will come on, and under water treatment disappear in a few days, without leaving a trace.

A chronically sick person must carefully guard against taking cold, because he can no longer produce a curative disease. There are certainly only very few men in Europe who can bid defiance to taking cold. These few would get no crisis in the water-cure. All others would do well to undertake a purification of their bodies with water, which is the sooner attained the healthier the organism is. Very robust persons, in the water-cure, get eruptions in a few days, while weakly people must wait months to get them.

11. COLD DRINK WHEN OVERHEATED.

Exactly like the operation of taking cold on the skin is the effect of drinking cold water during exercise, or after being overheated, on a healthy person—that is, it is always refreshing and agreeable, and never productive of disease. Is it to be believed that Nature would have given her creatures this ardent longing af-

ter cold water, if satisfying it were to be injurious ? Loving Nature has given men, as well as animals, no inclinations, the satisfying of which would make them unhealthy or unhappy ! But civilization—*i. e.*, the perverted civilization of which Europe is so proud, and which is daily becoming more and more a Chinese caricature —has perverted most relations of life into misery and error.

Every animal, when it is heated, swallows with avidity large quantities of cold water; and well it agrees with it. Only civilized man and the civilized horse suffer thereby ; for these poor creatures have always their bodies so full of morbid matter, that every interrupted exhalation brings disease upon them—thanks to effeminacy and the science of poisoning ! On the other hand, the wild horse, because he lives under a natural water regime, is as sound and hardy as any other beast; even the horse of the Indian can swallow cold water when heated, without being again put in motion, or covered up warm.

If drinking cold water after being heated were injurious to a healthy man, gentlemen doctors, what would have become of your forefathers in bear-skins? From what chair was the warning against cold water preached to the Germans in the forests, and to savages ? And were, or are, these wild gentlemen lung-pipers or asthmatics ? And have you ever found a savage, or man of nature, who did not drink cold water when he was hot ?

Every one who is free from foreign matter can drink cold water after the severest *échauffement*, and can then, as he likes, either again heat himself, or allow himself to cool. Experience has already shown this.

But he who has grown up in the regime of a false diet, and still more he who has swallowed medicinal poisons, should not drink when he is heated, if he does not continue the exertion which had produced the heating, unless, indeed, he has fully purified himself by a water-cure.

12. DYSENTERY.

Preliminary Remark.

When, in this book, the distinguishing characteristics of the various diseases are given under the rubric, "Symptoms of the Disease," these characteristics are always taken from the *signs* of the disease, never from its *nature* or *causes*, which two last themes,

in individual diseases, are always treated immediately after stating the symptoms.

1. *Symptoms of Dysentery.*

Severe pain in the rectum, sometimes also in the other intestines, combined with a continual inclination to stool, and relatively small evacuations. At first, fæces are evacuated ; but afterwards, in an advanced stage of the disease (which, however, is principally induced by medicinal treatment), the evacuations consist mostly in greenish, stinking slime, passed with painful straining. If blood is mixed with them, or passes off in large quantity, it is called bloody dysentery (die rothe Ruhr).* When, from a false mode of treatment, the false formations of inflammation (see "Inflammatory Diseases" for these) occur, skin-like and polypous formations pass off with the stools. Further, dysentery, when improperly treated, sometimes passes into suppuration of the intestines, still more frequently into gangrene, which is quickly followed by death.

2. *The Nature of Dysentery,*

Is an inflammation of the large bowels, most frequently of the rectum, so that the excrements can only with difficulty, or not at all, pass over the inflamed spot, whence comes the unsuccessful straining at stool. The causes of dysentery are to be found almost always in corruption of the air, of the water, or of the food; co-operative causes are—cold, and a previous predisposition to dysentery. These last consist principally in this :—in the walls of the large bowels there are present acrid or poisonous substances, enveloped in slime, which slime is dissolved by the consequence of the cold ; whereupon, under the co-operation of the already-named corruption of the elements or of the food, more morbid matter accumulates in the bowels, against which the organism reacts, by means of inflammation, and so strives to obtain a cure.

Moreover, I must freely confess that I have not yet succeeded in investigating clearly and in detail the processes of epidemic diseases, as I have done with the non-epidemics.

* *Note by Translator.*—This distinction does not exist in the English school of medicine, as the disease is not named dysentery when unaccompanied with bloody dijections.

3. *The Effects of Water-treatment on Dysentery.*

Water which is drunk passes very quickly, and, in inflammatory diseases, with abnormal celerity, through the whole circulation, and arrives very soon at the capillaries of the intestines in the inflamed spots, dilutes the acrid matters, mollifies them thereby, and by its fluidity assists in their expulsion through the various excretory channels. The water which is drunk does not arrive, as such, in the cavities of the large bowels, because it is already absorbed in the smaller ones; but for the speedy cure of dysentery, as of every inflammation, a large quantity of water applied in its original substance to the inflamed parts is very efficacious; on this account, in dysentery, frequent clysters of water must be administered, which directly reach the inflamed portion of the bowel, which is the proper seat of the disease. Water cools the inflammation, dilutes and mollifies the acrid morbid matters, which, during the reaction, are partly separated from the interior walls of the intestines into their cavities, and, partly through corrupted food and elements, have come from above downwards into the canal of the large bowels. Water gives, moreover, the bowels the necessary distension, and thus facilitates the stools, and in this way washes them clean from morbid matter. Finally, water supplies the oxygen and hydrogen, which in all inflammations are expended in abnormal quantity, and without which false formation would arise. Sitz-baths and wet bandages round the belly complete the work of cure.

When, by medicinal treatment, the dysenteric patient is brought so low that the exhalations of the skin, along with the evacuations by stool, are already brought to a stand still, the water must, by means of wet-packing,* be first directed to re-exciting the activity of the skin, which it effects by its power over the human organism above described. Also, when there is much fever previous to the inclination to stool, wet packing is necessary.

The effect of water on dysentery, accordingly, is the purification of the large bowels from the foreign matters, against which the

* *Note by Translator.*—A very common manipulation in the water-cure. It consists in enveloping the patient in a linen sheet, wrung out of cold water, which is again covered with one or more blankets, and in which the patient remains from half an hour, to two, or two and a half hours, according to circumstances. It is a very efficacious, and by no means unpleasant remedy.

organism so vehemently reacts; and, therefore, the water-cure is a support to the reactive struggle.

4. *Effects of Medicinal Treatment,*

Are, in dysentery, from the great variety of the remedies employed, sometimes of moderate, sometimes of very great hurtfulness. Moderately injurious are the slimy and oily remedies, which are often given alone, when the symptoms are not violent; but even these remedies can never be useful. The oil which is drunk loads the stomach to the utmost. It scarcely penetrates to the large bowels, but is mostly absorbed in the small intestines, so that only the smallest portion reaches those parts of the bowels where the inflammation, and the proper seat of the disease are. But even there it is of very slight service, because no inflammation can be cooled by oil, but only by water, because oil has no dissolving power, because it cannot at all penetrate into the minuter spaces, and because it contains neither oxygen or hydrogen, which are urgently required in every inflammation which is to terminate favorably.

That that portion of the oil which is already absorbed in the small intestines, and conveyed into the blood, can likewise have no healing effect on the disease, is, for similar reasons, perfectly clear.

Very frequently, in the beginning of the attack, an emetic is given, which is more in the characteristic spirit of the medical art. It is a poisonous means of coercion, which restrains the organism from its curative efforts, and either renders this effort laborious or makes it impossible, according to the strength of the patient.

The preparations of opium which are so frequently given in dysentery act in this way; by their poisonous effects, they paralyze the organism; and, on this account, after their exhibition, the symptoms of reaction become always weaker, and, on due repetition of the poisoning, entirely cease, whether it be on the appearance of the great colleague of the doctors—death, or because the organism desists from its struggle, and resorts to sliming-up the morbid matters. In this way, by the abovenamed and other poisons in dysentery, either death, in the shape of gangrene, is induced, or there are formed, in the inflamed spots, chronic indurations and disorganizations, which always have, as their consequence, tedious and usually life-long chronic suffering. This last is stated in all medicinal pathologies; although, indeed, it is not said that these

organic malformations and devastations are the effect of the suppression of the reactive symptoms by poison. But physiology furnishes the proofs of it, and it has been a thousand times confirmed by experience. In my hydriatic treatment of dysentery, chronic affections of the rectum have never occurred, and no patient has ever died of dysentery.

I must here expressly make a remark, that when I speak of hydriatic treatment, I mean one carried on from the first with water, and always exclude cases which have been previously treated with medicine.

In dysentery, as in every primary disease, the patients have an ardent thirst for cold water, and, as in every primary disease, precisely so much water must be drunk as thirst requires, and not a drop more.

13. CHOLERA.

There is no distinct boundary between sporadic and Asiatic cholera, any more than there is between other cognate species of disease.

1. *Symptoms of Cholera.*

It has frequently premonitory symptoms; often, however, none.

The premonitory symptoms are depression of spirits and anxiety, weariness of the limbs and giddiness, in combination with disturbance of the digestive functions, and particularly with diarrhœa.

The symptoms of cholera are—painful burning, with anxiety and oppression in the region of the stomach, and the part of the abdomen next below it; distension of the lower belly with rumbling of the bowels and griping; frequent vomiting and purging, by which a yellowish, brownish, or greenish fluid is with great violence evacuated. Combined with these symptoms there is a burning thirst for cold water, and a very quick, but thin, thready pulse.

These symptoms always occur in cholera, even when it is properly treated with water.

When medicinally, or improperly treated, there occur, as signs of a second, and worse stadium, the following symptoms—evacuation of a curdy or rice-water-like fluid with flocculi, which look like cheese-mites; coldness of the hands and feet; a change of

the color of the skin, into a dirty dun, blueish, or even blackish hue; clamminess and wrinkling of the skin, and secretion of an adhesive sweat; blackish color of the lips and nails; a moribund countenance, with hollow eyes, surrounded by blackish rings; a hoarse, unintelligible voice; a cold, greyish lead-colored tongue; painful cramps in the limbs, particularly in the calves of the legs, and in the muscles of the belly; heavy, stertorous breathing; complete absence of the secretion of urine; cessation of the diarrhœa and vomiting; comatose slumbering but without disturbance of the consciousness; a tough, pitch-like condition of the blood; gradually diminishing pulsation of the heart; increasing coldness of the skin;—death.

2. *The Nature of Cholera*

Is a reaction of the whole digestive system against morbid matters, which are more in its cavity than in its walls, and an effort to repel these matters by vomiting and purging. No explanation has yet been given of the nature of these morbid matters in epidemic and Asiatic cholera. It is, indeed, certain that these matters are to be referred to a corruption of the elements, and thereby also of the food, but more particularly to a corruption of the air. Whether this corruption of the air consists in putrefaction, or some other chemical change, or in an impregnation with small invisible animalculæ, I presume not to give an opinion. The morbid matters of sporadic cholera originate, also, partly from a less degree of corruption of the elements, partly, and perhaps principally, from bad food. This corruption of the food is of a double kind, occurring either before it is eaten or afterwards, in the interior of the digestive canal, from weakness or chronic poisoning (we can less readily suppose an epidemic corruption of articles of food in sporadic cholera).

That, besides this, in every species of cholera, a predisposition is necessary, is clearly seen from the circumstance that, when epidemic, every one is not attacked by it. The nature and causes of this predisposition are in general the same as those adduced in the preceding section.

Dysentery, as well as cholera, may become strongly epidemic, and apparently contagious, but they are never properly contagious; these diseases, in relation to contagiousness, may be called transition diseases.

Whence comes the phenomenon that cholera sometimes comes on without the preliminary symptoms of the evacuative struggle, and is immediately attended with cramps and coldness of the extremities ?

This phenomenon is explained by relaxation and chronic disease of the digestive organs; for it only occurs in persons who have long suffered from weakness of these organs. By perverted diet, and particularly by taking much medicine, the stomach at last loses that muscular power by which vomiting is produced. *Vice versa*, it is a proof of especial health and strength of the stomach, when it at once, and without difficulty, rejects any unfriendly substance, and immediately recovers its excellent appetite—like the dog's stomach.

The same phenomenon of the coming on of cramps without vomiting occurs occasionally after medicinal emetics, and has exactly the same grounds. The stomach, too weak to expel the enemy, torments itself with attempting so to do, and this torment produces the nervous contractions of cramp. In this manner a man can die of an emetic, without vomiting, as has often enough happened.

These cramps, and deadly anxiety, occur also as a second stadium of cholera in those patients whose evacuative struggle has been disturbed and suppressed by medicinal interference. For the old art of healing, with its usual folly, combats the purging and vomiting, which are the curative efforts of the disease; in this way, it has killed by far more men in cholera than the disease itself.

3. *The Effects of the Water Treatment*

On cholera do not require to be specially pointed out, as they are exactly similar to those in dysentery. The burning thirst for cold water indicates, as a consequence of the infallibility of the animal instinct, that this drink is the only and sovereign remedy. It operates beneficially by diluting and mitigating the morbid matters, as also quite especially by expelling them by vomiting and purging.

When both these symptoms are still present, the water is used as drink, in clysters, in sitz-baths, and wet bandages. If, however, these symptoms have already been suppressed by medicinal treatment, and the second stadium, with the above-described skin symptoms, has been thereby brought on, then the water must, by wet packing, strong friction of the feet, and but little drinking

or bathing, be directed to re-awakening the activity of the skin until this end is attained, whereupon the water is then again to be directed to the digestive system.

4. *Effects of Medicinal Treatment of Cholera.*

In slight cases, slimy remedies are at first given, of which I have already spoken.

In most direct contradiction to themselves, the doctors give sometimes remedies to stop the excretions (which is commonly the case); at other times, remedies to excite vomiting. That the first mode of procedure produces enormous mischief is clear from my preceding explanations. The second procedure is quite as mischievous; for medicinal evacuative remedies consist in poisons, which neither mollify nor dilute the morbid matter already present, but the contrary: they consist in poisons which do not dissolve old mucus, but necessarily occasion a new secretion of mucus, because, without this protection, the walls of the stomach and intestines would be attacked, and more or less destroyed by the poisons.

In cholera, medicine has shown its mischievousness on the large scale. According to official reports, there died, in Russia, of the cholera patients, who, from their distance from doctor and apothecary, were not medicinally, and indeed not at all treated, not half so many as of those medicinally treated. A similar ratio to the disadvantage of allopathy presents itself on comparing the homœopathic and allopathic treatment. To this is to be added, that those cholera patients who do not die under allopathic treatment have always to endure a long, frequently a life-long, chronic illness, because the excretion of cholera matters is not encouraged by medicine, but rather prevented, and rendered wholly impossible; and because to these matters are added, over and above, the medicinal poisons which remain lying in the body, more or less, for life.

On the contrary, when the cholera patient has had no medicine, and when the evacuations are still in progress, it is scarcely possible that he should die under proper water treatment, and still less that he should suffer from sequelæ and chronic disease.

14. PRIMARY INFLAMMATORY DISEASES IN GENERAL.

Preliminary Remark.

Under primary inflammation is here understood that form of inflammation which physicians term acute, or synochous.

1. *Symptoms of Primary Inflammations.*

In all inflammations of *internal* and, in severe inflammations, of *external* parts, fever is present. In the inflamed part there is an unusual increase of warmth, up to heat, and an abnormal accumulation of blood, with which necessarily a high degree of redness is combined. These accumulations of blood produce an increased pulse, fill the vessels which are otherwise empty of blood, and occasion a pulsation and a beating in vessels where previously no pulsation was perceptible. In the inflamed parts there are pains, often of a severe pricking kind. Primary or curative inflammation is distinguished from secondary or destructive by its increased degree, and more rapid progress; the two species of inflammation are still more and more essentially distinguished by the abnormally increased formative impulse of all curative inflammations; whereas, in the destructive, this impulse never rises above the normal activity, but, rather more frequently, sinks below it, as is especially the case in typhoid inflammation.

The only point in medicinal pathology of which hydriatic pathology can avail itself, and indeed *must* avail itself of, is its symptomatology; but this must be done with the utmost caution and knowledge of the subject, if we do not wish to transfer many errors from the medicinal into the hydriatic pathology.

The symptoms here given of primary inflammations are to be found in all medicinal books, and they belong truly and originally to this form of disease. But the symptoms of that change of the constitution of the blood, and of the production of false formations, which medicinal pathology ascribes also to inflammation, belong entirely to the medicinal treatment of it: they are an effect of the medicine and the non-use of water; they are in themselves so foreign to inflammation, that not the slightest trace of them is exhibited when this species of disease is treated from the first with water.

2. *The Nature of Primary Inflammation*

Consists in an evacuative struggle of the organism against foreign acrid poisonous substances set free from slime, or in exalted formative activity, arising from partial lesions from external violence, as in wounds, burns, &c.

In what way the body, from false diet, or a false method of cure, is beset with foreign and acrid matters, and how these matters can lie for a time inactive and innocuous, enveloped in slime, and how they again can be set loose as a consequence of cold, or because the part of the body wherein they lie renews itself, and consequently dissolves and endeavors to exhale the old parts—all this has already been explained and demonstrated, and I must now turn to the detailed examination of the processes of internal inflammation.

Inflammation, as a consequence of external injuries, is not spoken of here, as it belongs to the section on surgical diseases.

Those matters which are first introduced as foreign and disease-producing into the body are usually dietetical, not medicinal substances.

The unassimilable matters of a false diet get into the body from an excessive use of salt, from eating putrified substances—as, for instance, stinking cheese, or acrid spices, as, for instance, pepper—or from alcoholic and intoxicating drinks. As a consequence of the law that the digestive organs can digest nothing which is more acrid than the gastric juice and the bile together, the above-named acrid matters, mixed with the food and drink, pass, unassimilated, with their acrid qualities, into the circulation of the blood, and through it into the whole body, while the remaining constituents of the food and drink are digested and converted into organic matter. When, in Diarrhœa, or in nausea, or in contagious eruptions, medicines are given, then, in addition to the dietetical acrid matters, actual poisons are brought into the body. In this way, a man, without having had an inflammatory disease, and been poisoned for it, may already carry about in him a considerable mass of acrid and poisonous substances.

So soon as these substances are set free from the slime, by severe and long-continued exposure to cold, they produce, by coming into contact with the nerves, severe pains. When the organism is not strong enough to undertake the struggle for their radical expulsion, these pains continue longer, return oftener, and are called rheumatic pains. When, however, the organism is strong enough for a radical cure, it carries out the solution of the slime still further, and does not envelop with new slime the foreign matters thus set free, but impels large volumes of blood into the organ where they are mostly present. Abnormal volumes of blood are requisite for various purposes—namely, first, in order to dissolve

more and more the slime, to impel the loosened poisons with the exhalatory mass towards the skin, to protect as much as possible the nerves and other organic tissues from the destructive power of the poison, which is carried past them towards the skin; and, secondly, to replace, by new formations, the partial lesions, which, nevertheless, are necessarily produced in the organic tissues, for which purpose much blood is required; for blood is the material out of which the vital power creates all organic tissues. From this necessity for the reorganization of organic lesions is explained the abnormally strong formative impulse in inflammation, which as yet has remained a riddle to all pathologists.

Blood is the material for all organic formations, but these formations, in the normal and organically complete form, are not possible without a supply of oxygen sufficient for the conversion of fluid blood into firm organic matter; and of hydrogen, for the conversion of excretory firm parts into the exhalatory fluid. Both these substances are the constituents of water. In inflammation, the body requires for the above-named ends both these substances in quite abnormal quantity—consequently, it requires water in abnormal quantity. Without sufficient assistance from these two substances, the abnormally increased formative impulse cannot work out the organic re-formation of destroyed parts to organic completeness, but necessarily produces malformations; and these are the false formations of inflammation, which physicians cannot explain, and which always occur when the necessary quantity of water is not supplied to the skin and the stomach—unless, indeed, the inflammation is from the beginning tapped off by abstraction of blood, upon which I shall hereafter further expatiate.

The fever, which is combined with every severe inflammation, finds its explanation in the abnormal activity of the organism, increased much beyond the normal pitch, and in the abnormally great expenditure of oxygen.

3. *The Effects of Hydriatic Treatment on Primary Inflammation*

Have already been explained in their principal features under No. 2. For the complete solution of all the slimed-up foreign matters in the inflamed part, the blood requires to be much diluted, in order that it may penetrate into the smallest spaces, and may have the utmost possible dissolving power. In order to convey the foreign matters to the skin, it requires an unusual mass of exhalatory

matter, for which water supplies partly the material and partly the means; for excretion out of the pores of the skin, finally, the latter requires frequent purification from these substances, and the refreshing, cooling, strengthening influence which water has upon it.

So much for the necessity of water for the object of excreting foreign matters. The indispensableness of water for the re-formation of organic lesions has already been discussed under No. 2.

4. *The Effects of Medicinal Treatment on Inflammatory Diseases*

Are diametrically opposed to those of the hydriatic.

In the water treatment the instinct is satisfied, in the medicinal it is maltreated; for in every primary inflammation the patient has the most ardent thirst for water for his skin and tongue, and in every disease—nay, in every condition—he has the most violent disgust for medicine and poison. By the water treatment, the symptoms are indeed mitigated, but yet so long kept up, that the end of the inflammation is attained. In the medicinal treatment, the symptoms, as curative efforts, are suppressed, and thereby the expulsion of the morbid matters, and the reintegration of organic lesions, are made impossible. A real cure by medicinal treatment is a physiological impossibility; rescue from death by medicinal remedies is indeed exceptionally possible. Blood-letting, in particular, is the most efficacious means for this purpose; for when, in that stage in which the blood has not yet become corrupted, sufficient blood-letting is employed, the necessary volume of blood for an inflammation is thereby withdrawn from the inflamed organ, and the inflammation must for this reason cease. Often enough the patient dies of debility from loss of blood, but more frequently he does not die; whereas, on the contrary, he almost always dies, if neither water nor medicinal (remedies under which I include blood-letting) are employed.

But the most fearful effect of blood-letting and poisons on inflammation is this—that, when not followed by death, they always leave behind a lingering sickness, which in most cases is much worse than death. As a rule, we find it stated in all medicinal therapeutics, that inflammations medicinally cured generally leave behind them a weakness in the inflamed part, which lasts the whole life. This, however, is far from being the worst effect of medicinal treatment; very frequently, after it, there occur, sooner or later, chronic suppuration, induration or conversion into cartilage,

morbid growths, scirrhous exanthema, which at last passes into cancer, or accumulation of an abnormal mass of serous fluid (dropsy), and even gangrene. These sequelæ of medicinally-treated inflammations are to be found cited in all medicinal elementary works. The process of production of such destructive diseases finds its general explanation in my previous dissertations, and I shall bring forward the detailed proofs when I come to speak of secondary diseases, farther on.

Poisons are less efficacious in suppressing inflammatory symptoms than blood-letting. Nevertheless, they aid and assist. In later times, mercury, in its various preparations, has been most employed as an antiphlogistic remedy, as well as a mass of other poisons.

When poison is introduced into the stomach, the latter must either forthwith expel it, or slime it up. For the first of these, much more strength is required than for the second. Sometimes the remedy aggravates the symptoms and brings forth new, although different, ones; sometimes it assuages the symptoms; the first occurs when the organism endeavors to expel the poison, the latter when it slimes it up and tolerates it. By due repetition of the doses of poison the organism is always forced into enveloping it in slime. It is self-evident that the symptoms, when these are curative and consequently voluntary, must remit, when a great exertion of power is called for, in another organ; the strength of the inflammation in any other organ must diminish exactly as much as strength is required in the digestive organs for the production of slime. In this way it is explained how poisons repress or altogether suppress the symptoms of inflammation.

The effect of medicinal treatment on primary inflammation is accordingly either death from exhaustion or the production of chronic disease in this way; that, firstly, the original morbid matters are neither expelled nor are the organic lesions replaced by new formations; that, secondly, new poisons are brought into the body, and settled firmly down enveloped in slime; and that, thirdly, by the abstraction of blood, the whole organism is weakened, and in particular the nerves are oppressed. By repeated copious blood-letting, a disorder of the nerves is often enough produced, which brings insanity in its train.

Sometimes the mere quenching of the thirst with water is sufficient to cure an inflammatory disease; but death is often the consequence, and a radical cure by such a mode of employing

water is very rare. But the employment of water, according to methodical hydropathy, under all circumstances, cures every primary inflammation with the utmost celerity and completeness, and death is scarcely possible when water is used from the first.

Primary inflammation is the purest and most powerful curative effort of the human organism. For a series of years it has been becoming always more rare and the nervous form more frequent. This is the effect of a method of cure which borrows all its remedies from the armory of death and the executioner—poison, fire, steel—these three words include the whole "apparatus medicaminum" of the art of mischief, which calls itself a rational one, but which is an eating cancer in the marrow of the human race.

15. INFLAMMATION OF THE EYES—INFLAMMATION OF THE BRAIN—INFLAMMATION OF THE NECK, OR CROUP—INFLAMMATION OF THE LUNGS.

1. *Inflammation of the Eyes*

Is separated into a great many sub-divisions, according to the degree of severity (taraxis, chémosis, ophthalmia), and according to the different parts of the eye which are specially the seat of inflammation (inflammation of the orbits, of the eyelids, of the ball of the eye, of the cornea, of the iris, &c.) All these, and a host of other sub-divisions, are, in hydriatic practice, not only superfluous but embarrassing and confusing, and may be quite overlooked. We will, therefore, here use only the general term, "inflammation of the eye."

When the organism, by means of an unusual exertion, endeavors to expel foreign, acrid poisonous substances out of the eyes, by means of a secretion of mucus from its glands, this can only be accomplished by an abnormally increased activity, which is here only local, and therefore cannot be completed without abnormal accumulation of blood and increase of heat. When the heat is not cooled with water, and the eyes are not bathed with water, the blood changes its quality, and false formations of various kinds are produced; not unfrequently, a skin grows over the pupil and brings blindness with it.

Inflammations of the eye are very frequently epidemic, as for instance, in Egypt, when the prevailing wind is loaded with fine sand, and forces it into the eyes; as also in large towns, when,

in the summer-time, dry heat comes on, and the fine stone-dust, which the wheels of a thousand vehicles grind off from the paving stones, is not kept down by watering, as for instance in Berlin. Allopathy here employs its antiphlogistics, applies leeches and Spanish flies, and smears poisonous salves into the tender organ of the eye, in which again mercury plays the principal part. He who in this way has been under the hands of such executioners, has three sorts of prospects before him: first, always and unconditionally chronic diminution of the power of sight, which generally very soon gets so weak that it becomes useless for most house-occupations; secondly, in most cases, life-long redness, periodical pricking and smarting, and nightly suppuration in the eyes; thirdly, in a great many cases, at the end of a term of years, blindness from deperdition of the optic nerve. It is clear from the previous deductions of this book how the poison, which is smeared into the eyes and forcibly absorbed, may be kept in check for many years, and how it may at last, notwithstanding, destroy the optic nerves. Blindness may occur twenty years or more after such a cure, and yet the cause of it is that same poison in material substance which at that late period destroys the nerve. In Berlin, as a chief seat of inflammations of the eye and of allopathy, for a long time back many hundreds have been blinded in this way by the most celebrated oculists, and no year now passes in which such victims do not fall into the night of blindness.

If, in the acute stage, water is immediately applied in eye-baths as well as in wet bandages, the purification of the eyes is soon attained, and not the slightest sequelæ are possible. If, after poisoning has already occurred, to the above-named remedies against chronic disease of the eyes are added the douche and head and feet baths, a recurrence of the acute crisis is always experienced, and by perseverance we obtain a complete cure and a restoration of the previous power of vision, presupposing always that the organism is not too old, and has sufficient vital power.

2. *Inflammation of the Brain*

Comprehends both inflammation of the brain and its membranes, the distinctions between which, and their correct terminology, are quite useless in hydropathy.

The symptoms of this disease are sparkling red eyes, staring or wild rolling looks; the vessels of the head are overfilled and beat

violently, with ardent general fever; the skin is dry, a benumbed and oppressive feeling in the head is followed by constant severe pain, which is increased by every strong impression on the senses, and which passes sometimes into furious, sometimes into torpid, delirium.

Inflammation arising from external wounds is here left out.

The nature of this disease consists in a violent reaction of the organism against foreign matters in the brain, which are set free by cold, by a systematic water-cure for chronic disease of the brain, or by an abnormal afflux of blood from excessive exertion of mind.

The effects of hydriatic treatment on inflammation of the brain are, expulsion of the morbid matters partly by sweat and eruptions on the head, but more by abnormal excretion from the cavities of the ears and the nostrils (catarrh); these excretions have frequently a quite abnormal color and acrimony.

Neither death, nor the foundation of secondary diseases of the head, is possible in the water treatment.

The effects of medicinal treatment on inflammation of the brain are either death from apoplectic and convulsive attacks, and paralysis of the brain, or a perceptible weakening of this organ, or the occurrence of secondary diseases, such as lingering inflammation, gradual suppuration of the brain, accumulation of serous fluids, softening of the brain, and at last insanity.

3. *Croup, or Inflammation of the Neck.*

Under the term croup are included at times all inflammations of the different organs and parts of the neck; at others, only inflammations of the air-tubes, as also inflammations of adjoining parts.

Besides the above-cited general symptoms of inflammation, we find in croup a cough which has a hoarse and barking tone, and in inflammation of the œsophagus a difficulty in swallowing.

The skinny croup gets its name from the skin-like excretion which, in default of water-treatment, is frequently formed, and produces death by suffocation. This skin belongs to the false formations from inflammation, which were spoken of above. In the water treatment they can never occur, as indeed, in general, all descriptions of croop are quite free from danger under this treatment.

When under medicinal treatment death does not occur, there always are sequelæ, which, in the more favorable cases, consist in a disposition to fresh attacks; in the more unfavorable cases, how-

ever, in chronic inflammation and suppuration of the organs affected by the croup—farther, in indurations and ossifications of the trachea and œsophagus, moreover, in the occurrence of scirrhus and cancer. Laryngeal phthisis is also an effect of medicinally treated inflammations of the neck.

4. *Inflammations of the Lungs and Pleura*

Have similar symptoms, and are similarly treated in hydropathy. Severe oppression of the breast, and difficulty of breathing, with ardent fever, pain in the breast, sometimes dull, and sometimes pricking, hot breath and ejection of slime, and often of blood, are the symptoms of inflammation of the breast.

The effects of hydriatic, as of medicinal treatment, are throughout corresponding to those in other inflammations. In the water treatment, the real cure is completed by critical evacuations, by means of cough, and generally also by sores; in the medicinal treatment, the above-named sequelæ occur, and, in particular in the last instance, suppuration of the lungs, commonly called consumption.

Inflammations of other parts of the body, as the liver, the tongue, the heart, the diaphragm, the stomach, the intestines, the spleen, the kidneys, the spinal marrow, the uterus, &c., are quite analogous, in general, to the above described, as well in regard to their symptoms and nature, as to the effects which hydropathy and medicine exercise upon them; nevertheless, each of them is modified by the different construction and functions of the various organs. I must, however, dedicate the very small space which I can yet give to primary inflammations, to the discussion of Metastases.

When, as is usual, there are morbid matters present in various organs of one and the same body, and they are set loose from their enveloping slime by cold, or any other cause, true and energetic inflammation can, in the ordinary course, come on in one organ only, because the organism in general has not the strength to undergo victoriously the inflammatory struggle in two different organs; the exceptions are very rare, and only in extremely robust constitutions—be it observed, I speak only of primary, active, and pure inflammations, not of rheumatic, still less of insidious lingering ones. In this there is no contradiction of the statement that the neighboring parts and organs are simultaneously somewhat

inflamed; for this simultaneous inflammation arises only from a side-working of the self-active inflamed organ, and, from the sympathy of the neighboring parts, could not fail to occur.

Another phenomenon, not to be confounded with the statement just made, is the transplanting of inflammation from one organ to another, and that, too, a nobler organ, and one more essential to life. This transplantation of a disease, and in particular of an inflammation, is called Metastasis (true Metastasis).

Metastases are, generally, the effects of a false medicinal treatment. The true Metastases are only produced by new exposures to cold; the false Metastasis arises from medicinal poisoning.

I call a true Metastasis one which is produced by a forcibly-altered direction of the juices, and especially of the exhalatory fluids; the force which produces this seldom consists in cold from cold air, but so much the more frequently in a false employment of cold water, and still more of ice. If we protract the use of cooling water-compresses, or local baths in cold water too long, without in the intervals, by means of warming wet bandages, giving the organism time and means for reaction, the exhalatory fluids are thereby forced into other organs, and produce therein a loosening of slimed-up morbid matter, and hence a new inflammation. The original inflammation in the first organ must remit, because the organism has not strength for two simultaneous inflammations, consequently it must slime-up again the morbid matters set free in the first inflamed organ. In this way, out of an inflammation of the abdomen, by false employment of water, an inflammation of the breast can be made, or an inflammation of the brain from that of the breast. When physicians employ water in inflammation according to their method, they use it always too cold, and protract its use too long, so that they almost always must produce Metastases; they also use ice, which must be entirely excluded from true hydropathy. Under a proper employment of water the occurrence of a Metastasis is an impossibility, and the directions for such an employment of water can be given so simply, and made so self-evident, that the most ignorant, when he has read them, cannot go wrong. In my "Introduction to the Practice of Hydropathy" I will lay these down.

I call false Metastasis that transplantation of inflammation which is produced in another organ by poisonous substances newly introduced into the body. When, for example, for inflamed eyes mustard-plaster is applied behind the ears, or to the nape of the

neck, this is a false Metastasis, which is purposely produced by the physicians for the purpose of (so called) abduction. Very commonly they effect this unintentionally, by the internal administration of poisons, but quite in the same way. It is clear that the primary inflammation of one organ must in some degree remit, when by irritating remedies inflammation and ulceration are elsewhere produced, and the strength of the body is hereby divided; but it is quite as clear that the morbid matters in the primarily inflamed organ can in this way not be got rid of, but that new poisonous matter must be introduced into the artificially inflamed part.

True Metastasis is distinguished from the false by greater energy, and more strongly impressed primary character; the latter, in most cases, has already something of the chronic and insidious form, and sometimes passes into this form.

16. COUGH AND CATARRH.

These are morbid symptoms of the commonest and slightest kind, and in their origin are always curative attempts at expulsion of morbid matter, by secretion of mucus. In chronic cases, they lose their primary and curative character, and degenerate into various secondary forms, as for example, into "stopping of the head," or into dry cough, which occurs in some chronic affections of the neck, and as a precursor of suppuration of the lungs. We have here only to do with the primary forms, which are never of long duration, and which bring about considerable secretion of slime.

The excretions from the brain, that is, the excretory substance of the brain itself, as well as foreign poisonous matters, which have got into it through the circulation, are mostly excreted through the nose in mucus, less frequently out of the ears, least of all and only in disease, out of the orbits. Primary catarrh is thus an excretion of acrid foreign matters from the brain, and the inflammation of the mucous (Schneiderian) membrane of the nose, is produced by the acrid and corrosive power of these matters coming into contact with it. Allopathy, which in its supreme superficiality generally takes the symptoms, and even the effects of disease for its essence, looks for the nature of catarrh in an inflammation of the Schneiderian membrane, whereas this is only an *effect* of the catarrh, and the essence consists in a purification of the brain. Exposure

to cold is the usual cause of the occurrence of this purification, since the taking cold sets loose the slimed-up foreign matters, whereupon the purificatory struggle begins. Every one's feelings tell him that the cause and the seat of catarrh do not lie in the glands of the nose alone, but also, and much more, in the brain, since in the beginning of the catarrh confusion in the head comes on, and at the end of it, is succeeded by a feeling of comfort and increased freedom of the brain, which also manifests itself in lightness and freedom of the intellect, which at first was much oppressed.

Quite analogous are all the phenomena, processes and causes of primary cough. With similar superficiality, allopathy explains its nature to be an inflammation of the mucus glands of the neck, whereas it is to be sought in an expulsion of foreign matters from the lungs.

It is matter of rejoicing to see how primary cough and catarrh, under the water treatment, increase their excretions, and in this way are quickly cured.

Stopping of the head is by the water-cure converted into running catarrh ; and in like manner, dry cough, pain, and oppression of the breast, are converted into a critical cough, by which the morbid matters are expelled, enveloped in slime, when they otherwise, at a more advanced stage, would have produced suppuration or water in the chest.

The acrimony of the excretion in catarrh and cough, which, especially in the first, are often so corrosive that they painfully affect and give an inflammatory redness to the nostrils, and even to the adjoining part of the upper lip, proves sufficiently, that in the excreted mucus substances must be contained, which are something quite different from simple mucus, which, as is well known, is altogether a mild, tasteless, and inodorous substance.

In the great field of disease, the group of inflammatory forms borders on that of rheumatic, and in individual cases it is often doubtful under which group they ought to be classed. Primary cough and catarrh are also frequently transition-forms between these two groups.

17. INTERMITTENT FEVER.

Fever is usually divided into angiolic fever, (fever of the vessels,) intermittent fever, and nervous (typhus) fever. Angiolic fevers,

again, are divided into primary and secondary; to the first belong inflammatory, to the second, typhus and putrid fevers. Catarrhal and rheumatic fevers form a transition-group, and according to their more inflammatory, or more nervous character, incline sometimes to the primary angiolic fevers, sometimes to the nervous.*

Among fevers, only the primary angiolic and the intermittent belong to the class of primary diseases; catarrhal fevers also belong to it, for the discussion of which we have no room in this edition; they belong to the most unimportant and best known morbid phenomena, and their nature is clear from what has been said on inflammatory and rheumatic diseases.

The symptoms of a disordered or diseased stomach in fever, give to it that character which is usually named gastric. In the pure inflammatory form, the gastric character is wanting; on the other hand, in intermittent, it is co-existent, and often predominant. Intermittent, is distinguished from gastric catarrhal fever, by its complete cessation for a fixed period, after which it again recurs; there is a daily recurring intermittent, one in two days, and one in three. There are also intermittents which at distinct intervals return twice daily.

Symptoms of Intermittent Fever.

I do not consider the preceding, and often very violent rigor, which is always the forerunner of inflammatory as well as intermittent fever, as a diagnostic and characteristic symptom, because it is no "characteristicum," and because, moreover, I do not consider it as belonging to the disease itself, but as a preparation for it.

The symptoms of intermittent are blueness of the lips and nails, scanty secretion of watery urine, and a small quick pulse during the period of rigor. During the hot stage, which generally spreads itself downwards, the pulse is full and quick, but still hard; the urine becomes of a clear bright red color, the head is affected, and in the stomach there is a feeling of faintness. To the dry heat, succeeds sweat, with a softening pulse; the sweat has always an unpleasant, generally sour smell, and the urine throws down a

* This division is somewhat different from that adopted in the English school of medicine, in which fever is generally divided into three classes, inflammatory or synochous, intermittent, and typhus. The nervous fever of the German school seems to come nearest to our typhus.—*Translator.*

copious precipitate, when it is allowed to stand for a time in a glazed vessel. During all the above described stages there is an ardent thirst for cold water, and in the course of the sweating period there is also a desire for a bath.

2. *The Nature of Intermittent*

Consists in foulness of the stomach, in disturbed activity of the skin, along with the presence of morbid matter under the latter, and in a reaction of the organism against these evils. The fever is an attempt to expel the morbid matter, by sweat, out of the skin; the severe thirst during the period of rigor, which does not exist in that of inflammatory diseases, does not proceed from abnormal need of oxygen for new formations, but from the necessity for a solvent fluid, and proves the attempt of the organism to dissolve the slimy corrupted matters in the stomach, and then, by means of water, to expel them by vomiting or diarrhœa.

The cause of intermittent lies in disorder of the stomach, which is sometimes produced by faults of diet, sometimes by miasmetic admixtures in the air and water, sometimes by both these morbid causes together.

3. *The Effect of Hydropathy*

On intermittent is a real cure of the disease by purging, vomiting, and critical sweat and urine. The water introduced through the stomach into the circulation, sets free the morbid matters from the enveloping slime, and brings them into the current of exhalatory fluid towards the skin. The bath strengthens the skin, purifies it, keeps the pores open, and by the consequent reaction conducts the current of fluids from the interior towards the skin.

Although the water-cure always radically cures intermittent, when it is timely employed, it does not effect this so rapidly as in inflammatory fevers, because intermittent is already a compound disease, and because it is no such pure and energetic curative form as the inflammatory.

4. *The Effects of Medicinal Treatment.*

In this, as in all other cases, medicine suppresses the symptoms, and thereby converts the primary into a secondary disease,—*i. e.*,

into a chronic settling down of the morbid matter. The febrifuges of physicians are cinchona, belladonna, arsenic. Since the curative efforts in fever principally spring from the stomach, the latter must desist from these efforts, when substances which are injurious to it are introduced into it, and paralyze its powers. Then, naturally, the curative symptoms of the fever cease, and the doctors, when they have suppressed these by poison, or abstraction of blood, think, or at least say, that they have cured the disease. His own feelings always tell the patient the contrary; feeling and instinct, in primary diseases, never err, and never lie. Physiology and true pathology likewise say the contrary, and the tardy workings of such medicinal healings teach in a fearful way the contrary.

Medicinal remedies always drive away intermittent for a time, but it always returns when the organism has somewhat recovered itself. Then is medicine again given, and, often enough, it converts the curative disease into a destructive one, into a mucus, or even into a putrid fever. These conversions by medical treatment often occur immediately, without an apparently healthy interval. Even after such intervals, and indeed after a series of years, there occur, not unfrequently as a consequence of medicine, ossification of the stomach, dropsy, enlargement of the liver, with diminution of the heart, and other destructive diseases.

The diet in intermittent must be regulated by fixed rules; in the other primary diseases, previously spoken of, instinct and appetite are the only and infallible regulators of diet. In this, and many other respects, intermittent forms the transition from primary to secondary diseases.

18. CONCLUDING REMARKS ON PRIMARY DISEASES.

Although the rules for the practical employment of water against disease, along with the rules for diet, belong to a system of therapeutics, and consequently must be excluded from this book, still the statement of the practical fundamental rules is in its right place in a system of pathology, because, from the latter, the foundation of the therapeutic system must be deduced.

The colder the water is, the stronger is the reaction of that part of the body with which it is brought into contact; the colder it is, so much the more does the reaction accelerate the circulation, and thereby excite to an abnormal degree the activity of the

organ to which it is applied. Since, now, in all fevers, there is already an abnormal excitement of the circulation, the employment of cold water, as a whole bath, or for washing the whole body, is in these diseases *injurious*, and we must employ chilled (abgeschrecktes) water of from 56° to 77°. At least we must recollect *that fever is increased by cold water, but is mitigated by chilled;* the mitigation occurs from the chemical operation of the water, the excitement from the dynamic power of its cold. Exceptional cases may occur, in which the experienced water-doctor may think fit to increase the fever, and therefore to employ for a time cold water, but the laic must never attempt this; and in general, to avoid much mischief, it is necessary to keep in mind the above-named fundamental rule.*

Instinct indicates in all primary diseases the proper mode of employing water with such absolute infallibility, that in fevers it has a repugnance against cold water, even when the patient, when free from fever, is accustomed to it, and when his instinct then prefers it.

In thus closing the discussion of primary diseases, I do not pretend by any means to have exhausted the subject, but refer to the title-page, which only promises "*outlines*" of pathology.

N.

SECONDARY OR DESTRUCTIVE DISEASES.

1. GENERAL PRELIMINARY REMARKS.

Although the remodelling of the section on primary diseases which I have undertaken, neither in the comprehensiveness of the material nor in the arrangement and form, has attained that degree of perfection for which I would strive if I had more leisure for writing, I am compelled by many circumstances, in this section on secondary diseases, to be still more superficial, and again to print it, with but few changes in its former shape and contents.

* *Note by the Translator.*—These observations are of great importance, as Priessnitz himself, in his later practice, has done much mischief by his indiscriminate use of cold water; and the majority of so-called water-doctors, being servile imitators of him, without his tact and experience, have in this way done still more to bring the whole science into discredit.

As, in all classes of things created by the human intellect, there are individual groups of transition, this is also the case in every imaginable classification of disease. With more leisure, I would dedicate a special section to the transition groups; at present, I must content myself with designating verbally, as such, those forms of disease which constitute this group, without, therefore, giving them their proper place in this book.

2. THE MODE OF ORIGIN AND THREE STAGES OF SECONDARY DISEASES.

In discussing primary diseases, it has been already shown how poisonous and medicinal substances convert primary into secondary diseases.

False diet is generally co-operative in the development of secondary illness. In this I comprehend eating acrid articles of food, and alcoholic liquors; further, the want of bodily exercise, residing in unhealthy and corrupted air, as is but too often the case in the houses of the poor, and the eating relatively too much at meal-times. He who has not a strong stomach should never eat his fill; nor should he who leads a sedentary life, even when he has a strong stomach—for one departure from nature drags the other with it. It is unnatural not to satisfy the appetite, but it is also unnatural to lead a sedentary life. Only those who have strong stomachs, and, moreover, take much exercise, should always eat their fill, presupposing that they follow water diet.

Other co-operative causes in producing secondary disease are—over-exertion of single organs, especially of the brain and the organs of generation, and moreover, emotions of mind of a strong or depressing nature.

A disturbance in the equilibrium of the circulation and other functions is produced by long continued false and partial use of cold water. He, for instance, who daily washes his face and head with cold water, but his feet never, or very seldom, must, sooner or later, bring on coldness of the feet, and an accumulation of blood and heat in the head. Affections arising from false circulation of the blood are called, in common life, "fulness of blood"; but the idea which is at the bottom of this expression is quite a false one. There is no such thing as an affection from fulness of blood—*i. e.*, one arising from *too much blood*—the apparent affection always coming from false and unequal circulation of the blood.

In cold water lies the remedy for this affection; but, for this end, it must be used in exactly the opposite way to that which physicians intend and advise.

Secondary disease has three different stages, which indeed, in reality, are not sharply distinguished, but pass insensibly into each other.

The first stage is the period of frequently recurring exertion of the body to reproduce an acute disease for its cure; but these attempts never succeed perfectly without the assistance of water. In this stage, acute pains frequently occur, which either terminate in a hot, red swelling—as, for instance, in tooth-ache and other rheumatic affections, or which find a vent in abnormal secretion of slime out of the nostrils, air-tubes, eyes, throat, or bowels, or which succeed in throwing out eruptions or sores. All these various forms are decided signs that the body has still the power and the will to cure itself; but it has no longer the power to effect this by a general and radical reaction, by a real acute disease, but attempts to attain it by degrees, by frequently repeated partial struggles of an acute form. When, in this stage, a new attack on the organism takes place, perhaps arising from cold, it always reacts against it by acute pains; and, when the painful curative efforts of this first stage are suppressed by medicine, then the organism passes into the second chronic stage of disease, which is an apparent state of tolerable health, and a state of rest. In this stage, the organism has no longer the power to attempt its own cure, but still enough to retain in *statu quo* the netted and hedged-in morbid matters. When, in this stage, unfriendly influences act upon the body, it no longer attempts to expel the morbid matters thus stirred up, but rather to re-envelop them. For this reason, the previous acute pains, which are nothing else than the battle-music of the curative combat, pass off, and instead of them comes on an uncomfortable, dull oppression of the nerves, in which the patient feels an anxious longing for the pains. Instead of the pains, however, two much worse symptoms set in—firstly, diminished power and energy of the whole machine; and, secondly, the consciousness of the sick man, which tells him that all is not right under his skin, that there is an enemy there, that there the germ of death is forming and moving itself.

Not unfrequently there comes with the second stadium a corpulence of a well-known kind, that embonpoint of superfœtation, with its peculiarly puffed-out and impotent expression, combined

usually with baldness and dimness of the eyes. When to this is added a little rouge on the cheeks, the whole looks like a mockery on the healthy man—like a stuffed doll. Nevertheless, a patient in the second stage can look tolerably well after his affairs, and is generally reckoned a healthy man, because he is thick and fat, and has no acute symptoms.

The third stage is that of annihilation—either of single organs and senses, when the affection is only local, or of life itself, when it is general, or in organs which affect life. In the last case, this stage is a tedious, fearful, chronic dying out, the struggles and pains of which may last for several years.

In this third period, the organism has no longer the power and the juices to tame down continuously the internal unfriendly matters by envelopment; on which account, being set free, they begin to corrode and ulcerate the interior; first of all, in those organs and parts of the body where they are most copiously deposited. Thus arise chronic suppuration of single internal organs, of the lungs, of the liver, of the stomach, &c. Thus arise, moreover, caries of the bones, and the so-called fistulæ and cancers; also the giving way of the walls of blood-vessels, which, in the larger arteries, occasions death. Thus arise, also, the destruction of single organs of the senses, especially of the sight and hearing. Thus arise, also, deformities and faults (the congenital naturally excepted), formation of cartilage, ossifications, polypuses, and growths of all kinds—all through poisoning.

Many diseases of the third period may come on at once after poisoning, without being preceded by the two first stages, when the poisoning has been pushed, by bunglers, beyond the rules of the medical art.

To the third stadium belongs the chronic, pale, and cold swelling, called dropsy. (See below the process of production of this disease.)

It is certainly possible that a chronic disease may arise from one or more of the above-named faults in diet; but it is an extremely rare case when this happens without the co-operation of poisoning by medicine.

Whoever in an acute disease, has taken an energetic medicine, has lost the possibillity of dying a natural death from the weakness of old age; he must, sooner or later, die miserably of a secondary disease, unless, indeed, he cures himself, and regenerates his body by the water-cure and water diet.

Thou, who readest this book, when the black bowl of poison is held out to thee, cast it from thee, mindful of this warning: that what thou to-day drinkest, will, in a future year, bring thee a death of lingering disease.

Are not my deductions on the late, though deadly, workings of poison obvious enough to give thee of themselves conviction? Must thou have proofs from experience also? These, too, are not wanting.

The famous Toffana, in Naples, knew how to arrange her doses so that, according to the wish of her customers, they effected the death of the victim within various periods, either immediately, or after one year, or after ten. This lady was a medical genius, and most assuredly she would have "cured" acute disease, according to rule, with her little "remedies," since it was so easy for her to measure out the exact dose. Many victims, also, of Brinvilliers and Gesme Timm died of one or other of the above-cited secondary diseases, some years after having been poisoned.

I should be sorry if, in spite of what I have said, any one should rejoin: "These criminals gave poison, but doctors give medicine." Not taking into account that, according to every appropriate definition, poison is identical with medicine—(the only difference lies, not in the thing, but in the intention; when poison is given to do an injury, then it is called poison; when it is given under the illusion of thereby healing, then it is called medicine)—and that the intention alters nothing in things of similar nature; physicians nevertheless, in all energetic, acute diseases, administer poisons even according to the most confined terminology, in which only the most destructive poisons get that name—they administer arsenic, mercury, belladonna, prussic acid; in short, they empty the whole arsenal of death.

3. CURE OF SECONDARY DISEASES.

Since the causes of complete diseases are foreign matters in the suffering organism, which must be conveyed out of it, a real cure is only possible through the activity of the organism supported by the decomposing power of water, by which the skin and stomach are brought to exert their strongest reaction and greatest activity.

In acute diseases medicine blinds the eye of a dull-sighted observer by the appearance of healing, which poisoning spreads over its pernicious work by driving away the symptoms; but, in chronic

disease, no delusion is at her command, and she acknowledges her impotence.

Hydropathy cures all secondary diseases in the first and second stages with perfect certainty. He who, in the first stage, goes into a water establishment, may reckon upon an equally quick and radical cure, since his body of itself presses forward to crisis and cure. Those in the second stage must make up their minds to a tedious cure, because it requires a long time to be brought back to the state of the first stage, whereupon then the cure is certain. By perseverance, they will be healed from all their sufferings, and will not only recover their former health, but also their bodily strength.

Patients in the third stage are only partially and conditionally curable, and have so long, and laborious, and disagreeable a cure before them, that they must examine themselves well, to see if they have the will to persevere.

The first condition of curability is always this,—that there is still enough of vital power left; and the second, that no suppuration of the lungs has yet set in. With these two pre-suppositions, the water-cure cures advanced suppuration of internal organs,—such as those of the mouth, the œsophagus, the stomach and the bowels,—because, in these cases, the water, by drinking and clysters, can be introduced directly into them. Of cancerous diseases are curable, the external, and those in the stomach and bowels (?); also fistulæ; moreover, all external chronic suppurations, which are a sign of a good constitution, since the organism has the power to drive the morbid matters to the surface. Caries of the bones is also curable; as also diseased affections of all the senses; if their nerves are not yet wholly destroyed. Deaf and blind people have, in the water-cure, regained the power of acute hearing and sight. Finally, incipient dropsy is curable.

All these patients must make up their minds to a cure of from one to three years.* The cure lasts so much the longer the deeper

* Further experience has satisfied M. Francke that he has here rather overstated the time necessary for a cure. He seems to have had in his eye the results of the Graefenberg practice, where a cure of three years is by no means uncommon, but the unconscionable length of which is mainly attributable to the perverted system there adopted with regard to diet, clothing, and the use of too cold water. (See Part III.) In M. Francke's own practice, he has seldom had a patient under treatment for more than from six to nine months.—*Translator.*

the roots of the affection have struck into the organism, and especially when more affections than one are united in the same body.

It is not prudent, in such cases, to push the cure, and endeavor to force a speedy crisis. Before the latter is possible, a long period of recovering and strengthening must elapse—not reckoning the exceptions, where the organism is yet strong, and the affection is only local. In ordinary course, it is not judicious to let such a patient sweat daily, until a crisis comes on; it is rather preferable, at fitting periods, to alternate water-*diet* alone, with the proper water-*cure*.

4. WANT OF APPETITE—HEARTBURN AND ERUCTATION—HARD AND SLUGGISH STOOLS—FALSE MUCOUS OBSTRUCTION—WORMS.

Continued loss of appetite may have its origin in two different organs—namely, in the stomach (and bowels) and in the skin. When the first organ is diseased and weak, it is not capable of converting the food, quickly and normally, into chyle and blood; when the second organ is weak and inactive, there is no longer the normal necessity for much blood, because the inactive skin does not exhale with sufficient quickness the excretions of the body. When this excretion stagnates, there is no place, nor desire, for new formed matter, consequently, not sufficient appetite.

Sluggish digestion is removed by the internal use of water; stagnating cutaneous exhalation, by the external use of water. In this lies the reason why the cold bath so decidedly increases the appetite. If, at the same time, water is not drunk, the digestive organs cannot supply as much as the skin excretes, and as the body therefore demands, if it is not to lose weight.

Experience has given, as an average result, that in the water diet from one-half to as much more is eaten, as in the old coffee, wine, and beer diet, from which we may draw the irrefragable conclusion, that, in the water regime, the body is renewed from a half to once, more quickly than under the old regime. If the natural cycle of complete renewal of the body comprehends four years, it requires in a so-called healthy man, under the old diet, six or eight; in a chronically sick man still more, or rather, in such a case, no further radical renovation is possible.

Only when the body, as intended by nature, quickly renews itself, and the excretory flesh, &c., is dissolved and exhaled, has

the latter the normal firmness, hardness, and strength; the more slowly the process goes on the tenderer, softer, and flabbier is the flesh, and, in particular, the organism is inclined to the production of fat, pre-supposing that no exhausting chronic evil is present. It surpasses all expectation to watch how a thorough water diet converts the flabby, miserable, tender-like flesh of the coffee, brandy, and medicine diet, into muscles of iron.

Heartburn and eructations, as habitual phenomena, arise in this way. In weak and diseased stomachs the food and drink pass into acidity, of which the stomach then seeks to rid itself. The heartburn and eructation are to be regarded as an incomplete attempt at vomiting, and, by a proper use of water, they pass into the latter, whereby the stomach is then purified. This, in most cases, is quickly attained by water; but it requires a much longer time so to heal and strengthen the stomach, as that it can digest normally, and that hereafter no acidity can arise in it.

Hard and constipated stools arise from weakness, inactivity, and too small a secretion of fluid in the large bowels, and especially in the rectum. When the digested chyle is absorbed in the ileum and jejunum, there remain, of the digested mass, the thicker, and therefore not absorbable constituents, which pass in a dried-up state into the large bowels, into which, normally, a considerable quantity of mucus and fluid is secreted for the purpose of carrying forwards the excrements. When, however, from taking much medicine, the vessels of these bowels are dried up and partially destroyed,—moreover, when by much sitting, an inactivity of the rectum is produced, this slimy fluid is not secreted in sufficient quantity, and the stools become hard and sluggish.

False mucous obstruction is that diseased state of the stomach in which the food is not duly dissolved, but passes into a slime-like mass. This phenomenon arises in weakness of the stomach from a want of acidity and energy in the gastric juice. The most common cause of it is long-continued taking of medicine, whereby the nerves and glands of the stomach are weakened and partially destroyed.

Worms in the bowels only occur when there is disease and mucous obstruction in these organs; they are parasitical animals which do not exist out of the bowels, and therefore never can come into the body from without.

The worst species of these worms is the tape-worm. Many people avoid drinking water because they are afraid of swallowing

with it the young or an egg of the tape-worm. If these people would only take the trouble to think a little they would soon get rid of such a fear. Have old tape-worms ever been found in water? No. Whence, then, are the young tape-worms or their eggs to come into the water?

Tape-worm, however, can very easily arise from total abstinence from drinking water; for it is a parasitical animal which is generated in weak bowels, and the bowels can only retain their full energy by drinking cold water.

Those who saturate their children within and without with cold water may feel assured that they never will be tormented with worms and worm-doctors. The expulsion of worms by medicine can only have this consequence, that more are always generated, because the bowels are always weakened by the medicine; strengthen them and they will purify themselves with great energy.

The medicinal expulsion of the tape-worm is truly fearful. The worm is to be poisoned in the body, or so much poison is to be passed under his nose that he runs away in a fright. A fearful, senseless experiment which has already caused the death of many men, and is quite worthy of allopathy. Must not this poison go into the stomach, and consequently poison the container of the worm as well, and either kill him or make him sick? Even when the expulsion of the animals is attained, and the man escapes with life, the mischief which the poison does to the stomach and bowels is usually much worse than was the burden of lodging the animals.

All those causes which produce mucous obstruction and disease of the bowels may also become primary or remote causes of worm-disease: medicine, false diet, eating hot food and drink, deficient water drinking, &c.

I recollect, in my native town, a tragi-comic occurrence, where two ladies, an aunt and her niece, who, for fear of tape-worms only drank boiled water, but at the same time took a due quantity of medicine, tea, and coffee, both got tape-worms.

5. EXHAUSTING DIARRHŒA—TRUE MUCOUS OBSTRUCTION*—INDURATION OF SLIME, AND INDURATIONS IN THE WALLS OF THE DIGESTIVE CANAL—CHRONIC INFLAMMATION, OR SUPPURATION IN THE DIGESTIVE CANAL—CANCER OF THE STOMACH.

Exhausting diarrhœa arises from complete ruin of the absorbing bowels (the ileum and jejunum). When these bowels do not perform, or only incompletely perform the absorption of the digestive chyle, the latter passes with all, or most of the fluids, into the large bowels, and is expelled from them in a fluid state.

Secondary or exhausing diarrhœa has, therefore, quite a different origin from the primary. While the latter is produced by an abnormal secretion of fluid in the large bowels, the former arises from defective absorption in the small bowels.

It is certain that exhausting diarrhœa very rarely arises from other causes than from the continued use of strong medicines; I believe, indeed that it *never* arises from any other cause than poisoning.

The mode of origin of true mucous obstruction has been already explained. The nature of this disease consists in an abnormally copious secretion of mucus from the mucous glands. There is a double reason for this abnormal secretion, and true mucous obstruction has a double nature.

The first cause consists in disease of the mucous glands, especially in weakness of them, which is usually produced by medicinal treatment of primary inflammation of the glands, much seldomer by excessive exertion of single organs (as for example the organs of generation by excessive sensual debauchery), sometimes also by perverted diet and want of cleanliness.

Medicinal poisoning is here, as in every secondary disease, the chief cause. Often enough, under the hands of the doctors, are inflammatory, catarrhal, and even intermittent fevers converted into slime fevers: such a conversion is only possible by poisoning.

This kind of true mucous obstruction, *i. e.*, of abnormal secretion of mucus from disease of the glands, occurs more rarely in the digestive canal.

* From the novelty and importance of this subject the translator has been induced to insert, at the end of Part I., an additional chapter on it, taken from a later work by the author. For some cases illustrative of the treatment of this affection, see Appendix to Part II.

The second kind of true mucous obstruction consists in an abnormal secretion of mucus for the purpose of enveloping and mitigating poisonous substances forced upon the body. This species, therefore, does not arise from disease of the mucous glands, but from a protective operation of the organism against unfriendly matters forced upon it.

When sliming-up of the digestive organs has been produced, the old art of healing employs medicinal purifying remedies against its symptoms.

Emetics in a stomach which is not quite ruined, or not uncommonly weak, effect the expulsion of the remains of the food, of a portion of the emetic itself, sometimes also the whole of it; moreover, of the fluids that have been drunk, and especially of that mucus which has been newly called forth by the poison of the emetic; in one word, it effects the expulsion of the substances lying free and loose in the stomach. But the original old masses of slime, against which the vomit is given, and which by means of their tough adhesiveness stick fast in the dried-up spots of the walls of the stomach, can never be broken up without previous solution. On this account the old art of healing previously gives medicinal so-called solvent remedies. Physicians must have an extraordinary idea of the processes going on in the stomach, if they believe that these solvent poisons will address themselves, according to order, to the masses of slime, and break them up. On the contrary, as soon as a new medicine gets into the stomach, the latter must react against it, must prepare new slime to envelop it. Of the solution of the old mucus is so little the question, that it rather settles itself more firmly down, because the stomach, after the new poisoning, is always more affected and weakened. If, after the solvent remedy, there comes an emetic, it is certainly followed by a copious evacuation of mucus and bile; but these have only just been called forth by the remedy which was given, and therefore are still swimming loose in the stomach. The old mucus, which adheres firmly to the walls, can be dissolved and expelled by nothing except water.

Exactly the same is the case with purgatives, only with this difference, that these produce a new secretion of mucus, principally in the bowels, and occasion partial purging.

The oftener such medicinal purifications are undertaken, so much the more does the slime accumulate, and if the proceeding is obstinately continued, in the end these remedies have, at last, no out-

ward effect; they are heaped up along with the slime in the internal canals, for the power of reaction of the organs is broken. At last, a complete plastering-up of the bowels, and a lingering death may ensue, which, for nervous torments, has no equal.

If some of my readers are not convinced by my explanation of the effects of the operation of medicinal "purifying" remedies, I can bring forward proofs, from experience, against the striking power of which no opposition is possible—namely, those who, shortly after having undergone this process, particularly for intermittent fever, have betaken themselves to the water-cure, have frequently in it got a purifying crisis, in which not only large masses of slime, but also the medicines which they had taken, distinctly recognizable by the taste, have been brought up. Those who have been long subjected to medicinal treatment for stomach disease, may be assured that they harbor much slime and medicinal matter in the digestive canal,—they may rest assured that they will attain a radical purification by the water-cure, if they have *perseverance enough*, and can dispose of time and money, so as not to break off the cure before the coming on of crisis, or during its progress.

Some one who does not know the water-cure from his own experience will, perhaps, here object, that an excess of water-drinking in perfectly pure digestive organs may also produce vomiting and purging—possibly, indeed, vomiting, but never purging; and then what is vomited is nothing but *pure* water, without bad or medicinal taste. This vomiting is only possible when more water is forced upon the stomach than it can by the greatest extension contain, and instinct strives so much against this, that such folly can seldom happen. Two circumstances prove that in purificatory crises in the water-cure old impurities and slimed-up medicinal matters are at the bottom of them; namely, in vomiting it is proved by the masses of slime and their villanous taste, which is often unmistakeably medicinal; and in diarrhœa it is proved by the masses of slime which pass off, and a still more striking proof is this circumstance, that after the crisis is completed, no quantity of water will produce these evacuations.

The less important the mucous obstruction is, the sooner and easier follows the crisis; the older and greater, the later it comes, because in this case it requires a long time to strengthen the stomach, &c., so that it gets strength enough to produce and carry through the crisis. As soon as a feeling of comfort and energy has been attained, then begins the purifying combat. Most certainly

many people have left the water-cure without getting a crisis, because they gave it up too soon, and without guessing how it looked in the inside of their bowels.

In people medicinally poisoned according to law, the same appearances have presented themselves as in the dissection of those poisoned (assassinated) contrary to law, as, for instance, in many victims of Gesme Timm. Persons who, according to the secret confessions of this criminal, had long before been poisoned by her, and died some years after the trial, had in their stomachs a collection of hardened slime, which by chemical examination was found to contain arsenic. These unhappy victims might with certainty have been saved by the water-cure timely adopted.

In the preceding pages we have spoken of the effects of medicinal emetics upon stomachs not entirely weakened. If, however, the stomach is so weak that it is not equal to the strong muscular exertion necessary for medicinal vomiting, and if, therefore, no evacuation follows, it is at all times certain that the medicine remains during life in the body, since only a very small portion of it is absorbed by digestion; by much the larger, however, is settled down, enveloped in mucus, in the walls of the stomach, after the latter has separated the fluid in the medicine, the original water, from the solid and properly medicinal portions. It adopts this process in general with every fluid medicine. We must not believe that there is on earth any other drop-like fluid besides water; all other things, apparently fluid, are nothing else than a mixture of exceedingly minute solid substances with water. Although chemistry will, perhaps, never be able to separate completely from each other the fluids and the original solid atoms in any given mixed fluid, the stomach can do it, at all events partially; and it effects this, partly by its decomposing juice, partly, in poisonous fluids, by the newly-effused mucus, which is an admirable filterer, since solid matters remain fixed in it, while fluids trickle through. The stomach is the best chemist; and it acts in this way with all mixed fluids which are introduced into it, especially with medicines, if it does not immediately get rid of them by vomiting or purging. When, therefore, in this book, we speak of the settling-down of medicines in a weak stomach, this always relates only to the solid medicinal particles, for it is not at all intended to be maintained that medicines remain as a fluid mixture in the stomach, which, indeed, would be an evident absurdity. As soon as the solid parts, the real quintessence of the medicine in the stomach, are separated

from the water and enveloped in slime, the latter settles itself down, and in time hardens into a solid mass, just as the mucus, which in weak stomachs is effused into the mouth, and adheres to the teeth, hardens into tartar.

If the correctness of my reasoning on the inefficacy of medicinal emetics is disputed, and it is doubted that the slime evacuated by such means is only that newly called forth by the remedy, one can convince himself of it by administering an emetic to a pure healthy stomach. As soon as the latter has decomposed it, it feels that it is poison, and for double reasons it must prepare new masses of slime, first, in order to protect itself, its glands, nerves, vessels, &c., against the poison; secondly, in order to expel the latter, which is no otherwise possible than by the help of this slippery means of transport—unless, indeed, immediately after the emetic large quantities of cold water or milk are drunk, whereby the power of vomiting is afforded to the stomach, and it is spared the necessity of secreting slime. One may convince himself still more decidedly that vomits, in the purest, healthiest stomach, produce slime, if one of the so-called solvent medicines is previously given, and allowed to operate for an hour.

In an exactly similar manner do medicinal purgatives, even in the healthiest bowels, produce evacuations of mucus, and in the same way in obstructed bowels the evacuations after purgatives are never evacuations of old morbid matters, but of newly effused slime.

The water-cure for hardened slime in the digestive canal consists in much drinking, in sitz-baths, wet bandages round the body and clysters; it is here, as always, pre-supposed, as a first postulate of every water-cure or water-diet, that the patient takes a daily bath, that is, a daily washing or bathing of the whole body in cold or chilled water.

In old mucous obstruction, more water must at first be drunk than thirst requires, because the quantum required by thirst is quickly digested, and, therefore, has no time to dissolve the hardened mucus. But this drinking beyond thirst must not be pushed too far, if it is not to do injury. A couple of glasses beyond thirst are sufficient to afford the stomach the means of solution.

If, when sitz-baths are taken, water is drunk, and the body at the same time is rubbed and kneaded with the wet hands,—the

procedure has the most natural similitude to the washing out of a dirty cask.

The sitz-bath, by the conjunction of different effects, is one of the greatest among the great benefits with which the genius of Priessnitz has endowed suffering humanity. The effects of this bath, in regard to strengthening the digestion, and to exciting the purifying struggle, would appear truly miraculous, if it were not possible so easily and naturally to explain them.

Firstly, the bath, peculiarly efficacious from its long duration, draws out from the external skin and muscles of the lower belly the morbid and medicinal substances which have been long lodged in them, by producing eruptions and sores.

Secondly, it thoroughly strengthens the nerves of the ganglionic system.

Thirdly, by the general effect of cold water, as well as by the wet rubbing and kneading, it strengthens the muscles of the belly, and encourages the peristaltic movement of the bowels, without which digestion is impossible.

Fourthly, by its mechanical pressure, it encourages vomiting, when this is necessary. Other healing effects of the sitz-bath on other organs belong not to this place.

Wet bandages, in all respects, assist the operation of the sitz-bath.

Clysters serve for the purification and strengthening of the rectum, and in all cases of digestive weakness are a necessary part of the water-cure. For, where there is sliming up and weakness of the stomach, there are also sluggishness and accumulation of slime in the rectum.

Constipation occurs not only in chronic diseases of the stomach, but also temporarily, in almost every acute disease, when it is treated according to the old medicinal regime. The constipation and the medicine together naturally take away the appetite, and this so generally, that we are accustomed to regard loss of appetite as a natural, necessary effect of the disease itself. Take to water, ye who are sick, and you will preserve good appetite and good stools, and you will then perceive that the most important functions are disturbed, not by the disease, but by the physic. In water treatment the appetite sometimes fails for a day in sharp fevers, seldom for two, and never longer.

If, during an acute disease, a disturbed, constipated state of the bowels has been occasioned by medicine, and, at a later period, this

function again goes on normally, the old excrements, whose expulsion had been delayed for days and weeks, often remain lying in the rectum, to which they adhere by means of mucus, and become indurated. Their solution and expulsion are only possible by repeated cold-water clysters; at the same time, the rectum recovers its energy thereby. In persons who have sunk into the wretchedness of bad digestion and constipation, the clysters, at first, usually pass off before they are warmed in the bowel, and without being followed by any, or by any considerable, excretion. We must not be led astray by this; we must persevere, and the water will soon be taken up, and at intervals whole clysters will be absorbed, as a proof how much the bowels are in need of the healing element. Then follow normal stools, and, after a long period, perhaps after several months, begins the solution and expulsion of the old excrement, hardened into balls (scybalæ).

As the excrement hardens itself and is much compressed, it is possible that the rectum should garner up incredible quantities of it in a small space, before it becomes so stopped up, that atrophy or some other deadly disease ensues. There have been examples, in sea-voyages, that passengers for a long time, even for weeks, have had no stools, without entirely losing their appetite or health. Truly, indeed, the lower belly is distended by such an accumulation; nevertheless it is astonishing how it can contain the residuum of so many meals. When, at a later period, the usual soft stools again occur, without any excretion of the old hard, dry excrement, the circumference of the lower belly is reduced by the still greater compression of the latter, without, however, attaining its normal slenderness. In spite of this internal accumulation, tolerable health may be enjoyed for years; but, in the end, if no other disease cuts short life, it makes a natural death impossible; which, indeed, is always impossible, if chronic mischief lies concealed in the body.

Those parts of the stomach and bowels which are covered with hardened slime die out organically, and pass into induration, because these spots are prevented by the adhering slime from being organically active; they are prevented from secreting the gastric juice or absorbing chyle; they are prevented from throwing out their own excretions, and therefore renovation is also impossible. For these reasons, these portions must die off, and the spots covered with slime must pass into induration.

The symptoms of hardened slime in the digestive canal come

forth unequivocally in the beginning of water cure crises, and in dissections of dead bodies. The symptoms in patients *out* of the water-cure are in all such cases not very prominent. Pain there is none. If the slime affects only small spaces in the large bowels, no effects are perceptible for a long time, and symptoms sometimes never present themselves. An internal imperceptible working is indeed always present, and it consists in a somewhat repressed nutrition of the body. When, however, obstructions and indurations of this kind are present in the stomach, there are always still more important indurations in the bowels, because the slime always settles itself first in the latter, particularly in the cells of the large bowels. In the same proportion that a man has obstructions and indurations in his digestive canal, so is he leaner and paler. Thus, leanness and paleness are the chief symptoms of mucous obstructions, as also, in a high degree of this disease, hypochondria and affections of the nervous system. If a person suffers from all these symptoms, without having any distinct, visible disease, the digestive organs are always the seat thereof, and usually there is mucous obstruction in these organs. People of firm flesh and ruddy countenance seldom suffer from it, and never to any extent.

It is easy to show in what way mucous obstruction produces leanness and paleness. The more surfaces in the digestive organs are obstructed and indurated, the less surface is left in activity, for digestion and absorption of the chyle. In this way, a considerable portion of the nourishing matter of the food passes off unelaborated in the excrements. Hence, all people so affected are inclined to over-eat themselves, because the body demands more nourishment than the digestive organs can elaborate; hence, in spite of the quantity of food daily consumed by them, which, in a healthy digestion, would suffice for the continued nourishment of a strong fleshy body, theirs becomes leaner and leaner.

As most men have not sound digestive organs, when they satisfy their appetite completely, and to the point of not being able to eat more, they suffer great inconvenience. Hence has arisen the common rule, that it is healthiest to leave off eating before the appetite is fully satisfied. For medicinally poisoned stomachs, this prescription is a wise one, but for healthy stomachs it is an absurdity—namely, if, with health of stomach, an active life is combined. He who has recovered his digestion by a water-cure, and hereafter adheres to water-diet, feels himself most comfortable

and healthy when he eats his fill; and, indeed, in our moderately cold climate, fat meats are especially healthy to a sound man, particularly for sustaining the comfortable warmth of the body. Truly, indeed, he who has a stomach after the old regime, gets only acidity from fat, and ought not to eat it, and in general must not eat his fill: no more should he who leads a sedentary life.

Do you believe that Nature would have given to man an appetite for more than he ought to eat? Do you believe, also, that Nature has imposed penitences and privations on man? No; this has been done by man himself.

When the appetite of a sound water-stomach has been satisfied to the utmost with good fat bits, no penitence follows thereupon, but that highly enjoyable, self-satisfied state of digestion which only the healthy man knows.

With obstruction is usually combined hard and sparing stools, and congestion of blood in the head, eyes, and breast. All these disturbances and inconveniences disappear of themselves, as soon as the purification by water is completed. If, instead of this, medicine is continued, there comes on atrophy, iliac passions, induration of the bowels, or some such "scientific" wretchedness.

Mucous obstruction, and partial induration of the digestive organs, are seldom found among the lower classes, because these seldom take much medicine. The patients who come into water-cure establishments have almost all taken much medicine. According to my experience in a well-directed establishment, provided with good water, nearly a half of the patients get critical diarrhœa, and an eighth of them critical vomiting; so that nearly the half of them have hardened slime in the bowels, and only an eighth the same in the stomach.*

From the operation of sliming-up, of which so much has been said, and which the stomach performs on the poisons forced upon it, we can obtain an explanation of the reasons why certain portions and certain kinds of poisons, when introduced into the stomach, produce no sudden symptoms of disease; although, when introduced immediately into the circulation through a wound, they speedily produce death. This is the case with the poison of snakes, of which a portion can, without perceptible injury, be swallowed, which, if introduced into a wound, either occasions sudden death, or at least violent disturbance of the system.

* *Note by Translator.*—From later experience, M. Francke states the proportion of stomach cases as only one to sixteen of the other.

When, however, the doses of poison are too large, and at the same time the nature of the poison is too strong for the stomach to envelop them entirely in slime, they eat their way through the mucus, and not unfrequently occasion chronic suppuration in those parts of the stomach and bowels with which they principally come in contact.

Moreover, in discussing the mixture of poisons with mucus, it must be observed that an absolute envelopment of the poison is thereby never effected, but only a relative, and that always more or less of the poison thus swallowed is absorbed and carried into the blood; more when the poison mixed with slime takes its course through the bowels; less when the greater part of it remains lying in the stomach. Nevertheless, this second case is the most injurious, because the sanctuary of life, the focus of nourishment, is more injured thereby, than when the poison is carried out of the stomach, and introduced partially into the blood.

In chronic suppuration, the organism reacts under the ordinary diet, and without the help of water against the quick spreading of the mischief, only by constant adduction of its best juices to the part attacked. This incomplete reaction produces that sort of inflammation which physicians call chronic, and which has not an energetic, but rather an insidious character. By this reaction is effected, that the suppuration only goes on very slowly, or that it sometimes is prevented for years from making progress. So soon, however, as any debilitating cause, such as another disease, or old age, comes on, the work of destruction goes on quicker and produces death,—often many years after the occurrence of the poisoning.

The symptoms of this disease are, besides deficient digestion and nutrition, a feeling of burning or pricking in the stomach or bowels, which often alternates with a feeling of pressure. On the disease making further progress, there ensues vomiting of congealed blood, which proceeds from one of the blood vessels of the stomach, which has been attacked and corroded, or a discharge of blood from the anus, sometimes congealed, sometimes not. With insidious suppuration of the stomach there is also usually, though not always, periodical vomiting combined.

This disease is curable by water, if there is sufficient organic power left, and if it has not attained its highest pitch. The processes by which water effects the cure are easily pointed out. The water which is drunk performs, as above remarked, its course

through the whole circulation, before it is partially excreted by the urinary organs. It dissolves therefore, throughout the whole body, stagnating and slimy matters; it mitigates, by dilution, acrid and poisonous substances, and conducts them out of the body by exhalation through the skin, by the stools, and urine,—of course, when water is also properly and in due proportion externally used. Moreover, the water which is drunk comes into direct contact with the inflamed and suppurating portions of the digestive canal, is partially in its purity, before it passes into the circulation, absorbed by them, mixes itself with the acrid poisonous matters, which are the cause of the inflammation, thereby mitigates and dilutes them, and at the same time serves as a means of transport for their excretion. In this way it operates from within, through the small vessels in the walls of the stomach, and at the same time externally as solvent, diluent, and extracting. By its constituents, oxygen and hydrogen, it exercises another healing effect, in the necessary reconstruction of the nerves, glands, &c., which have been destroyed by the inflammation.

Cancer of the stomach arises from the same causes as insidious inflammation. It is a still worse disease, and occurs when the above-stated causes are present in a high degree, especially when combined with a general corruption of the fluids, and when corroding poisonous matters are deposited in the glands of the stomach.

Its symptoms are as follows:—First, The symptoms concealed in the stomach, which only become evident in dissection, are in the beginning an uneven hard swelling, which is painful, has a red color, passing afterwards into darkened lead or blue black, which grows into the adjoining parts, and at last breaks out into an ulcer, discharging an acrid, often bloody, ichor of various colors and disagreeable smell.

The symptoms perceptible by the patient himself during life, are burning and pricking pains in the stomach, vomiting of a stinking ichor, often mixed with blood, very bad digestion and nutrition, sleeplessness and constipation.

From this we see that the symptoms of these two last diseases have a great resemblance to each other.

Cancer is more difficult to cure than the above-named inflammation; but in its beginning, especially in strong constitutions, it is curable by water. The curative processes are entirely similar to those above described in suppuration of the stomach. When, however, the cancer has already broken out, and the organism, in

the struggle with it, is exceedingly debilitated, then no cure is possible. I have cured no small number of cancers with water, but I have also refused to receive into my establishment many such patients, in whom the disease had already made much progress, since a water-doctor must at almost any price avoid the occurrence of a death in his establishment. For this reason he must often refuse to receive patients who are not absolutely incurable, but in whom it is doubtful if the disease shall not speedily terminate fatally.

A great number of men carry the germ of cancer in them. These unfortunates have before them, in the hands of physicians, a painful death. If they had a knowledge of the nature of their disease, and of the different methods of cure, they would hasten to come into a water-cure establishment, before it is too late. Those who have a periodical feeling of burning or pricking in the stomach, often combined with a feeling of compression therein, have the germ of cancer in the stomach, or at least of chronic suppuration in that organ.

6. MUCOUS FEVER, NERVOUS FEVER, PUTRID FEVER.

1. Mucous fever arises generally from falsely treated catarrhal and inflammatory fevers; which false treatment consists in the employment of medicinal poisons, and a false diet. To the latter belong the deprivation of cold water, and eating warm glutinous soups, which are especially injurious when the patient has a repugnance to them, and yet must eat them by order of the doctor. It is very rare that a fever at once comes on with the character of mucous fever.

The symptoms of mucous fever are the following,—a quick but weak pulse, want of appetite, usually constipation, which sometimes alternates with diarrhœa, a whitish or dirty grey complexion, inclination to puffiness, and all the symptoms of a disordered stomach, such as eructation, a loaded tongue, a slimy disgusting taste in the mouth, distension of the lower belly. Combined with these, there are often catarrhal affections, which, however, do not belong to the character of the mucous fever, but pass over from the original catarrhal into the mucous character.

The cure of a mucous fever follows evacuations of mucus from the throat and bowels; moreover, critical sweats and eruptions. It is clear, from the preceding explanations, that these curative

processes are not only encouraged by water, but are made possible by it alone; it is moreover clear, that medicinal remedies are decided impediments to these processes. Very often, in the hands of physicians, is catarrhal fever converted into mucous, and the latter again into nervous,—daily experience teaches this. In hydriatic treatment, such a change for the worse is an impossibility.

2. Nervous fever appears quite as rarely as an original form of disease, and is, quite as usually as mucous fever, a concoction of the doctors; it develops itself under their hands from gastric, inflammatory, and even from intermittent fevers. Nervous fever is no curative disease; what I have said in my first hydriatic work, "The Spirit of the Gräfenberg Water-Cure," on this fever, proceeds from an incorrect view of the disease, and requires the correction here given. That pamphlet was written during the first period of my own water-cure, and wants the eight years' experience which I have since had, and the researches I have since made.*

Nervous fever arises when, in an organism beset with morbid matter, an impulse is given to the production of a curative fever, but in which the completion of the curative form is impeded by weakness of the nerves, and usually also by the torpor of the skin. Under curative fevers I comprehend inflammatory, catarrhal, rheumatic, gastric, and intermittent fevers.

From this explanation of the nature of nervous fever results the explanation of the reason why the above-named curative fevers, in the hands of the doctors, so often degenerate into nervous fevers, —namely, because, by abstraction of blood and poisoning, the organism is deprived of the power of sustaining and completing the curative fever, since by these disturbing aggressions the nervous system is lowered and made unfit for every curative fever, and since, finally, by the non-employment of water to the skin, the latter is so weakened, that critical evacuations in sufficient quantity cannot take place from it. Under all these impediments, the febrile excitement passes over principally into the nervous system, and in the compound form of disease, thus arising, there are combined nervous pains and ardent fever, which is called nervous fever.

* The little pamphlet here alluded to, is written in an exceedingly lively and original style, the author seeming fully inspired by his subject; it exalts Priessnitz's fame to the skies, and has, perhaps, done more than any other book to establish his reputation—unfortunately now unmerited. The pamphlet has been translated and published by a Doctor Schieferdecker at New York; without, however, the slightest allusion to, or acknowledgment of the original author.—*Translator.*

It has already been explained that gastric fevers have often an epidemic cause, *i. e.*, corruption of the air in particular districts. These gastric fevers of the epidemic kind are very often converted, in the hands of doctors, into nervous—nay, in certain districts, and at certain periods, they *always* take on the nervous form under their hands. Nevertheless, it is an error when people speak of epidemic or contagious nervous fevers. For, in the water treatment, gastric fevers never take on the distinct nervous form, and they even quickly lose the premonitory symptoms which lead us to expect their degenerating into this form.

In discussing the causes of nervous fever, we must not omit to mention, that when a disposition to curative fever is present, any intellectual over-exertion may likewise become the occasion of its degenerating into nervous fever; moreover, this form of disease can be developed from a curative one, by repeated injurious emotions of mind, fear, grief, or repeated vexation.

But all these causes occur very seldom in comparison with those of blood-letting and medicinal poisoning; for these intellectual and moral causes must rise to a quite unusually fearful degree, if they are to produce the same effects as medicinal treatment.

The symptoms of nervous fever are as follows:—Every species of it is preceded by affection of the head, by nervous pains, by feverish pulse, by want of sleep or disturbance of it, by dreams and by loss of appetite. Thereupon it divides itself into two different kinds.

1. Ardent nervous fever comes nearer to the curative form than the comatose or torpid, and is more easily and certainly curable by water. In it more power is recognizable in all the functions of the organism, and in all the diseased manifestations. Dry and burning hot skin, quick and irregular pulse, a state of excitement with raving, frequent jactitation, ardent thirst, nervous and sometimes half rheumatic pains, a dry, brown, furred tongue, form the most prominent symptoms of ardent nervous fever.

2. The comatose, or torpid nervous fever, has, on the contrary, the following marks: pale and sunken expression of countenance; dull, dead expression of the eye; entire prostration of strength; dullness of the senses, as opposed to their morbid sensibility in the ardent species; comatose slumber, complete loss of appetite and absence of stools; blackish, brown, furred tongue; dull, unconscious raving.

Ardent nervous fever is very frequently converted into torpid, by medicinal treatment. The further effects of this treatment are, death by paralysis, or apoplexy; exhaustion of the strength, decomposition of the fluids, atrophy of the nerves (insidious nervous fever), or a very tedious or only relative recovery, without any, or at least without material, critical efforts or excretions. How tedious recovery is, in the hands of the doctors, and how very rarely the previous health is again attained, is but too well known by experience, and finds a sufficient explanation in the fact, that critical excretion of the morbid matters is rendered impossible by medicinal treatment.

Under hydriatic treatment, nervous fever assumes, by degrees, the character of a rheumatic or catarrhal fever; there usually come on distinct rheumatic pains, and the morbid matters which have occasioned the nervous fever are expelled by critical excretions. If the disease is from the commencement treated with water, its radical cure is completed with comparative celerity, and sequelæ, relapse, or newly-arising chronic evils never appear.

Although the hydriatic treatment of nervous fever must be more cautiously conducted than that of inflammatory fever, (although, moreover, the former is a secondary species of disease, and is developed from an impeded curative impulse), my experience has, nevertheless, justified me in believing that no one ought to die of nervous fever, if from the beginning it is *properly* treated with water (not, however, after the fashion of the doctors). From the disposition to nervous fever which has for many years prevailed in Mecklenburgh, I have had opportunities of treating this disease in all stages, and in all forms. Although I have, as yet, not lost a patient, not even in the cases which had previously undergone medicinal treatment, still I hold the result of the water-cure to be very doubtful, when a physician has previously been busy with the case. For in so dangerous a disease, people do not go for amusement from one method of cure to another—they do not dismiss the physician till they have given up the hope of a successful result from medicinal treatment, and then the patients are usually reduced and debilitated to the uttermost. All those who were handed over to me from medicinal treatment were already reduced to skeletons; and I consider it, therefore, as only a lucky chance that I have cured them all. Not taking into account the uncertain result of the water-cure, after previous medicinal treatment, the recovery in such cases must always be very tedious.

3. Putrid fever is, still more decidedly than nervous fever, a concoction from primary fevers, and appears still more seldom at once in its fearful form. Medicinal treatment and hot, moist, and putrid air in the sick room, are the usual causes by which a primary or nervous is converted into a *putrid* fever.

The symptoms of it are a pricking heat, which on touching it with the hand leaves a disagreeable feeling, great debility and disfigured appearance, a small feverish pulse, offensive evacuations and bleedings, a tendency to the decomposition of the fluids and softening down of the solids.

Although I cannot assert that water, properly employed, *always* cures putrid fevers, still it is proved by experience that water is also the best remedy against this disease, and we may with great probability reckon upon a successful result, when it is at once applied on the appearance of this fearful form of disease.

7. NERVOUS PAINS (NEURALGIA)—CRAMPS.

All nervous pains are secondary morbid phenomena, and their symptoms are therefore to be considered not as curative efforts of the organism, but as painful sensations, which the body endures in its gradual destruction by chronic sickness.

Tedious and insidious neuralgia is in most cases an effect of secondary diseases of the digestive organs, an evil which may be so latent, that in the parts of the body which are occupied by these organs no symptoms of disease are to be traced. For instance, in hardened sliming-up of the digestive canal, there are no special or sensible symptoms in the stomach and bowels, even when it is present in a very high degree; its symptoms are leanness, pallor, hypochondria, disgust with life—in one word, dull nervous torments, as to the seat of which the feelings lead to no conclusion.

The nerves are mostly governed and influenced by the brain; but the brain itself is a complexus of nerves; and if we do not separate it from the nerves of the rest of the body, but comprehend it under the collected nervous system, then are the organs of digestion those which of all others exercise most power upon it. The stomach is, by means of its ganglia, subjected to the reciprocal action of the combined nervous system, but it predominates over the latter in a higher degree than it is itself governed by it.

Since poison, when swallowed, gets first into the stomach and

bowels before it passes into the blood, and since it is frequently partially witheld by sliming-up from passing over into the blood and the rest of the body, and remains lying in the digestive canal; in such nations as have for a long time practised, or rather suffered, the art of healing by poisons, diseases of the digestive organs must not only be exceedingly diffused, but must also be predominant over the diseases of other organs. Since, moreover, the digestive organs exercise so decided a power over the nerves, so must the next, in degree of diffusion, be nervous diseases.

Such is the case in modern Europe—everywhere there is stomach disease, sometimes under forms which, by perceptible sensations, point out to the patients the stomach as the focus of suffering; sometimes in latent forms, which announce themselves to the feeling as nervous suffering.

Since the use of medicine is more common in the higher than in the lower classes, stomach and nervous diseases must be more frequent in the former than in the latter. Experience confirms this conclusion.

Every tedious poisoning, not only medicinal but also homicidal, has nervous torments in its train.

When the stomach, and particularly the ganglionic nerves, have been poisoned and shattered by active medicinal poisons, given for an energetic acute disease, and when in this way neuralgia has been produced, the art of medicine prescribes for its cure milder poisons, and completes in this way, slowly but surely, the ruin of the nerves. These milder poisons are called "nerve-strengthening," or, in general, "strengthening" remedies.

An organism can only be really strengthened when it is enabled, by expulsion of all foreign matters, especially from the digestive canal, to elaborate and assimilate a sufficient quantity of food. With real increase of strength there is always combined (as has been a thousand times proved by the water cure), in very thin persons, a very perceptible and often very striking increase in flesh and muscle, and in persons of full but soft flabby flesh, it is hardened into an iron-like mass. Where these two very perceptible effects, and a blooming red complexion are wanting, no true increase of strength has taken place, but at most a mockery of it from excitants. Alcohol is the nucleus of most allopathic "corroborants," which first of all stimulate the nerves, but later and more surely ruin them and the whole organism. The alcohol is used partly alone, in a sublimed form, as in ethers, essences, Hoff-

mann's-drops, partly along with stimuli, as for instance, old wine, cognac, or cinchona, &c. All these remedies, in their nature and effects, coincide with brandy. When the period of the first excitement is passed, there follows torpidity, and at last that fearful state in which brandy and stimuli have become necessaries, without having any further inciting effect.

But, as little as the day-laborer, can the ethereal lady leave off her brandy, which in her nicety she entitles "ether," "eau," and God knows what other names.

The completion of the ruin of the nerves by nerve-exciting and narcotic medicaments rests on a direct injurious operation of these substances on the nerves. The same effect is produced indirectly by every other poison, which produces long-continued and frequently-recurring severe pain. All pain is unnatural, and the nervous system of all animals is constructed for pleasure and not for pain; for this reason it cannot endure long-continued pain without falling sick. Rheumatic pains also, especially those of the teeth and face, in the long run, ruin the nerves; even pains produced by external artificial means—for instance, by the rack—have the same effect, when often repeated.

When strong medicinal poisons penetrate directly through the circulation into the substance of the body, they produce, not only a chemical transformation of the nervous substance, but also an organic malformation and respective destruction of their form. When, however, medicinal poisons, by their indirect operation, ruin the nervous system, the transformations occasioned thereby extend themselves more to the form than to the substance of the nerves.

The artificial stimulants which are such deadly enemies to the nerves, do not come from the hands of doctors alone, but unfortunately, in modern days, from the bosom of a false civilization, and especially from social corruption. This corruption is come to such a pitch, that the use of narcotic poisons is held to be an attribute of manhood, and by boys as a sort of knight-dubbing, which exalts them to men. To these narcotic articles of diet belong especially tobacco and intoxicating drinks. I will here only state, in general, that these noxious substances are indeed much less injurious than most medicines, but injurious they are, in any case, to the stomach and nerves; and if they have not alone the power, when moderately used, to produce speedy and marked mischief in a healthy,

strong man, they are at least true allies of medicine in the work of destroying the nerves.

Coffee, tea, and stimulating spices, are also injurious to the nerves, although alone they are much less capable of destroying a sound nervous system than tobacco and alcohol. But they co-operate with the destructive power of medicinal poisons, and they must be unconditionally withheld from diseased nerves, if a cure is to be rendered possible.

We will now turn to the immaterial causes of nervous suffering. If any system can be made diseased and gradually ruined without the introduction of foreign bodies into the body, it is indisputably the nervous system. Nevertheless, I do not believe that in any case an affection of this system has been produced by immaterial causes alone; but these causes are sometimes the predominating, and are very often co-operative in disease of the nerves.

At the head of these immaterial causes stand over-exertions of the intellect. In my opinion, there is only one kind of intellectual exertion which does no injury to the health, and that is the exertion of sagacity for purely practical ends, having no relation to science, more especially for escaping dangers, for pursuing enemies and predatory animals, which so often occur in the life of savages. But abstract and scientific thought I hold to be relatively unwholesome; and I am of opinion, that while I, at this instant, in the interest of the health of the community, think and write, I am acting against the interest of my own health. I say "relatively" unwholesome, and I wish especially by this word to indicate the idea that it is unnatural and unwholesome to pursue abstract thought as a profession and means of gaining one's bread; in my opinion, in a truly humane state of cultivation, everybody should perform some sort of bodily labor, and the intellectually gifted should give themselves up to abstract and scientific thought only as a relaxation in their leisure hours. This would be not only better for the health, but also unspeakably better for science. The sciences which are constructed by chamber-sitters by profession, can no more be sound than the chamber-sitters themselves are. But all this does not come in here; this leads far away into foreign domains; it brings much suffering to humanity and to the poor pallid day-laborers of science; it bears witness to the falsity of our state of civilization, and gives me a pain in the heart whenever I think of it; and for these four weighty reasons I must let these thoughts pass.

I said "relative," and I wished thereby to indicate dispropor-

tionate, continued thinking, combined with neglect of the bodily elaboration of the strength and stagnating fluids. By the increased strictness of university examinations, the foundation has been laid for much misery and much nervous suffering; nay, for an increased number of cases of insanity and suicide. Every intellectual occupation which is not pursued from internal inclination, or on the other hand, is carried on with repugnance, operates on the nerves of the brain, either as torpifying or morbidly exciting, and produces, in either case, decided mischief, not only in the body but also in the intellect.

To intellectual over-exertions belong also the labors of those unlucky poets whose fancy is not like a fountain, which voluntarily flows out copiously and incessantly from the recesses of the soul, but like a pump which must be laboriously worked in the sweat of the brow.

The second class of immaterial causes of nervous diseases consists in mental emotions of an injurious kind. To these belong sorrow, grief, terror and long-continued fear, vexation, envy, and jealousy, as also humbled vanity, or ambition, and love of power. All these influences are often co-operative with the causes of nervous affections. It is easy to imagine that some of them alone may produce nervous suffering, although this is by no means proved, and experience seems to speak against it. For experience teaches us that there is no single one among the above-named mental affections, which at every time and at once ruins the nervous system of those who feel them; but experience teaches us that every insidious poisoning, whether homicidal or medicinal, brings misery upon the nervous system; experience teaches us that those persons who have taken the most medicine have at the same time the weakest nerves.

Sexual excesses also operate injuriously on the nervous system, but only then when at the time a system of narcotic artificial stimuli is adopted, or when medicinal poison is present. If a natural diet is used, and, on the occurrence of disease, hydropathy is adopted, there can be, at the age of manhood in a healthy man, no excesses in relation to health—*i.e.*, the impulse to physical love is not stronger than the capability.

The case is different with sexual enjoyments at an unripe age, and with all unnatural sexual gratifications. All of these exhaust prematurely the powers of life, and depress the intellectual and bodily functions; they also depress the nervous system, and rob it

of its lively sensibility for pleasure; but when medicinal poisoning, or intellectual and moral influences of an injurious kind, or the evil workings of a narcotic diet, are not added thereunto, the whole machine is simultaneously depressed, and neither symptoms of disease, nor strongly prominent disturbance in the equilibrium of the functions is produced. But this assumed isolation of the above-named excesses is very rare; when they are combined with a narcotic diet, then they co-operate in the destruction of the nervous system.

Cramps are morbid phenomena, which are only possible in secondary disease and much-shattered nerves. Cramps are involuntary movements and convulsions of the nerves, which impart themselves more or less to the adjacent muscles, and thereby produce the most varied involuntary and uncontrollable actions of the organism; a throwing about of the arms and legs; a bringing out of tones sometimes lower, sometimes louder, but always expressive of pain, and which sometimes swell to a heart-rending shriek.

The allopathic classification of cramps into clonic, tonic, convulsive, cataleptic, epileptic, &c., is a confused mixture from various norms of classification, since some of them are only different degrees of effects from synonymous causes, while others are the effects of dissimilar causes.

Next to organic devastations and malformations, chronic nervous affections are those against which water lends its aid most slowly and most incompletely; nevertheless, it is the only remedy which gives decidedly the greatest relative aid, or indeed any aid at all. Even most physicians confess this. Many of these gentlemen tell their patients that water is a remedy only adapted for nervous affections.

In relation to practical hydropathy, the first fundamental rule in the treatment of severe nervous affections is this, that, until a considerable improvement has taken place, cold water must never be used, but chilled water, of from 57° to 72°. This rule is unfortunately daily infringed in many water-cure establishments. By using too cold water, and the exciting baths therewith combined, a nervous patient is always made worse, and he may even thereby become a victim to insanity.

For some generations acute diseases have been becoming more rare, and chronic more frequent (as a necessary result of the medical art); and on this account stimulants have become more generally diffused, and nervous affections more terrible. Nervous suffering,

nervous excitement, cramps, and convulsions, are to be found everywhere—in the human body, in society, in literature, politics, and morals—and the prime cause of all this misery is nothing else than medicinal poisoning. In this way has allopathy pushed its infernal influences even into the depths of the spirit. Do you smile? Do you believe, then, that an over-excited nervous weakling can bring forth a series of thoughts, images, and deeds, on which the stamp of nervous effeminacy and over-excitement is not impressed? Youth is inexhaustible in the talent of hoping, and a numerous band of youths takes the cramps and convulsions of our day for throes of time, which are to bring forth a new and great epoch. Poor deceived youths! the convulsions of an over-excited poisoned old maid are no throes of parturition; they are the lingering struggles of death!!

8. HYPOCHONDRIA AND HYSTERIA—DISGUST FOR LIFE, AND SUICIDAL MANIA.

Hypochondria and hysteria are similar forms of disease, and what is unlike in them proceeds from the dissimilarity of the two sexes; hypochondria belongs to the male, and hysteria to the female sex. The seat of both diseases is in the lower belly, and especially in its nerves. In hysteria, there is always combined a disease of the sexual nerves with that of the digestive organs; in hypochondria, on the contrary, there is usually only an affection of the latter nerves.

The symptoms of both these diseases, which they have in common, are, at first, a marked, frequently and suddenly returning change in the disposition of mind, and an apparent change of character dependent thereon. At one time there is the most extravagant joy from very trifling causes; at other times, and more frequently, the deepest grief, ill-humor, and wrath, from equally insignificant causes. In the former frame of mind, the character appears good-humored, sympathizing, and indulgent; in the second, on the contrary, repulsive, hard, unjust, even malicious. A second symptom, in both these diseases, is egotism, and, depending upon this, the desire to speak much of one's self and one's own disease; to think and read much about it; to change one's views of it daily, and, in an alternation of joy and fear, to experience in thought all possible diseases. With the eccentricity thus depicted, there is,

in each of these various frames of mind, naturally a want of perseverance in the same occupation, and a catching at new projects.

In hysteria, there appears often an unmistakable effort to attract observation by actions, speeches, looks, and especially by dress, which appears to proceed from disease of the sexual nerves.

The purely corporeal symptoms are pain and cramps in the lower belly, hard and scanty stools, flatulence, changeableness of appetite, and feeling of bodily anxiety. In hysteria, the cramps sometimes increase to convulsions, and to a cramp-like movement, rising from the lower belly to the stomach and throat—called "the rising mother." It must, however, be remarked that the bodily symptoms here enumerated do not always appear—at all events, frequently—not till long after the mental affections above described.

The causes of both diseases are over-excitement, disorganization, material and formal transformation of the abdominal nerves, and medicinal poisoning, especially by frequently repeated purgatives; moreover, want of exercise, much sitting or long intellectual over-exertion, tension of the fancy, a diet which weakens the digestive organs by over-excitement; sometimes, also, sexual excesses, especially unnatural sexual indulgences. Hysteria arises frequently from a complete want of sexual gratification, along with other co-operative causes, and in this case it frequently produces a morbid and excessive degree of coquetry.

In all secondary diseases of the lower belly, as also in hysteria and hypochondria, the feelings of the patient lead him to no certain conclusion as to the seat of his sufferings. The cause of this phenomenon lies in the following construction of the human body: —The nerves of the viscera of the lower belly form a peculiar system, the centre of which is the solar plexus, called also the brain of the lower belly (cerebrum abdominale). These viscera, as also the heart, receive their nerves from the ganglia, by which the connection with the brain is maintained. From this isolation from the brain, it follows necessarily that the above-named viscera communicate their feelings only very feebly to the latter; besides which, their sensations are in themselves weak, because their nerves receive but little marrow.

Most physicians assume dynamic causes for the diseases in question; but many of them confess, that usually organic faults, and malformations in the organs of the lower belly, exist in these forms of disease; truly, without comprehending that these dis-

organizations are seldom produced by anything else than medicinal poisoning.

They consist in transformation of the nervous substance, in deadening and induration of the nerves, by adhering hardened mucus, in accumulations of serous fluids (dropsy), in the occurrence of abnormal mucus, membranous growths (polypi), and in chronic suppurations.

Hypochondria and hysteria are always real bodily diseases; the idea that these affections sometimes arise from imagination only, is totally false. The hypochondriac has often very erroneous notions as to the seat and nature of his disease; but in regard to the existence of *a disease*, he does not deceive himself. Moreover, every one who feels himself sick, is in reality so, although medical advisers often wish to talk their patients out of this, and to persuade them that the disease has been removed by their medicines. *Vice versa*, many a one thinks himself healthy, who is not so, if we establish organic unity of the body as a condition of true and perfect health.

With hypochondria and hysteria there are always combined periods of despair and satiety of life; but habitual disgust for life is no symptom of true hypochondria, but arises from a form of disease which is compounded of hypochondria, of sensual satiety, and of a tough and thick condition of the fluids and blood. This morbid condition of the blood arises from a deficiency in water-drinking, and from indulgence in fermented and distilled liquors. In such a diet the fluids of the body are deficient in the normal quantum of oxygen and hydrogen, and this deficiency produces, in the common sensorium of the organism, an uncomfortable, joyless feeling; moreover, this deficiency disposes to apoplexies of various kind.

Hypochondriacal, periodical, and habitual disgust for life, are in modern days so diffused and so moulded into form, that we may consider it almost a new temperament. Its chief, or at least, co-operative cause, is to be found in ruin of the digestive organs, as indeed all the various temperaments are chiefly results of good or bad digestion. This is very convincingly proved by the water-cure, which, by curing this most important organ, has converted many a melancholy and malcontent into a lively, happy, sanguine man.

Water alone is able to effect anything against the evil in question; in most cases, when there is sufficient perseverance, it pro-

duces a radical cure, which, however, naturally can last no longer than a rational corresponding diet is used, and when, especially, bodily exercise is not neglected. Truly, water can also effect no cure when, along with already exhausted powers of life, the above cited organic faults and devastations in the lower belly are present in a high degree.

The highest degree of hypochondria and disgust for life is the mania for suicide. It is very difficult, it is almost impossible, that a perfectly healthy man should raise his armed hand against himself, even if the worst outward adversities of life should break loose upon him. All outward misfortune is as nothing in comparison to the internal chronic misery of disease.

The passions, it is said, give the impulse to suicide. Most certainly; but, be it observed, the passions are in most cases and in most men the children of bodily disease. The perfectly healthy man has but seldom, and but few passions, because his pretensions to enjoyment of life are mostly satisfied by the pleasures of good digestive and generative powers. Do you accuse me of making man a half animal? Not I; Nature has done this, since she has clothed the soul with an animal body, and,—let people declaim as they may,—it is yet certain that no human soul can be sound when the lump of clay to which it is bound, suffers pain and misery.

The thirst for happiness rushes through the human heart, powerful and warm as the gulf-stream through the ocean. For the healthy man flows everywhere the honey of joy; when he awakes he rejoices in it, and along with him his members, which extricate themselves, reinvigorated from the embraces of sleep; he has joy and quickening in the breath which he draws in full inspirations from the great reservoir of ether; he finds voluptuousness in the golden sunshine and in the mountain flood. But with the loss of health vanishes the capability for enjoyment and pleasure, and yet the longing after happiness remains. It is a fundamental trait in the perverted being of the sick man, that he thinks the outward conditions of happiness are wanting to him, whereas he fails in the inward requisites. Durable happiness resides alone in the natural enjoyments of sound body and spirit.

"Mens sana in corpore sano."

When these are chased away by sickness, the unfortunate longs for foreign artificial joys, and the more these escape his grasp, the more hotly burn his passions.

Since most passions are children of disease, it is easy to explain the apparent miracle that they are cured by water, because it relieves from their causes.

I know that this view sounds very material, and is not poetical, but the whole water-cure is not poetical, and not encouraging to poetry, at least to the modern kind, which pushes its blossoms from a sickly stem. You may smile, but I do not fear to say, make men healthy and you will see a new poesy arise, and the accords of melancholy and the screams of despair will die away.

No man in acute disease has ever taken away his own life, even during the sharpest pains and sufferings, because instinct feels that they are nothing but the remedies of nature. On the contrary, in chronic suffering, there awakes a feeling of being past recovery, which whispers despair. In this way most suicides are the late consequences of medicinal poisoning, are explosions of the dull feeling of inward misery, which is to be healed by no pills but those of lead.

In spite of the outward misery which presses on the lower orders, suicides are comparatively less frequent than among the higher classes ; they are protected from suicide and nervous misery by their poverty, which leaves them but little to spend on medicine.*

Look at two different men, how differently, when struck by the same blows of misfortune, do they act. Bankruptcy drives the one to suicide, it impels the other to increased industry, to contentedness, and true happiness. The faithlessness of a sweetheart breaks the heart of the one, or drives a bullet through it; the other gets another love, and becomes the happy father of a family. Whence come these different effects of the same cause? From the different temperaments of men, *i. e.*, from the different states of health of their digestive organs.

9. RHEUMATISM.

Rheumatism is divided into several sub-species, of which the acute or inflammatory rheumatism is, properly, the only pure rheumatic primary form ; the cold chronic and the atonic are secondary forms,

* In later times most of the sufferings which in the higher classes are produced by medicinal poisoning, have been diffused among the lower orders by the brandy poison. Especially are suicides and aberrations of intellect among the consequences of the brandy pest.

which are produced only by false treatment of the acute. Nervous rheumatism is a form compounded of nervous and rheumatic affections.

The symptoms of inflammatory rheumatism are, severe pain combined with abnormal accumulation of blood, and the heat thereby produced in the suffering part. We see that these symptoms are nearly allied to those of proper inflammatory diseases, and the nature of both forms of disease is also cognate. The difference lies in this, that in inflammatory diseases the heat and the accumulation of blood in the diseased part are greater than in the rheumatic form; moreover, that the purely inflammatory form runs its course, and comes to a termination sooner than the rheumatic; on the contrary, in the rheumatic form the pains are more acute than in the inflammatory; and finally, the latter is accompanied by more ardent fever than the former. These differences arise partly from the greater energy of the inflammatory form, partly from the essential difference of the organs, which are mostly affected by the two forms in question; namely, the internal organs devoid of bones, and most copiously provided with blood-vessels, are most subject to inflammation. On the other hand, the seat of rheumatism is more in the muscles, membranes, and sinews surrounding the bones. This explains the severer pain of the rheumatic, as also the greater accumulation of blood and the heat of the inflammatory form.

From what has been said it follows, that rheumatism is a transition form between curative and destructive diseases.

Rheumatic pain arises from this, that the nerves in the affected parts are attacked by foreign acrid substances, especially poisonous medicines. Every strong impregnation with mercury produces rheumatic or gouty pains, which often rise to a fearful height.

If one applies externally to the nerves of a wound, acrid corrosive substances, there arise, exactly in the same way as in the inward rheumatic, inflammatory and gouty processes, pains which are so much the more severe, the more corrosive the poisonous substances are.

The effect of water treatment on inflammatory rheumatism is the expulsion of the matters giving rise to it, by critical sweats and exanthems (sores and eruptions).

The effect of medicinal treatment, on the contrary, is the conversion of inflammatory into cold chronic, atonic, and nervous rheumatism. This conversion is brought to pass slowly, but surely, in

this way, that the organism by medicinal sudorifics, purgatives, vesicatories, and the like, is weakened and withheld from the formation of curative exanthems; moreover, in this way that the skin in the effected parts is for a long time covered with flannel, or wax-cloth, and thereby completely debilitated, and rendered absolutely incapable of excreting the morbid matter.

Medicinal sudorifics give rise to the same processes as medicinal purgatives, only in different organs. An expulsion of morbid matter is rendered impossible by the introduction of new mischief; in the most fortunate but very rare cases, the organism itself excretes the latter. Sweat produced by medicine is not a critical sweat, but one of violence; moreover, by these remedies, which are usually swallowed hot, the stomach is weakened, and in the long run ruined. In common life, it is said that the causes of rheumatic affections lie mostly in colds. I have already shown, in developing the internal processes of taking cold, that no disease, and no pain can be produced by the severest cold, if no morbid matters are present. Accordingly a cold, when morbid matters are present, may readily become the exciting cause of the appearance of rheumatism, and may accelerate the period of its attack, but it never can be the primary cause thereof, can never create it.

Chronic cold rheumatism manifests itself only by internal pain, without the skin over it being reddened or heated, because the skin and the whole organism are too much weakened to push out on the periphery the curative symptoms of heat and accumulation of blood.

Atonic rheumatism manifests itself in weakness, lameness, and stiffness of the parts attacked, without pain and without inflammation.

Nervous rheumatism is the form assumed by it in persons with shattered nerves, cramp-like sensations are then combined with the rheumatic pains.

Chronic, atonic, and nervous rheumatism cannot be cured by the organic powers without the help of water, even under the best diet; still less is this possible by medicine. When, with sufficient vital powers, the water-cure is properly and perseveringly applied, the secondary forms convert themselves into primary, or inflammatory, which discharge their morbid matter in critical sweats and exanthems.

Sometimes the rheumatism sticks fast in one place, and is then called fixed; at other times, the pain springs rapidly from one

place to another, and is then called wandering. We must not explain wandering rheumatism, as if the acrid matters which excite the pains wander rapidly about, which is a physiological impossibility, but rather in this way,—that in different parts of the body foreign matters are present, are set loose from their envelop of slime, in some one part of the body, by the processes above described, and by their acrimony produce pain; but then, again, from want of the necessary conditions for excretion, are again suddenly enveloped in newly effused slime, whereupon the same process is repeated in some other part of the body.

When rheumatism attacks the organs of the senses, and is treated medicinally, these organs are frequently rendered incapable of performing their functions; in this way has many a man lost his hearing, his sight, his smell, and sometimes even his taste. *Vice versa*, these lost senses have often been recovered by the water-cure.

The worst species of fixed rheumatism are sciatica and face-pains; but ordinarily these affections are of a complicated nature, and have a mixture of gout and nervousness. These affections are also curable by water, when there is sufficient vital power.

One of the most common and most painful rheumatic affections is tooth-ache.

Among all those who are diligently fed from the apothecary's shop there are very few, perhaps none, who are not at times subject to the torments of tooth-ache. Nevertheless, articles of food strongly salted, or prepared with strong acids, also introduce matters into the body which occasion pains on coming into contact with the nerves, and especially with those of the teeth.

Most medicines commit their ravages first of all in the mouth, throat, and digestive canal, because they are introduced more immediately into both these parts of the body. Before the medicine gets into the stomach, a part of it is absorbed in the tongue, in the gums and glands. It is true that the organism reacts against them, and endeavors to expel them by an increased flow of saliva; but, when the use of them is boldly continued, the power of reaction becomes also weaker, and chronic deposits are accumulated. When upon this comes a cold, these small atoms of poison are by the retroceding exhalation disturbed out of their envelop, and excite, in virtue of their corrosive nature, tooth-ache and glandular pains, &c.

So long as the organism is yet powerful, it seeks to expel the foreign matters by saliva and small or large gum-boils.

A flow of acrid saliva is never anything else than the effect of a fresh or an old poisoning, most frequently by mercury; so that this abominable poison, which is now given in almost every disease, is also the most frequent cause of tooth-ache. By the saliva, somewhat of the intruding poison is again expelled; it is indisputably certain, that in acrid saliva particles of poison are contained, since, for instance, it is impossible that it should smell of mercury, if no mercury was there. Although physicians must know this—for they know that the sensation of smell is only excited by small particles getting into the nose; they know, moreover, that the flow of saliva, by its acrimony, makes the mouth and lips raw—yet they do not appear to comprehend that the flow of saliva is a curative effort of the body, and must, therefore, be encouraged—which, indeed, is only possible by water. Nay, most physicians give remedies in order to suppress the flow of saliva, and for this end make the patients chew biting substances, or spices, or they give sulphur and iodine, especially in mercurial ptyalism. Take water in your mouth, and keep it there till it is warm; apply warming bandages, wet with cold water, round your neck and salivary glands; bathe daily, and you will soon see how the excretion of the poison is encouraged by an increased flow of saliva, and how, in this way also, curative sores are developed.

In tooth-ache there occurs usually also a flow of saliva, and it must likewise be encouraged in the manner described, only that one should always use warm water internally, if the pain is severe, and, at the same time, rub cold water externally, applying bandages again above this.

Radical cure from the liability to tooth-ache, or from all tooth-ache matters, is only possible by a radical water-cure, though, indeed, it is not possible to cure a single chronic affection, without at the same time stirring up, and thereafter removing, all other morbid matters concealed in the body. This is the reason why chronic cures are so tedious.

People who had previously suffered from tooth-ache, when in the water-cure get again critical tooth-ache, which is to be distinguished from the ordinary affection by this, that it begins with the symptoms with which the other goes off—namely, with an excretion of acrid saliva, with swelling of the jaws or cheeks, and with an uncomfortable feeling, as if the teeth had grown longer; there-

upon follow gumboils, as also boils on the outer skin, and often such a rawness of the mouth that mastication is very painful. In this way, the organism, with the help of water, frees itself from the causes of past as well as future pains, and the critical symptoms here cited are proofs enough that material foreign matters are the causes of all tooth-aches. After removal of these no cold will produce tooth-ache, which is confirmed alike by reason and experience. I know several people, who had previously suffered fearfully from this pain, but who, after going through the water-cure, have never had the least warning of it, and who laugh at every cold.

So certain as it is that every one who has yet sufficient vital power, can free himself radically, and for ever, from this evil by the water-cure, it is equally certain that it is impossible at once to remove the pain by water, because no true cure is possible without pain. This principle holds good not only in the physical, but also in the moral world.

The allopathic remedies against tooth-ache consist, chiefly, in abstraction of blood and fluid by leeches and blisters. We have already spoken of the first "tappings off;" but those by blisters are not less purposeless and injurious. When corrosive and poisonous substances, of a certain kind, are laid in plasters upon the skin, the latter absorbs a portion, and, because it is poison, re-acts against it, by the adduction of healthy fluids; these are poisoned, and therefore the organism rejects them. This executioner-like proceeding proves that, in the "rational art of healing," everything is to be found rather than "ratio." Is there sense or "ratio" in this, that one tries to purify the body from old morbid matters by bringing new into it, that one forces it to turn its power of reaction from the old against the new, or, at least, to divide it betwixt the two? Even, if from these remedies a momentary alleviation ensues, this does not happen because the original morbid matters are thereby removed, but because the necessary strength is withdrawn from the body. By reduction of strength you can drive away all pain, as well as life itself; and the reduction of strength is the universal remedy of allopathy against all acute pains and struggles.

Another sort of allopathic soothing of pain is attempted to be attained by putting biting substances into the hollow tooth, or upon the gums. It is well enough known that these shameful remedies have not always even a palliative effect, to say nothing of a really

curative. Sometimes, for the first moment, the internal pain is deadened by the external; but, so soon as the painful reaction against the fresh poison is ended, the struggle with the old re-awakes, and attains its result with so much the more difficulty, the oftener it is disturbed.

When many of the above-named medicinal remedies have been, in any case, employed against tooth-ache, the sufferer has the best prospect of getting, sooner or later, a tooth-fistula, or perhaps losing a bit of his jaw-bone. When the effort to expel outwardly the tooth-ache matter by saliva and boils is disturbed and re-pressed by new poison, the morbid matters at last, corrode inwards, and produce internal suppurations in the bones, which are called fistulæ.

How are the teeth, and especially their whiteness and enamel, best preserved? By what sort of powder? By what dentist?

This half-toothless European race cannot, without impertinence, speak of its teeth, or, at most, of their ruins, venerably moss-clothed, and breaking into fragments.

The teeth have three deadly enemies:—first, everything in the shape of poison or medicine; secondly, anything that is hot; and thirdly, all impurities of the stomach. The two first enemies corrode and split the enamel, and therewith the teeth themselves; the third sort of enemies cover the teeth with dirt and tartar, and this again raises and presses them out of their sockets, so that they get loose and fall out. Most powders, which are used for cleaning and preserving the teeth, are also injurious, because, by their acidity, they slowly destroy the enamel. Experience proves this. Which has the best teeth, the peasant girl or the lady, especially when you deprive the latter of her ivory? Instinct equally proves it, for these powders are unpleasant, and sometimes even painful, to the teeth. Every substance which is repugnant to, or occasions painful sensations in the body, or individual parts thereof, is unwholesome.

Those who have purified their stomachs by a water-cure (and, *en passant*, I counsel all ladies whose mouths do not smell of amber, to get themselves a rosy breath by water), and who thereafter adhere to a diet of cooled food—and, most especially smoke no tobacco—need never have recourse to these artificial means; on the contrary they will see that their teeth get clean of themselves, and that the tartar is loosened from them.

The only purification which the teeth require is afforded by the

water which occasionally passes over them in drinking; those who wish to do it more thoroughly, can rinse and gargle the mouth after every meal with this precious fluid.*

Do not you believe this? Do you think that the powder of the tooth-breaker is not altogether useless? Go and ask the lady tigress, what little dentifrices she has to thank for her elegant tooth-enamel? Ask the elephant who is his dentist, since a constant exchange is going on out of his mouth into that of fine ladies!

10. GOUT.

In the same way as rheumatism in its inflammatory form is with difficulty distinguished from pure inflammation, there occurs a difficulty in separating its chronic and atonic form from those of gout. It is especially often difficult to decide whether face-pains are to be classed under fixed rheumatism, or under gout.

In both the diseases in question we see more distinctly than elsewhere that the division of diseases into genera and species is only an invention of the human intellect, and has no existence in reality.

Another question here to be considered, is the hereditary nature of gout, which is so frequently asserted.

Except contagious chronic exanthematous diseases, there occur few or no hereditary *complete* diseases, since, by virtue of an admirably wise arrangement of nature, not the worst, but the best fluids of the mother, even when her body is diseased, are conveyed to the fœtus, and because the presence of material foreign substances is necessary for every formed and complete disease.

But there are congenital abnormalities in the organization, and there is congenital disposition to disease.

All unassimilable substances and all excretory matters are repelled by all the internal organs, and in this way they are brought from hand to hand nearer to the skin, and finally exhaled; at least this is the endeavor of the organism. When, however, this does not succeed, from insufficient activity of the skin, these matters establish themselves principally in those organs, which are

* With all due deference, it must be observed that this would hardly suit English ideas of cleanliness; moreover, the majority of those who have taken much medicine, and particularly mercury, have such interstices between their teeth, that the occasional use of a tooth-brush is absolutely necessary, particularly after eating.—*Translator.*

originally the weakest, and in time excite therein the disease which the father had, and which the son perhaps will again have.

The correctness of this view is confirmed by this, that hereditary diseases generally develop themselves only in the course of the life, frequently only in old age. He who adheres to water-diet is, even with a decided predisposition to a family disease, secured from the formation thereof. From this view the curability of hereditary disease by water becomes evident, as has been proved also by experience.

We see suppurations of the lungs naturalized in certain races, but the weakness of the lungs only is hereditary in these cases; as a consequence of this there occurs, under bad diet, first of all, stagnation (of the excretions) in the lungs, as a consequence of this, acute efforts to expel them by cough or inflammation, in consequence of which medicine is given, and its consequence is the deposition of poison in the lungs, which sooner or later, as a last consequence, produces suppuration and death.

Exactly the same is the case with hereditary gout. Gout is a disease of the bones and periosteum. When these parts of the body are the weakest, morbid matters deposit themselves principally therein, and generate gout. The pains of gout are produced by the foreign and poisonous matters exercising their destructive corrosive power on the periosteum. From this disturbance the particles destined for the formation of new bones are not normally elaborated, and partly also the excretions from the bones are not sufficiently, or not at all, carried to the skin and exhaled. This explains the origin of gouty lumps, which are nothing else than bony excretions.

By the by, physicians know from experience that sometimes, in gouty persons, after severe pain, when a critical sweat breaks out and dries up, the whole skin is visibly covered with a white earthy powder, like bone-dust. From this follows, indisputably, that material morbid matters, which are removed by the sweat, are present in gout. It is surprising that the allopaths, who have recorded this fact in their books, should not have drawn from it the very obvious conclusion, that gout can only be cured by activity of the skin, by sweating, exhalation, and sores. Nevertheless, in the hands of the doctors, the sweating-cure would only produce new mischief, instead of taking away the old, for sweat from medicinal remedies is only excited in this way, that the organism endeavors to expel the intruding hot medicaments, whereby a set-

ting free and expelling of the old morbid matters are not to be thought of.

Moreover, a medicinal sweating-cure of a chronic disease is impossible, because the sweating must be repeated daily for a long time. This would produce a precious piece of mischief, if one were to excite sweat daily, for perhaps a year, by drinking hot cammomile and elder tea, or, according to the proposal of a Paris doctor, punch. Not only these substances, but their warmth alone, are sufficient to ruin the stomach. The skin is also relaxed instead of strengthened by much sweating, without its being followed by a cold bath, and yet it must be very much strengthened if, by its activity, the morbid matters are to be drawn to it from the interior, and expelled by transpiration, sweating and suppuration.

In modern times, gout is considered as one of those diseases which is especially curable by water. It is, moreover, well established by experience, that water gets rid much more certainly of the coarse, thoroughly material matters, as, for instance, mineral poisons—quicksilver, steel, lead, copper—than vegetable poisons. It is particularly difficult to overcome the poison of belladonna.

The cure of gout consists especially in sweating and douche-baths; these drive the accumulated gouty matters out upon the skin in critical sweats, eruptions, and sores; but the cure is tedious, if the mischief is old and deeply rooted. When it has come to a favorable end, the patient, if he wishes to remain healthy, must adhere for life to water-diet; if he takes again to wine, coffee, &c., and especially if he neglects daily washing, or bathing, the old misery comes on again.

Even allopaths concede a certain curative power to water in gout, and many have sent their patients to Graefenburg.

In the water-cure, critical sweats of bony matter occur much more frequently and more strongly than in the dry medicinal regime, in which such critical sweats appear only rarely, and in peculiarly robust constitutions. In the water-cure, the critical sweat sometimes covers for a long time the skin of a gouty patient with such a quantity of chalky matter that every unassisted eye can perceive it.

Physicians assume in gout a dyscrasia of the fluids as the cause of the disease, and derive this dyscrasia from a false process of preparation of the blood and fluids, so that in this way the digestive organs are held to prepare by a false act of digestion acrid and

pain-exciting fluids from healthy food. M. Munde, in his so-called Hydro-Therapia, subscribes to this view, which is excusable in physicians, whose whole theory rests on a false basis; but is unpardonable in any one who is unprejudiced, and who has studied the water-cure so attentively as M. Munde.

These views, and the attributing disease to dynamic causes, are contradicted by all philosophical considerations; secondly, by the laws of physiology; and, thirdly, by the results of experience in the water-cure.

1. The philosophical point of view in relation to pathology has been already stated. If the causes of disease were immaterial and dynamic, they could not be recognized by any of the human senses, nor by any intellectual sense, and it would be an impossibility to go out of their way. The human organism would then be an abortive bungle—no proof of infinite wisdom but of endless stupidity; on the assumption of the truth of the dynamic pathology and the medicinal therapia, instinct would have been given to man not only in vain, but rather to his great torment, and to the production of interminable confusion—that same instinct which so unerringly prescribes to the most incomplete creatures the way to preserve their life and health, that same instinct which speaks as loud and as distinctly in man as in beast! Or has, perhaps, man less horror and disgust for poison than animals? Has he a less desire for food and drink than animals?

Moreover, if the causes of disease were dynamic, every possibility of an investigation of processes of disease would be taken away from man, since to him the dynamic is inscrutable and incomprehensible; and, accordingly, a system of pathology would be an impossibility. Pathology, on a dynamic basis, is for the human spirit a *contradictio in adjecto, i. e.*, if we require of it that it should contain the truth. The much more sagacious homœopathists have well comprehended this, and do not enter into any inquiries and systems of the nature of disease, and the causality of its processes. Homœopathists stand upon quite as false a basis as allopaths, but they have two great advantages over them; first, that, in their views, they are consistent in error, whereas the allopathic views of disease are constantly involved in contradictions; and, secondly, that the homœopaths give totally inoperative remedies (I speak here of the true Hahnemannic homœopathy, with its decillionth dilutions, not of the spurious homœopathy, called also the specific method of cure, with its thirtyfold, or more, dilution

of poison, which most certainly can operate, and that injuriously), while the allopaths administer to their unfortunate patients, not only undiluted, but also very often artificially concentrated and sublimated poisons, and thereby commit greater ravages among mankind than plague, pestilence or cholera.

2. The physiological reasons against the assumption that the organism, by a faulty act of digestion, can, out of wholesome food and drink, generate such acrid matters as, when brought by the circulation in contact with the nerves, excite pain, are as follow:—

The conversion of the totality of a mild substance into an acrid and corrosive is not possible by any known chemical process: but substances which are mixed with acrid matters may be converted into corrosively acrid ones in this way, that the diluting parts are separated, and only the corrosive remain. This last process takes place in the digestion of such articles of food and drink as are mixed with acrid or poisonous matters. Namely, by digestion, the mild constituents are assimilated; the acrid, on the contrary, are separated, pass unassimilated into the blood, and through it into the whole body, and excite pain by their contact with the nerves. It is exactly this process which produces by much the most disease—we shall see, farther on, in what constitutions. In this process, however, no acrid matters are generated by false digestion, but they are, during the act of the most normal digestion, separated from their mixture with mild substances.

Moreover, combined poisons can be set free by chemical processes, or, more properly, there are mild substances which can thereby be partially converted into corrosive and narcotic poisons; but the processes of digestion are so entirely different from these, that a conversion of mild into poisonous substances by false digestion must, according to all known physiological and chemical laws, be considered an impossibility. The most acrid substances which a diseased stomach can generate from wholesome food is stomach-acid; but this is still very far from being a corrosive or narcotic substance; indeed, it contains no such substances. Moreover, this acid announces its presence to every one who is affected with it by eructation. There are, however, numerous gouty patients who do not suffer from stomach-acid, and a host of people with the latter, who have no gout. Stomach-acid contains no substances nearly so acrid as brandy, wine, or even beer; for all these liquors contain more or less alcohol-poison. Stomach-acid is, moreover, not nearly so acrid as most spices. It is, therefore, most surpris-

ing that it should be assumed that, in people who eat all these acrid and poisonous substances, the gouty and other pains are produced by the contact of the nerves with acrid matters generated by the stomach from mild food. The supposition is still more surprising and absurd in the case of persons who have taken, and still are taking, unmixed poison under the name of medicine. When poison is taken, there are sufficient grounds for all possible suffering, without our being compelled, or being justified in having recourse to an hypothesis so unfounded and contradictory to all known physiological laws as the above.

Farther on, we shall come back to the subject of a disease of dyscrasia, or, more properly, of the false preparation of fluids from wholesome food; but we shall see that this disease also is generated by material substances, and that, on the other hand, it produces no corrosive or poisonous substances, but only faults in the chemical constitution of the blood; so that the false concoction of fluids is not of a positive, but of a negative kind.

Here we have only to consider the more acrid and corrosive substances; for only by contact of these with the nerves can internal pains of any kind be produced. Even the so-called nervous pains, nervous tooth-ache, head-ache, &c., are always of a nervous-rheumatic or nervous-gouty nature. These pains produced by the contact of acrid matters with the nerves, and their nervous character arises from chronic disease and partial disorganization of the latter. There are contractions, cramps, &c., of the nerves, which indeed have arisen mediately from poisoning, but which, in already formed secondary disease of the nerves, do not arise from immediate and simultaneous contact with acrid foreign matters. But every real pain in the interior of the human body can only be produced by the immediate and simultaneous operation of foreign matters. These are mostly of a corrosive and poisonous nature; but there are also internal pains, which are produced, not by the chemical, but by the mechanical operation of foreign matters—for instance, the pains occasioned by the occlusion of various canals by stony concretions (gall-stones, nephritic-calculus, &c.)

The reason, which, in the results of the water-cure, speaks against the above assumption, consists in this, that gouty patients do not at once, in the beginning of their cure, get critical vomiting or diarrhœa. When the digestive canal contains free* acids, these

* By free acids are here meant any others than those which, enveloped in mucus, are adherent to the walls of the digestive canal.

are, by the free use of water, at once expelled by vomiting or purging, and, *vice versa*, when such evacuations do not follow the use of water, there are either no acids, or no free ones present. Such evacuations, in the beginning of a water-cure, only occur in such patients as suffer from acidity of stomach; by no means, however, in gouty patients.

Gout arises from acrid matters introduced from without into the body, when these matters have been long made use of in considerable quantity, and when in the persons using them the bones and periosteum, especially of the joints, are the weakest parts of the body. In such cases, the acrid matters and poisons of the diet and the medicines are rather repelled by the other organs, and deposit themselves in the bones and periosteum, prevent the normal excretion and replacement of the bones, and produce thereby concretions of osseous matter. But all these phenomena can only occur when the organ of the skin becomes weaker, which happens usually after the first years of youth.

I am of opinion that, in most gouty patients, medicinal poisoning is certainly a *co-operative* cause of the disease, but that the *chief cause* is a diet of acrid food or intoxicating liquors—that is, under the supposition that the other internal organs are strong, and that the bones, with their periosteum, are originally the weakest parts of the body.

Fully-formed gout comes on at tolerably fixed periods, usually in spring and autumn, when the body undergoes its principal renovation, and when, therefore, the deposits of morbid matter are most subject to be set free (from slime), and produce pains and disease, and can only through pain be excreted.

The symptoms of gout are well known—so far, indeed, as they can be defined; for they frequently pass into those of other diseases, if the case is complicated. The symptoms of pure gout, and that most frequently occurring, are—severe pain in the ligaments of the joints and the adjacent bony parts, combined with an inflammatory swelling and immobility of the affected joint.

Various names have been given to gout, according to the joints which it attacks—as chiragra, podagra, gonagra (hand, foot, knee-gout).

Moreover, gout has been variously designated according to its various character—wandering, fixed, acute, chronic, atonic gout. In these various characters of gout, the same holds good that

has been already stated of the corresponding characters of rheumatism.

The effects of medicinal treatment on gout are essentially as follows. The antiphlogistic (anti-inflammatory) remedies in gouty fever produce the same injurious effects as those stated under the head of inflammatory fever. Emetics and purgatives gradually ruin the digestive canal; the narcotic poisons, especially opium (given to relieve pain), act most injuriously on the nervous system, and fill the organism with poison; the so-called antiarthritic remedies, such as mercury, aconite, colchicum, camphor, guaiac, sulphur, liver-oil, &c., operate, in quite as decided a way, injuriously on the nerves and digestive organs, and load the body with foreign matters; they do the organism much harm, but the gout very little; the latter triumphs over all these quackeries. Indeed, among the relatively enlightened portion of the medical body, the opinion predominates that their science is inoperative against gout.

The curability of gout by water is pretty generally acknowledged, and requires no further proof.

I would divide gout into spurious and genuine. The spurious would then be that pain in the bones which is produced by strong medicinal poisoning, particularly by a severe course of mercury; the genuine again would consist in that pain mostly fixed in the joints, which, where there is a predisposition thereunto, *i. e.*, when there is a predominating weakness of the bones, is produced by a faulty diet as the preponderating cause. According to my experience in the water-cure, true gout is cured principally by critical sweats; the spurious, again, mostly by critical exanthems.

11. CHLOROSIS—SCROFULA—RICKETS (ENGLISH DISEASE).

In the first ten chapters on secondary diseases, I have devoted more time to them than remains at my disposal comparatively for the following, and I must therefore diminish the proportion between what precedes and what is to follow, retaining more the aphoristic form of my second edition.

I have already indicated that in diseased digestive organs there is an act of false digestion, by which the blood, and indirectly also the remaining fluids, may be prepared in a faulty manner. But first, the chief reason whereby the digestive organs are made to produce faulty blood consists always in material morbid substances, which penetrate into the body from without. It is true that in

scrofulous, venereal, consumptive, and gouty mothers, this can already occur to the fœtus in their bodies; but these fœtus usually come into the world with a disposition only to scrofula, seldom or never with the disease fully formed. Secondly, such a preparation of morbid fluids from wholesome nutritive matters, never consists in the generation of foreign matters, in their chemical nature corrosive or acrid, by a false act of digestion, but always in this—that there are either disproportions in the composition of the chemical constituents of the blood, or that one of these substances is entirely wanting. By such false acts of digestion, accordingly, there are no substances generated which excite pain. There is no contradiction of my doctrine in the fact, that in dyscartic diseases (the medicinal name for those belonging to this category) pains, and, in rare cases, also evacuations of acrid matters by sores, occasionally occur, so soon as the patients are treated with medicine, or at a previous period of their lives have taken medicine or acrid food and drink, since in these cases the pains are excited by the acrid matters in the medicine and the diet.

Chlorosis, scrofula and rickets belong to the class of cachectic and dyscratic diseases; to these are added, improperly, by physicians, consumption, dropsy, syphilis, leprosy, and scurvy.

1. *Chlorosis.*

The symptoms are: white skin, which is sometimes shaded yellowish-green, and always relaxed and cold, pallor and puffiness of the lips, bluish rings round the eyes, melancholy and irritable disposition of mind, disturbance of the digestion, and frequently palpitation of the heart, with shortness of breathing.

The nature of this disease consists in a morbid chemical constitution of the blood, combined with diseases of the sexual organs, and frequently arising from the latter. The causes of this disease are usually several co-operative ones, such as false diet, too much sitting, over-exertion of the intellect or fancy, medicinal disease, sequelæ of disease from preceding scrofula, frequently also onanism.

The medicinal treatment consists principally in the employment of bitter and aromatic remedies—rhubarb, sal-ammoniac, myrrh, and especially of iron and chalybeate mineral-waters. The organism, sometimes, cures this disease in spite of the medicine, but the latter often converts it into hysteria, atrophy, or dropsy.

The water-cure has already shown its efficacy in chlorosis; and,

supported by much experience, we are entitled to say, that this disease is always radically cured by water properly employed, if no organic faults, especially of the heart or lower belly, are present.

Chlorosis occurs only in the female sex, and usually only about the years of puberty.

2. *Scrofula.*

The symptoms are a relaxed and transparent white skin, thick and distended abdomen, morbid and false appetite, loss of strength and meagreness of the limbs, weakness and flexibility of the bones, disproportionably large head, a broad almost square face, deep-sunk eyes with enlarged pupils, and a disposition to inflammation therein.

The focus of this disease is in the glands and lymphatic system.

Medicinal treatment of scrofula operates in general much more injuriously on the organism than that of chlorosis. In scrofula, stronger poisons are given, as mercury, iodine, belladonna, hemlock; moreover, liver-oil, gold, lime-water, and all sorts of mineral and artificial baths. A perfect cure can never be obtained by medicinal treatment; under it, scrofula often passes into tubercular consumption, hectic fever, atrophy, or dropsy. By a water-cure scrofula is generally cured, when not preceded by medicine; and, even after the latter, water will still cure it, if the medicinal disease has not too deeply laid hold of the vital organs and exhausted their power.

Scrofula is peculiar to childhood.

3. *Rickets.*

This disease is nearly allied to scrofula, and is likewise peculiar to childhood.

The symptoms are a large head, and, particularly, defective closure of its sutures, a thick lower belly, thin limbs, swelling and curvature of the bones.

Medicinal treatment is generally followed by death from atrophy or dropsy.

Proper hydriatic treatment cures it, if no considerable medicinal disease is combined with it, and if the organism is not too much exhausted.

This fearful disease, like many others, was quite unknown until

the introduction of strong poisons into medicine, that is, till the middle of the sixteenth century. In my opinion it can occur in no children except those who are the offspring of poisoned parents, especially those who have suffered from medicinally treated syphilis, itch, or scurvy.

12. HEMORRHOIDS.

The symptoms of this disease are itching and burning in the anus, evacuation of blood from the rectum, swellings and knots in the anus, secretion of slime from the rectum.

Hemorrhoids, with evacuation of blood, are called bleeding—those with mucus, mucous piles; the knots which secrete nothing are called blind piles.

The nature of this disease consists in an excretion of acrid matters by a flow of blood, and therefore bleeding piles belong to the transition diseases, between the primary and secondary form. In the evacuations of blood the cure of old and new morbid matters is not completed; there is only a partial riddance from those acrimonies which are always brought into the body afresh by medicine or false diet. Bleeding piles are, in the course of years, when the use of medicine is continued, always converted into blind mucous, or transplanted. Under the injurious influences alluded to, the hemorrhoidal acrimonies are thrown upon other parts of the body, and either find there no means of evacuation (latent hemorrhoids) or are evacuated by the vessels of other organs, as, for instance, the vagina and the bladder.

The effect of medicinal treatment on this disease is, accordingly, a gradual conversion of bleeding into blind, mucous, and latent piles.

The effect of the water-cure is an opposite conversion, and thereby a cure in this way—that no new acrimonies are brought into the body, and the old ones are removed by bleedings, critical sweats, urine and exanthems. Naturally, no cure can follow without a corresponding diet. Much exercise, and the use of mild food and drinks, are the principal requisites of this diet.

The suppression of bleeding piles by medicinal treatment has always, sooner or later, the most lamentable consequences.

13. ANEURISM—VARICOCELE—VARICOSE SORES.

Aneurism arises in this way, that either all the coats of an artery, in certain places, lose their tensive power and extend themselves,

or that one of these coats gives way, and the others yield to the pressure of the blood, and expand themselves. The latter process is more common in this disease than the former. In the expanded part we find then an enlarged arterial sack, in which frequently a pulsation, corresponding to that of the heart, is perceptible.

The causes are divided into two chief classes; namely, into external mechanical, and internal chemical, with which last, a mechanical co-operation from a violent exertion is sometimes combined.

The purely mechanical causes are external injuries with sharp instruments, particularly the lancet of the surgeon. When, in letting blood, not only the vein which is intended is opened by the cutting instrument, but at the same time an immediately adjacent artery is injured, so that the blood of the artery passes into the opening of the vein, the latter expands itself and becomes an aneurism. This accident occurs frequently, and explains why aneurisms occur so frequently after blood-letting.

The absolute folly and mischievousness of blood-letting have been spoken of above; along with the certain disadvantages of blood-letting, even if properly performed, the patient risks the uncertain consequences of mistakes in the operation itself. To these belong, also, the injuring of tendons, which is not very rare, and which has rendered many a man incapable of bodily labor.

Aneurisms which arise from internal causes have generally compound causes. As a constant one, we may assume that the arterial coats have been from birth upwards relatively weaker than the remaining organs. With this predisposition, the expansion of the vessel may occur when the blood by an exertion, or from pregnancy, is impelled with abnormal force through the vessels, and in one or more parts of them produces a partial disruption of their coats; or when poisons and acrid matters, previously taken, have deposited themselves principally in the arterial coats, as the weakest parts of the organism in question, and by their corrosive power produce a gradual destruction of the parts most affected. Without doubt the latter cause is much more frequent than the former; as, indeed, it is doubtful whether the first, without the co-operation of the second, ever produces an aneurism.

Certain poisons exercise their destructive effects principally upon single systems; as, for instance, mercury upon the lymphatic system. According to my observations the most dangerous poison for the blood-vessels is prussic acid; at all events, most of my aneurismic patients had previously taken much prussic acid for

other diseases, and the aneurisms had afterwards come on. In people who have taken poison, and suffer from expansion of the vessels, it is, *à priori*, probable that the poison is the chief cause of this, as of all other organic mischief. Moreover, my experience confirms this conclusion; for all those patients who underwent a water-cure under my care, got critical exanthems on the skin, over the expanded vessels, which was attended with itching and burning; and this can only be produced by evacuations of acrid and poisonous matter.

Experience has also shown me that the causes of aneurism are not in the abdomen, where they are sought for by physicians, but mostly in the parts of the vessels themselves which are expanded. If the former were the case, the expansion would extend itself over all the vessels of the lower extremities; a disease of the abdomen cannot act more strongly, still less exclusively, on single spots of the vessels than on others. Co-operative causes are certainly to be sought for in the abdomen, but never exclusively.

Physicians employ, in aneurism, firm compresses, or laced stockings; in their opinion, the vessels are in this way pressed together, and a further expansion or complete disruption of them is prevented. This remedy is just as perverse as all their internal remedies. By the lacing, only the outer side of the vessels is forcibly hindered from expanding itself. An expansion inwards or sidewards is still possible; to prevent this, the vessel must be laced up all round. Moreover, by the laced stocking, the circulation of the blood and cuticular exhalation are impeded; consequently, its effects are in every respect absolutely injurious, and encourage the complete disruption of the arterial coats.

The true physician must never recommend the employment of a laced stocking, neither must he always recommend the laying aside one which has been long worn, and always with great precaution, because the vessels weakened by this process might be easily torn, if the patient, immediately on laying it aside, were to undertake his usual movements and exertions. Patients with aneurism, in whom I thought it unadvisable to lay aside the laced stocking, have never been received by me for treatment, because I considered their cure impossible.

The water-cure only effects a conditional cure in aneurism; namely, it only produces a contraction of the vessel into its previous form, when the expansion is not old and severe. When this is the case, nothing further can be attained than a stopping of the evil;

the deformity remains, but in favorable cases the inconveniences and the danger disappear; to the inconveniences belong especially the tension and the cramp-like feeling in the diseased vessels, during and after any exertion.

As above stated, in my cures of aneurism, critical exanthems have always formed themselves on the affected parts. In treating these, the water-doctor must be peculiarly cautious, because, if too cold water is used, they readily degenerate into varicose sores, which are very difficult to heal—indeed, under the use of quite cold water, are incurable. Moreover, he must be careful not to apply the water locally, before the whole body of fluids has been considerably purified by the cure. The too early local use of water likewise produces varicose sores.

Varicocele is produced by the bursting of an aneurism. In large vessels it causes death, in the small it occasions the formation of several small blood canals. It is incurable by water, but the dangerous consequences of the smaller kind may be removed, or the occurrence of new ones may be prevented.

Varicose sores arise from the compound evil of the disruption of a vessel, and the local presence of acrid and morbid matters. Under false treatment, these sores either pass from a critical character into a secondary malignant, or they appear at once under this character.

The water cure for varicose sores is always tedious, and the result doubtful.

14. SLEEPLESSNESS.

Sleep is that state in animals in which the physical powers and voluntary movements are quite inactive, and the sensibility for sensual perceptions is to a certain degree extinguished; but in which, on the other hand, the processes of circulation, of assimilation, cuticular exhalation, and respiration, go on more undisturbed and more equally.

As the nature of vitality is undiscovered, so is also the inward nature of sleep—the standing still of certain processes of vitality.

Sleeplessness (*i. e.*, relative) in healthy men may arise from a want of exercise, or from not appeasing the sexual impulse, so that the elaboration of the fluids and the excretion of their superfluity in seminal-fluids is prevented, and thus these fluids produce a disturbance in the harmony of the organism; in a certain sense, a state of disease.

Most states of disease disturb the sleep more or less, because, in these, abnormal processes take place, which surpass the powers of the sleeping organism, or which, in other words, are incompatible with the standing still of the functions reposing in sleep. On this account, in all diseases their processes are in conflict with the sleep; if those are active, the latter must yield, or is converted into a half slumber; when this comes on the former are forced, for a period, into complete or relative rest.

From what has been said, we see that sleeplessness is no proper disease, but that it may be an effect of all, and of the most various, diseased processes.

Those who suffer from sleeplessness, without the presence of the above-named cause, want of exercise, and the not appeasing the sexual impulse, and without perceptible, painful, or acute, or in any way distinct, symptoms of disease, have, in the interior of the organism, latent organic malformations, or devastations, in action, and the sleeplessness arises from a reaction of the organism against the rapid progress of the disorganization. The relative and incomplete reaction, in secondary diseases, is usually not combined with symptoms which are perceptible by the feelings of the patient, or the eye of the physician; the absolute reaction, in primary diseases, is, on the contrary, always combined with such symptoms.

As fever is the effect of every bodily exertion which surpasses the continual power of the waking organism, so is sleeplessness the effect of processes which go beyond the powers of the sleeping organism.

It follows from this that medicinal opiates are doubly mischievous; first, because they consist of benumbing poisons, and, therefore, bring poison into the body; and, secondly, because they disturb the organism in its reaction against the rapid spread of an internal devastation, or malformation, already in progress.

It may be perhaps objected to my whole reasoning, that, in these days, sleeplessness is a very general evil, and yet, that organic faults are not so common.

To which I reply, that organic faults are exactly as diffused as secondary diseases; in every chronic disease organic faults are being formed in the organs which are the seat of it.

Dissections of those who have died of chronic disease have shown this as clearly as it was already proved, *à priori*, by true pathology.

It is exceedingly absurd that the doctors, when they find in dis-

section organic devastations and malformations, should hold themselves justified for the incurability of the disease. The presence of such appearances in people who, in every illness, have been medicinally treated, is the strongest possible inculpation of the medicinal method of cure.

It is most absurd to look for the causes of organic lesions, in people to whom poisons have been administered, elsewhere than in those poisons. Where poisons, such as are prescribed by physicians in all energetic diseases, have been swallowed, we have then before our eyes sufficient cause for all imaginable organic lesions and malformations.

15. LINGERING FEVER—CHRONIC NIGHT-SWEATS—DROPSY.

1. *Lingering Fever.*

As acute fever arises from the organism making an abnormal effort to expel accumulated morbid matters—an effort which exceeds its normal powers—so does lingering fever arise when the performance of its daily functions exceeds the power of the machine, because one or more organs have been gradually injured by poisoning. We see from this, that such a fever is not the effect of a curative struggle, but of gradual defeat and destruction; it is therefore wretchedly weak, as is proved by the thin, old-man-like pulse, in such cases. In all people who have taken medicine for years, the digestive organs are irritated and poisoned, and these people, therefore, after every meal, get a slight fit of fever, as a proof that the business of digestion can only be effected by an abnormal exertion of power.

2. *Chronic Night-sweats.*

Chronic sweats have the same relation to critical, as lingering fevers to acute. Critical sweats during, or after, acute disease, pour forth the whole mass of accumulated morbid matters; on the other hand, night-sweats depurate nothing more than the daily bodily refuse, which, according to nature, ought to have been removed by the more imperceptible exhalation and breathing of the skin. Chronic sweats are the consequences of reduced activity of the skin, which, in its daily business of secretion, must have recourse to the extraordinary means of sweating.

The end of these sweats is often atrophy, often dropsy. In chronic sweats and fevers, each of them is followed by a rigor; so that the body is always alternating from one extreme to the other, because a relaxation of the powers must quite naturally follow their morbid tension.

A cure of these very bad morbid conditions is only possible by a tedious, laborious water-cure; nevertheless, it is always to be attained, if there is youth and sufficient vital power left.

3. *Dropsy.*

This fearful disease every year demands more victims. What are the causes of this?

It can only be occasioned by a twofold cause—viz., poisoning, and a dry skin-regime (want of cold washing and bathing).

If the skin is so relaxed that it can no longer throw out the excretory fluids, which reach it daily from the interior of the body, these fluids, which ought to be exhaled, accumulate under the skin, and produce puffiness, pallor, and coldness—the so-called dropsy.

The more a body is poisoned, the more it requires abnormally strong exhalation, because it tries to get rid of its morbid matters thereby. It follows, from this, that in people thus poisoned, the activity of the skin is more than usually brought into play, and therefore is the soonest relaxed, if it is not supported by the daily refreshment with cold water, destined for it by nature. For this reason, none require water-cure and water diet more pressingly than those who have taken much medicine. We can also, in this way, explain how strong poisonings (whether medicinal, especially by mercury and cinchona, or dietetic, by excessive use of spirits and alcohol in intoxicating liquors) so frequently occasion death by dropsy. When poisoning and torpor of the skin, and therewith a disposition to dropsy are present, it breaks out very frequently as a consequence of cold; nevertheless, it is an error to think that cold can be the first or only cause of the dropsy.

The water-cure cures this disease always in its commencement, if there is sufficient vital power left in the body. The problem of the cure is, so to vivify and bring into action the skin as that it again undertakes the office of exhalation. The critical removal of the already accumulated fluids is usually effected by sweating and abnormal secretion of urine.

When the poisons taken are chiefly thrown on an internal organ,

—perhaps, because, during the acute disease in which the medicine was given, there was, in this organ, an enhanced feverish vitality, and therewith an afflux of fluids,—the last effect of the poisoning is either suppuration of this organ, or a collection of stagnating fluids in it—local dropsy. Its process of origin is this:— As a protection against the intended morbid matters, the organism transmits to it, without intermission, its best fluids, in order partly to dilute the poisons, partly to throw them, with these fluids, out on the skin. In this way they can be radically expelled, if water is used, inwardly and outwardly. If this, however, is not done, and if the organ, most loaded with poison, loses the power of again repelling the intruding fluids, when saturated with poisonous matter, so that they do not reach the skin to be exhaled, then we have dropsy, either of the brain, breast or belly, &c.

He who rejects all medicine and intoxicating liquors, and keeps to water diet, has no dropsy of any kind to fear.

These local stagnations of serous fluids may be cured by water, if there is sufficient vital power left, and the disease is not too fully formed.

The inefficacy of medicine against all these diseases is well known, and the old art of healing gives itself scarcely the air of being able to cure them—its confesses its impotency.

16. CONCLUDING REMARKS ON SECONDARY DISEASES.

When medicinal poisons are given on an empty stomach, they act the more injuriously on the organs of digestion, and produce secondary diseases chiefly in them. When given on a full stomach, they pass, mixed with the food, into the chyme, chyle, blood, and through the circulation into the whole organism, remaining, however, unassimilated foreign matters. By their mixture with the food, they act less injuriously on the digestive organs; they are also, thereby, somewhat diluted and mitigated, but introduced more thoroughly into the blood than in the former case, in which a portion of them is withheld from passing into the blood, by being enveloped in mucus.

The stronger poisons are given more rarely than the weaker; and the former occasion principally organic lesions, by suppuration, cancer, and caries of the bones. The weaker, and more generally administered, produce principally dropsy. Dietetical poisons, particularly the alcohol in intoxicating liquors, produce, therefore,

numerous dropsies of all descriptions, but of themselves never suppuration of internal organs.

Medicines from the class of corrosive poisons, as arsenic, mercury, concentrated acids, muriate of barytes, iodine—moreover, the numerous corrosive vegetables—chiefly produce suppuration and chronic inflammation of internal organs.

The narcotic poisons, in the form and dose of medicines, occasion principally excitement; thereafter, torpidity, and deformities of nerves and dropsy.

Astringent medicines produce chiefly atrophy, by stopping up the finer canals, and by contracting permanently the animal fibres.

Organic indurations, ossifications, formations of cartilage, the wasting away and abnormal increase of single organs, the growth of polypi and of stony concretions (in urinary calculus and gout), all these painful and tormenting organic faults and devastations can only be produced by poisoning, which in most cases is medicinal, much more rarely dietetical, and most rarely of all, homicidal.

All these organic malformations and lesions occur in the course of the life, and usually after middle age, or later; the art of healing, under whose protection and influence such misery can arise, is already, in the eyes of every thinking man, designated and branded as an art of mischief of the most fearful kind.

All these disorganizations can be healed only by water, and that only in the first stage, when there is sufficient vital power left. At a later period, water can only effect strengthening of the organism, and alleviation of the organic evil. Therefore let every one, as soon as he perceives the first symptoms of such disorganization in himself, hasten to betake himself to the water-cure. Every chronic pain and chronic sleeplessness are symptoms of disorganizing processes in the interior of the body.

O.

CONTAGIOUS DISEASES.

Epidemic diseases are often confounded with contagious. Cholera, influenza, yellow fever, are epidemic diseases; and intermittent and gastric fevers often become so.

All diseases which have a purely contagious character, with the single exception of hydrophobia, are accompanied by exanthems of the most various kinds.

In many of these exanthems, small worms, or mites, have been discovered by the help of optical instruments, and these animals have in each different disease a different form.

It is exceedingly probable that these mites are not the effects, but the causes of the exanthems, and therewith of the whole disease.

If any mineral, vegetable or animal poison (except hydrophobia), is introduced into the body, it penetrates and poisons it by means of the circulation; but the poison loses, in the same degree as it is diffused and mixed, as much of its power as it has gained in diffusion; the same is the case with the poison of snakes. In contagious exanthemata, however, the case is reversed; the smallest quantity is sufficient to infect the whole organism, and the latter now reproduces the poison in much greater quantity than it has received it; and this poison, by its enormous diffusion, loses nothing of its power.

The production of sharp biting poison, by a physiological process, from the fluids of the body, is not only quite inexplicable, but contradicts every philosophical conception of physiology and pathology.

If we, however, assume that these diseases are produced by animalculi, which propagate themselves in the body of the person affected, we obtain thereby not only an explanation of the diseases in question, but we also preserve the philosophical bases for all pathology and physiology. We are, therefore, intellectually forced into this assumption, and this so much the more, as our sensual perceptions have already been convinced of the existence of mites in psoric and venereal sores.

Canine madness is also no otherwise explicable than by the hypothesis of the animal generation of foreign beings.

Contagious exanthems fall into two classes, acute and chronic.

To the acute belong rushes, measles, small-pox, &c.

In these diseases we must suppose a kind of animalculi, which, indeed, propagate themselves in the human body, but only for some generations, and which quickly suffer death, if they do not cause it.

To the chronic belong itch, leprosy, and syphilis, &c. We must here assume an animalculæ (the microscope has already dis-

covered it), which, under a false diet and false art of healing, continually propagates itself, until it has occasioned the death of the person attacked, by eating around it.

I must put off to a future time going into the detail of contagious disease, and confine myself here to putting down what was said of syphilis in my second edition.

In all diseases which are caused by inorganic matters medicine can only do harm, without the possibility of being of use, or of destroying the morbid matters, because, first, the medicine does not so penetrate the whole body, as that it can reach every concealed foreign atom; and because, secondly, supposing even that this did happen, the annihilation of the morbid matters would never thereby be effected. It is well enough known, that the annihilation of the smallest atom of matter is impossible, whether by fire or by any chemical process. Apparent annihilation is nothing else than a resolution into elementary matter, or a passage into other combinations. It follows with certainty, from this, that the organism can never be freed from its foreign morbid matters in any other way than by their expulsion; that it is impossible to effect their annihilation in the body by medicinal means—it follows that every idea of curing by poison, or medicine, is one of the most absurd and fearful errors into which mankind has ever fallen.

If, however, the causes of disease were really of an immaterial and dynamic nature, as physicians in modern times assume, then the idea of curing by poison, or by any material substance, is still more contrary to sense. A cure would then be only possible by dynamic influences and means, as by magnetism, electricity, and the like.

In every case, therefore, whether material substances or dynamic disturbances are the causes of disease, medical science is as absurd and contradictory in its theory, as it is destructive and productive of mischief in its practice.

The case is different in chronic contagious diseases, where, by poisoning the fluids of the body, we can certainly effect the poisoning of the animalculi. When this has happened the organism rids itself of the minute invisible corpses by exhalation and suppuration. It attempted this already when they were alive, but it could not succeed, for two reasons; first, because they propagate themselves; and secondly, because they are always striving to make their way inwards, from the skin into the interior.

But the fearful part of this cure by medicine is, that the poison, which is given for this purpose, mostly remains till the death of the patient in his body, and by degrees effects the destruction, or at least the injuring of internal organs; and thereby a painful death, long before the natural age—unless, indeed, the poison be expelled by a water-cure. This, however, is tedious, is combined with much pain; and moreover, few men live in such circumstances as to admit of so tedious and expensive a cure. Therefore, this so-called cure by medicine is one of the greatest misfortunes that can happen to a man.

In the acute exanthemata—rushes, measles, &c., medicine is entirely useless (but not harmless), because it cannot be so quickly carried out as the disease itself is decided; it requires several days before poison which is swallowed, or rubbed into the skin, diffuses itself through the fluids of the whole body.

It is matter of experience, that chronic exanthemata are not cured by the mere outward employment of corrosive substances and poisonous salves, but are thrown thereby upon the inner organs; this is true in itch as well as in syphilis. Now it becomes a question—and this question is of the highest importance for medical practice—whether the exanthematic poison is by the external remedies first propagated into the interior, as most allopaths assume, or if the whole body is already always infected before it forms the outward local symptom, as Hahnemann believes. The latter asserts that all external destruction of primary syphilitic sores, however effected, whether by caustic, by fire, or by steel, has sooner or later produced secondary affections; but, even if this was allowed, it nowise proves that Hahnemann's view of the nature of syphilitic infection is the right one; it rather contradicts all probability, for without doubt the organism would immediately react against the affection when it first comes in contact with the skin, *i. e.*, would endeavor to expel the animalculi from the skin, and therefore form sores before the enemy could penetrate into the interior. If the organism had not the power to react against the evil as long as it was only on the surface, how could it have it when it had already penetrated into its nobler organs? Most probably, therefore, on the first outbreak of psora and syphilis, the skin alone is affected, and for the purpose of a radical medicinal cure, the object would be not to apply the medicinal poison from without to the skin—because the animalculi would retreat from it inwards, but it should be applied

from the inner side of the skin, for then the animalculi could not escape. But how are we to go to work, so that the medicine should act upon the skin from within, outwards, without introducing it into the stomach, and thereby poisoning the whole body? Truly, in general this is not possible, except in one special case—namely, in primary syphilis in the male sex.

Immediately on the breaking out of such sores, let mercurial inunctions be applied to the root of the penis, without anything further outwardly or inwardly. By such a proceeding alone is it possible to decide the question whether, on the outbreak of primary syphilis, the whole body is already affected, or only the glands. If caustics are applied to the sores, the poison is thrown inwardly; if the parts are cut or burned, we can never know whether we have cut and burnt deep enough; but if my proposal is adopted it is impossible that the animalculi could find their way inwards without being killed. From the construction of the female parts of generation it is clear that a similar proceeding is not possible in them.

If the experiment should turn out unfavorably, *i. e.*, if secondary syphilis (or transplantation of the syphilis inwards) were produced, it would prove that Hahnemann's view is the right one.

Even if this experiment were to succeed, I would advise no man to have recourse to mercury in syphilis, but unconditionally and always to water. For those, however, who always hand themselves over to the doctors, this invention of mine would be a great benefit, because not the whole body, but only a very small part of it, would in this way be penetrated by the mercury.

The cure in contagious exanthemata consists in sweating-baths, in wet bandages over the eruptions, and in drinking.

It has been said that the water-cure in itch and syphilis is exceedingly tedious; some writers have, indeed, asserted that water has here shown its insufficiency, and that recourse must always be had to the specific remedies. The first statement is perfectly well grounded, if the infected persons, before their entrance into the water-cure establishment, have already been much handled, or rather mis-handled, with medicine; for then we have to do, not only with the getting free of the infection, but also of the medicine which has been taken, and the cure must naturally last so much the longer, the more the body, by the help of the doctor, has already lost strength and flesh. The cure must also last very long when in the affected body, besides the infection, there is already

an old horde of chronic evils, hemorrhoidal, gouty, and other matters; for, as already said, water cures no single disease without at the same time setting in motion all other concealed mischief.

The second assertion of the absolute insufficiency of water can only have been made by those who are totally inexperienced in the water-cure, and into whose heads no ray of light on the nature of disease and effects of water on the animal organism, has yet penetrated.

A word more on mercurial poisoning. It is quite the same whether mercury has been swallowed or rubbed into the skin—it always penetrates into the solids and fluids of the body. It can, as is well known, never be assimilated to human flesh; consequently, it must either be gradually expelled through the skin by the organism, or it remains as a foreign, gradually destroying substance—as poison. Allopaths believe that they can extract it from the body by warm sulphur-baths. We see that allopathy is here openly of opinion that a foreign material substance has passed into the organism; but the way in which it tries to get rid of it shows the greatest ignorance of nature's mode of healing. The sulphur, they think, is by elective affinity to attract the mercury and neutralize it—as if the human body were a rag or a sponge, without life of its own, or as if the mercury lies so upon the surface as that it would be attracted by the sulphur. No, things take place quite differently; when the sulphur penetrates into the skin the organism must protect itself against this new poison, and has, therefore, at this moment, least of all, the power to bring to the skin the mercury concealed and slimed-up in the remotest and most various parts. The mercury remains where it is, and the sulphur which penetrates into the body must likewise be surrounded by mucous fluids, because otherwise, like every poison, it would destroy the nerves and all other organs into which it is conducted. The whole result of sulphur-baths is, therefore, that, to the old mercurial poisoning, a new sulphur one is added. That this is the case has been indisputably proved by experience in the water-cure. All people who have taken mercury, and for whom thereafter a course of sulphur has been prescribed, have always had the same succession of crises at Graefenberg; namely, their first critical sweat smells so distinctly of sulphur, that the dullest nose can have no doubt; when the sulphur is got rid of, then come sweats of a mercurial smell, sores, and eruptions, and ptyalism, the most certain proofs of an excretion of mercury; very frequently

the syphilitic sores make their second appearance at the last, but are speedily sweated and bathed away.

The warmth of the sulphur-baths contributes its full share in making such a mercurialized person worse, for they dispose the body to take cold, which in every poisoning, but especially in that by mercury, has very painful and often dangerous consequences. All warm baths, far from being able to effect a cure, weaken and render effeminate the organism, and open the door to disease. For health, and still more for cure, great activity and warmth of the skin, an afflux of the fluids from within outwards, an energetic life in the periphery of the body, are absolutely necessary. By warm baths, however, the contrary of all this is effected; for, since their artificial action is that of heating the skin, as a consequence of the eternal laws of nature, the reaction after them produces coldness and torpidity in it. No contradiction is here possible; it is equally proved by theory and experience.

P.

EXTERNAL OR SURGICAL DISEASES.

In this class I include all those injuries which have arisen from external, mostly mechanical causes, by no means, however, the external exanthems which have arisen from internal sickness.

External diseases, therefore, are divided into wounds, bruises, ruptures, dislocations, burns, and frost-bites.

In order to cure a lesion, the organism must form new flesh and new vessels in the injured part; to enable it to form this flesh, it must bring to the part, in abnormal quantity, the materials thereof—the formative fluid, which is blood—(exactly in the same way as plants cure a lesion by impelling the sap in large quantity to the injured part.) By this abnormal afflux of blood to the part, an increase of heat is produced, which however only becomes inflammation when the instinct of the person wounded for cold water, inwardly and outwardly, is not satisfied. Allopaths consider this afflux of blood to the injured part, and the increased local heat, as a disease, as a phenomenon which must be removed, and take away blood. The organism sends fresh blood to the parts where it is

required, and the doctors tap it off until the extremities become bloodless and cold, very often till the man dies of debility (the same in internal inflammations), and then, in the literal sense, the patient has been slaughtered.

If wounds from the first are treated with water, according to Priessnitz's method, they heal up quickly and completely, the parts never give pain thereafter, have no hard cicatrix, nor, indeed, any perceptible scar, so that the place where a severe wound has been cannot be discovered.

All wild animals do the same as Priessnitz;—but where do the senseless beasts of the field get their wisdom? Every wild animal seeks the water when it is wounded, cools the heat inwardly and outwardly, and heals its wounds much more dexterously than Dieffenbach or Graefe—this may appear incredible, but every huntsman knows that it is true.

It would lead us too far, if I were to adduce examples in which wild animals have been radically cured of organic lesions which we usually hold to be unconditionally mortal. I have collected examples of this kind, from the lives of European gamekeepers and the trappers of the "far West"—and intend to publish them on another occasion.

It is exceedingly probable that the beginning of all medicine is to be sought for in the employment of herb poultices for external wounds.

As every organism strives to expel intruding unfriendly substances through the skin, it strives, in a still higher and more general degree, to clean wounds of dirt or similar substances by suppuration, before it closes and heals them.

The pus, in critical exanthems, as well as in wounds and injuries, is nothing else than the means whereby morbid and poisonous matter may be conducted outwards. It is impossible for the organism to expel these substances, however small and atom-like they may be, in their nakedness, because, if not enveloped in mollifying fluids on their march outwards, they would come into contact with, and occasion pain to the nerves, and danger; nay, they could not be transported, without a smooth, slippery covering.* Critical sweat, in the water-cure, which is almost always sticky and ill-smelling, like the pus of wounds, is in its nature nothing else than a sort of matter, only that it is gradually expelled from a million

* When a crumb gets into the air-tubes in eating, mucus is immediately secreted, to render it slippery and transportable.

pores, in innumerable little drops. When, on the other hand, the sweat is not critical—*i. e.*, contains no morbid matter—it has, on breaking out, no bad smell, and is more watery than fat or slimy.

Exactly as the internal curative struggles of the organism, the symptoms of acute disease, can be suppressed by poisoning, so can we defeat the endeavors of Nature to purify a wound by suppuration and to keep it open till this has happened, and we can effect a closure and cicatrization of the wound against the instinct and will of the organism. But it is most certain that, in all wounds smeared together by salves, there are always foreign matters chronically lodged in them. Here is the proof: all deep and severe wounds which have been medicinally healed leave under the scar a feeling of pain, or of numbness and discomfort, which are plainly perceptible when the part is pressed, or when a storm is coming on; in some cases, these feelings occur, without assignable cause, at periodical intervals. Such forcibly-closed wounds frequently break out again in the water-cure, purify themselves by suppuration, and then heal up. Then, every trace of pain or inconvenience disappears forever. It has often happened that visible material substances have been thrown out by the suppuration in such re-opened wounds—as, for instance, pellets of shot, or even thread or bits of charpie. Wounds from former campaigns, many years old, have again broken out at Graefenberg, and have thus expelled their enemies and tormentors.*

Like medicine, hydropathy took its beginning from the treatment of wounds. Priessnitz, the creator of the science, began by curing chiefly external injuries.

The cure is different, according to the constitution of the patient and the nature of the injury. The principal remedies are local baths, wet bandages, and drinking. In the water treatment, it is impossible that a wound should close before it is perfectly clean and ripe for healing. Especially in punctured wounds with triangular weapons, water is of incalculable value, because, in these wounds, their too early healing over has the worst consequences.

In animals, and particularly in horses, water has been for a long time employed against external injuries, and not without success;

* *Note by Translator.*—English surgery is nearly free from the reproach conveyed in the above paragraph. My lamented friend, the celebrated Liston, always treated wounds after operations, with cold water only; and military surgeons never apply anything else to gun-shot wounds.

but people would be astonished at the results, if, instead of the usual perverted way of employing it, they were to proceed according to Priessnitz's prescriptions. This ought especially to be conceded to the poor horse. Because man has most regard for this noble animal, it is, next to himself, most honored with medicine; and the consequence of this proceeding is quite the same as in the human race. The delicacy and sickness of the horse is generally known and deplored; people often lament that exactly the most beautiful of animals should be the most sickly; but it has never occurred to the most sagacious of animals that the sickliness and infirmity of the nobler races of horses are only the effects of medicine and pampering. Exactly in proportion as horses are more or less poisoned with medicine, so are they more sickly or more healthy. The English race-horse is almost as rheumatic and hysterical as a lady of rank; the farmer's horse is somewhat more robust; still more so the Polac; and the horse of the savage knows as little of disease as his rider.

If one understands how to use water in wounds and injuries, he can, in most cases, dispense with surgery, with the exception of the reduction of dislocated joints, ruptures, and some other few cases.

Surgical and operative assistance in cancers, morbid growths, caries of the bones, gangrene, aneurism, and other consequences of previous poisoning with medicine, is confined to the removal of the diseased part; the aid of water effects the cure and retention of the part. This is the first little difference betwixt the efficacy of water and of surgery. The second consists in this, that, after mutilation, the mischief usually breaks out again in other places; whereas, by the water-cure, the possibility of any future mischief is rooted out. Truly, indeed, the water-cure for such evils lasts very long, and a leg or a breast can be cut off in two or three minutes.

What a chain of fearful errors: When an acute disease is by medicine happily cured INTO the body, the patient praises the skill of his doctor; nay, he is regularly pathetic in his gratitude. When, after many years, the poison develops its devastations and destructions, it never occurs to the unlucky wight, that, a long time before, his doctor sowed the poison-seed, which is now ripening to a harvest of internal suppurations, cancers, and sores. Now must the iron be laid to it to cut down the crop, to cut out the cancer;

and the *refrain* of all this misery is the stupid astonishment, how wonderfully far man has got in his science.

"Ars longa, vita brevis." Yes, indeed; but the longer the art, the shorter the life.

Q.

CRITICAL OCCURRENCES IN THE WATER-CURE.

Medical science understands by crisis, in the enlarged sense, a decision of a disease; in the more confined sense, the fortunate decision of a disease by evacuations, whether they be sweats, or secretion of mucus, or exanthems, or abnormal deposits in the urine, or diarrhœa, &c.

By lysis is understood a crisis so unimportant, that it escapes perception, and is only observed through its consequences. From these explanations, we see that hydropathy has borrowed both these words from medical science, and connects them with similar ideas. It seemes extraordinary that physicians should generally make use of such expressions, and yet deny the existence of morbid matter, and the occurrence of crises in the water-cure; although this is by no means universally the case, as some of the older and more practical among them still adhere to the old humoral pathology.

In hydropathy, we understand by crisis the sensually perceptible excretion of morbid matters, along with the excitement and the fevers which often precede it; by lysis, we understand the imperceptible excretion of such matters.

We have already shown how the water-cure converts chronic diseases into acute—namely, how the water, first of all, strengthens the organism, and then releases from their envelop the slimed-up morbid matters, and occasions their excretion, frequently attended with smart fever.

The diseased conditions, during the water-cure, and especially during its critical periods, are entirely different from anything previously experienced. This cannot be otherwise, because this cure by degrees stirs up and expels, in sores, &c., all latent and deeply concealed morbid matters; whereas, on the contrary, all

previous methods of cure repressed the excitement of the curative struggle, and forced the morbid causes inwards. The most essential difference between water and medicine is, that the former takes the bad matter *out* of the body, the latter forces it *into* it.

For this reason, the physician seldom attains the perception that the causes of disease are material substances; the hydropathist, on the contrary, has the sensual perception of this in every case. Hence the various views of the materiality or spirituality of the causes of disease. He who cannot by reasoning be convinced of the truth of the former view, would do well to go to Graefenberg; there he must give in, unless, indeed, he denies, right spiritually, all demonstrative power to sensual perception.

To the characteristics of the critical state belong, first, that singular mixture of hope and joy and corporeal pain, of which only he who has experienced it has any idea, although the solution of this apparent riddle is not difficult. The pain is produced by the awakened morbid matters, and the joy by the instinct, which is sure of recovery, and which is no longer to be befooled and benumbed.

The cure brings with it much labor and pain, absorbs all time for amusement, and demands more than usual perseverance. Of those who have fully gone through the cure, many find their expectations in a double way deceived. In the first place, the cure, in many complaints, is more tedious and painful than they had previously thought possible; secondly, its results are often much more brilliant than their most sanguine hopes.

Be it remarked, I speak of those who persevere until no more crises will or can come, because the body is perfectly purified. Very many quit the cure too soon, and do not go through the after-cure, which then becomes necessary. When a person has had a couple of crises, with sores and discharge of matter, he is already astonished that such an enormous mass of mischief should have been in his body, and thinks for certain this is the last of it. Nevertheless, it may happen that, after further use of the cure, the crisis is again and again repeated, until perfect purification and health are obtained.

Still more annoying than boil crises—nay, sufficient to drive one to despair—is the purification cure, from long-standing obstruction of the digestive canal; the masses of excretory matter are also here much larger. When a week has passed in vomiting and purging of mucus, it appears much to the patient; when months

pass, he becomes desperate; and yet he may live to experience that it is protracted for years. Truly, the latter is a very rare case, and only possible when the obstruction has begun not much later than life itself, and is therefore so indurated, that its separation in strata demands an enormous time, and much activity of the system.

In these stomach crises the patients frequently taste, with unmistakable certainty, medicines which they had taken years before. There is nothing surprising in this; for these substances, which are garnered up in indurated mucus, and which neither air nor water can reach, retain their taste and smell as if they had lain in stoppered vials. So it is with poisonous substances, which, divided into small atoms, are chronically lodged in the body. Mercury, for instance, retains its poisonous corrosive power; when it has lain many years in the body, and then has been driven out upon the skin by the water-cure, it corrodes the latter and the bandages moreover.

The physiological law of the total renovation of the body within a few years, appears to be in contradiction to the fact, that poisons may remain for twenty years or more as foreign substances in the body; nevertheless, it is easily explained. The renewal of the body goes on *around* the foreign matters; the exhalation of the excretory parts extends itself to the small particles of slime which envelop the poisonous atoms; but to expel the latter is much more difficult for the body than to renew their covering. When it can no longer effect this, then begins the destruction of internal organs, either by suppuration or dropsy. The same happens visibly on the large scale with a musket bullet, which has been driven into the body twenty years or more before; it is still there, although not an atom of the then existing body now remains; the latter has been renewed three or four times in the interval.

The first effects of the water-cure are a feeling of increased comfort; only when the body has obtained new strength come the onset of crises, hot fever, with the internal pain from the excited morbid matter. In a few hours or days this fever is followed by the breaking out of sores, eruptions, and sweats; this is—provided always the use of water is duly continued—the constant course of chronic diseases. In the usual acute diseases, the fever is still more quickly and more certainly removed by the water, and the disease got rid of in sores, &c. I say still more certainly, because the acute disease is a curative effort of the body of its own accord;

and, on the contrary, in chronic disease, the organism must be first excited to the acute outbreak, by the long use of water.

From the time that the cure begins to work until its end, we find, that in most patients the slightest injury of the skin occasions suppuration, and is long of healing. This symptom is a new proof that the water-cure draws morbid matter from within outwards. In ordinary life we meet, not unfrequently, with people of pale color, scanty flesh, and other symptoms of chronic disease, whose skin nevertheless heals up quickly and without much suppuration after every injury. People conclude from this that such a body must have very healthy fluids, and that the wretched appearance arises only from weakness; but this is most falsely concluded; it proves that the mischief lies in the internal organs and parts of the body. When such people come into the water-cure they learn the truth; in like proportion as their internal feelings improve, as their flesh gets hard, so is their skin more inclined to suppuration, until, finally, the proper outbreak of eruptions or sores ensues.

All this is a proof that, by the water-cure, the life and energy of the external functions, and those nearest the surface, are in the same degree exalted, as the morbidly increased activity of the inner noble organs is brought back to the normal state; by which is explained the well-known fact, that a complete water-cure diminishes, and at last quite cures, inordinate excitement of the passions.

By degrees, as the cure elevates and strengthens the organism, as the improved digestion conducts more blood to it, the streams of life, the vessels, are filled, and their beat becomes full-toned, their march, previously creeping, becomes firm and sure. Every patient experiences a complete alteration of the pulse, if it was not normal, on his beginning the cure.

In many cases this change of the pulse occurs immediately after a crisis. There is a sort of pulse-crisis, during which all the vessels beat and hammer as if the body were a stamping mill. This condition is especially encouraged by much drinking. The reaction produces more heat than intoxication with wine; the skin is very hot, which is always a pleasant feeling (for it is only internal heat that is painful); a pricking and sticking is felt in the skin, which arises from the exhalation of acrid morbid matter. Drinking is a chief requisite in the cure, nevertheless it may be overdone if one continues to pour down water against the resistance of the instinct.

Like the pulse, the color of the blood is also changed by the

water, from the melancholic dark red it passes to that light shade which we see springing from the vessels of a deer when shot. Water produces rosy blood, and this transparent color, together with the increase of blood and purity of skin, is the cause of the rosiness which the complexion assumes during the water-cure.

R.

WHAT DISEASES ARE CURABLE BY THE WATER-CURE?

Answer: All *kinds* of diseases are curable, but not all *degrees* of disease, and consequently not all patients. He who is curable to-day, is so, perhaps, at the end of a year, perhaps no longer so to-morrow.

All kinds of disease are curable by the water-cure, because they are produced by material substances, and because the organism and each of its organs possesses the power of throwing out all sorts of foreign matters. Water is, therefore, not the universal remedy against all diseases, but the organic power is so, which can only victoriously develop itself when all the demands of organic instinct are satisfied, and the objects of its antipathy kept at a distance.

But all degrees of disease are not curable, because only that diseased condition is curable in which the organic power is stronger than that of the morbid matter.

Therefore, the hydropathist, who is to decide on the curability of a patient, must know the degree of the disease and the measure of the organic power better than the kind of disease.

S.

CHALLENGE TO PHYSICIANS.

I challenge all the physicians of Germany, or of Europe, to controvert my doctrine of pathology. If any one can convince me that the doctrines in this book are as erroneous as all those hith-

erto brought forward, I will honestly and openly confess it; if any one brings forward skilful and ingenious *seeming* reasons against me, I will refute them; if any one comes against me with abuse and reproaches, I will not answer him.

One thing I beg, if you reply to my challenge, leave your learned guild jargon at home. Believe me, the times are past when the public took off its hat before your dog Latin Gallimathias, when it allowed itself to be imposed upon by the charlatanic clatter of hollow figures of speech without meaning, after the fashion of metaphysics. Every truth which benefits mankind, every truth which is evident, must be so presented as that every ordinary understanding, every thinking head without the previous cultivation of the schools, can comprehend and retain it.

Truth resembles the pure mountain stream in transparency and invigorating freshness; in its first effect it resembles the lightning flash which inflames and enlightens; in its after effect it resembles the whole thunderstorm, which purifies the atmosphere and revives all life.

ADDITIONAL CHAPTER.

ON THE LODGMENT OF HARDENED MUCUS IN THE WALLS OF THE DIGESTIVE CANALS.

The facts that in many diseases mucus lodges itself, and is gradually indurated in particular portions of the walls of the digestive canal, has been proved by the water-cure in a manner of which no unprejudiced person can entertain a doubt. It is possible that these facts have been already confirmed by dissection, and recorded in medical books. In composing this section I had not time to subject to a careful examination all the pathological and toxicological books referring to the subject; and must, therefore, in bringing forward proofs of the phenomena in question, confine myself at present to the result furnished by the water-cure and to physiological analogies.

The most material and palpable proof that foreign matters can remain a long time fast clinging to the walls of the stomach and bowels, was furnished to me by the cure in my own person. For,

in my earliest childhood, I had been tormented in the most unheard-of manner, for years, with daily doses of astringent remedies, and especially of laudanum. The consequence of this medicinal mistreatment was, as was shown in the water-cure, that all, or at least the greater part of these medicines had lodged themselves, in the walls of the stomach and bowels, in gradually hardened mucus. In a vomiting crisis of unexampled length, I expelled all the kinds of medicine which I had taken, and felt the taste of some of them most unmistakeably. This phenomenon occurs, indeed, only seldom in the water-cure; but it is by no means an isolated case.* In my establishment, not a year has passed in which some patients have not had vomiting crises, during which they distinctly perceived the taste of medicines previously taken,—in many cases years before. I could authenticate these facts by the testimony of several patients, if required; but I omit it, because similar facts have been experienced in other establishments. Least of all can physicians object to the proof by taste, because in their own science they concede a power of discrimination to this sense, in deciding on the qualities of nearly all remedies. But another objection may be more justly made by those who understand the subject, if the distinct taste of medicines is brought forward as a proof that they have been lodged until then in the walls or anywhere in the cavity of the stomach. For it is a well-known fact, that many medicines applied elsewhere than to the stomach have produced vomiting and purging, and a distinct taste of the medicines employed upon the tongue. Thus, for instance, tartar-emetic applied to wounds has produced vomiting; croton-oil rubbed upon the abdomen, purging; and rhubarb applied to the wound after amputation of a foot, not only has produced smart purging, but left a very strong taste in the mouth, which the patient declared to be the same with that of a piece of rhubarb which was given him to chew.

According to the experiments just quoted, the vomiting up of medicinal matters which had been taken long before, is still no proof that they had hitherto lain in the walls or cavity of the stomach.

* In the translator's own case, during a slime crisis, when he was passing daily large quantities of hardened mucus, and at the same time bringing it up from the throat (without vomiting, however), he had, for ten days consecutively, a constant, distinct taste of quinine in his mouth, though he had not taken a grain of it since thirteen years before, when he had swallowed large quantities of it as a remedy against fever.—*Translator.*

They might possibly have lain in any other organ, and after their release by the water cure, have been brought, by the circulation, partly into the stomach, and into contact with the nerves of taste. I am able, however, to bring forward proofs which leave no doubt of the lodgment of hardened mucus in the walls of the stomach, and I will take the first of these from my own cure, already cited. After I had in the vomiting crisis, for some weeks, brought up much mucus, with a marked taste of cinchona, I felt one day, in vomiting, a hairy lump coming from the throat into the mouth; at the same time, I perceived the distinct taste of a sailor's soup, stinking of rancid oil, which I had eaten on a sea voyage about three years before. It is well known, that ship and emigrant cooks are not very cleanly in their operations, and as I, with all my companions, had to partake of a very bad table, it often occurred that we had to force down the most disgusting food and soups. Especially at that dinner, the taste of which I felt again during the vomiting crisis, a black soup was given us, which I hurried down, observing to my companions that it was the black broth of the Spartans. In swallowing the fluid, I observed that a hairy mass had slipped over with it, but I was not able to bring it up again. That day on the sea had long disappeared from my memory, when I brought up the hairy substance in the crisis. I took it out of the basin, and laid it in the pipe of a heated stove, still thinking that it must be a lump of hair. On examining the dried lump, I found that it was a small ball of caulking oakum, steeped in rancid linseed oil. For although the oakum was thoroughly dry, it still evolved a penetrating smell of linseed oil. I have preserved this relic of my crisis; it is an absolutely infallible proof of the truth, that, in weak and ruined digestive organs, noxious substances may lodge themselves and remain lying for years. That these, and all heterogeneous substances lodged in the body, should lose nothing of their chemical properties, and consequently of their smell, is explained from this, that they are enveloped in gradually indurated mucus, and that accordingly no decomposing element can exercise any effect on them.

To this fact, no contradictory answer can be given, except by declaring my statement to be a fiction. Against this, I can, indeed, bring no juridical proof, because I had not engaged a notary and two witnesses to be present during the crisis. But I can state other demonstrable facts, which prove incontrovertibly the lodgment of heterogeneous matters in hardened slime in the walls of

the digestive canal. For in vomiting crises in the water-cure, along with mucus of a fluid and unformed substance, there are also ejected threads and tissues of mucus, of a plastic structure. I refer here to the two cases given.* Both the relaters are uninterested in the truth or untruth of the fact in question; consequently, to their statements full credibility must be conceded, as well in a moral as a juridical point of view. If it were not an useless repetition, I could add to these statements a number of others. In my own person, I have experienced numerous similar occurrences. It is most certain and undisputed by physicians and chemists, that such mucous substances as have a firm and distinct structure, and are neither half nor quite fluid, and which have lost the capability of being again made normally slimy by wetting them with water, must have been completely dried, old and indurated mucous masses. I have not been able to effect their resolution in water, and I have since found in Berzelius, to my great satisfaction, and in complete confirmation of my views, that mucus, completely dried, can only be dissolved when alkali is added to the water, but not by water alone. It follows from this, that mucus brought up in vomiting crises, of a visible structure, and insoluble in water, must have been previously dried up in the interior of the body, and cannot possibly have been freshly secreted during the vomiting, or shortly before.

Since atmospheric air is only found in the stomach at times, and then in small quantity, it must require a long time so to dry up the mucus, as that it assumes the property of insolubility in water.

The numerous different mucous substances which I have seen vomited up in the water-cure, had very different forms and structure; they were partly long ribbon-like threads, partly lumps of mesh-like tissues interwoven with each other, partly net-like, with connecting longitudinal and crossed threads. Equally different was their color, comprehending the most various shades,—bluish, greenish, blackish, whitish, yellowish, but most frequently brownish, and especially greyish. The difference of these colors can only be explained by that of the medicines which had produced the mucus, and been bound up in it. Some of the colors, indeed, may be explained by the secretions,—for instance, by bile.

The existence of a structure in the mucus, and its insolubility in water, proves its age and previous induration. The size of the

* *Note by Translator.*—These will be found in the Appendix to Part II.

lumps and tissues forbids the idea that they could have lain *inside* the coats of the stomach. For a secretion of mucous bodies, possessing a structure, and of the length of an inch, with a corresponding breadth, from the glands of the stomach, or the tissues of its coats, is a physiological impossibility. We are, therefore, from all sides brought back to the assumption, that mucous bodies of the nature described must have been for a long time in the cavity of the stomach, and fast adherent to its walls. When now, simultaneously with such a breaking out of slime, the taste of medicines previously taken is distinctly perceived,—nay, when, besides this, the mucus and the fluid have the color of the medicine, we are fully justified in the opinion, that the medicine on its introduction into the stomach was enveloped in freshly secreted slime, and, in this gradually indurated mass, plastered against its walls. To this is to be added, that no reason is discoverable which speaks against the possibility of a lodgment of mucus in the walls of the stomach. Analogy speaks rather for it. For instance, mucus adheres to the teeth, and hardens into those solid masses which in ordinary life are called tartar, and which are periodically removed by the dentist. If to this is objected, that the inner coat of the stomach is exceedingly slippery, and beset with innumerable glands and secreting organs, and that, therefore a lodgment of hardened slime on it, in the same way as on the teeth, is not possible; I answer, that the healthy and normal stomach is certainly in the condition described, and in it no lodgment of slime is possible; nay, every sound and strong stomach, especially in animals, has the power of gradually pushing through the side-tissues and expelling even needles, which have been swallowed. But the case is in every respect different with a diseased and medicine-poisoned stomach. By long-continued taking of medicine, especially if the remedies selected are acrid and poisonous, the stomach and bowels are by degrees in certain spots organically destroyed or dried up, sometimes morbidly softened, sometimes indurated, sometimes abnormally attenuated, sometimes equally thickened, sometimes affected with chemical inflammation and suppuration. These facts are subject to no doubt, and no contradiction; the occurrence of these diseases is laid down in all pathologies, and known to all physicians, and they give the most varied proofs of the possibility of the lodgment and induration of mucus in the digestive canal. Many indurated and disorganized spots in the stomach secrete no fluid of any kind, are not the least slippery, and therefore offer as little impediment to the

adhesion of mucus as the teeth. Nay we are justified in the assumption that in digestive canals, which have hardened spots, the adhesion and induration of mucus must be much more frequent than in the teeth, in people affected with mucous obstruction. For, in these persons, there is always much more morbid mucus in the digestive canal than in the mouth, and it remains much longer in the former organ than in the latter, from which it is more quickly expelled by spitting.

In laying open the digestive canal by dissection, the lodgment of hardened mucus in any spot cannot present itself to the eye, otherwise than every ordinary induration, which is usually, though not always, combined with some thickening. There are certainly indurations of another kind, which consist in this, that the organic tissues have passed partially into induration, and in which no slime is lodged. The difference between these various kinds of indurations generally escapes a superficial view, and it is quite certain that anatomists in dissections have often taken indurations with adhering slime, and containing medicines, for simple induration of the organic tissue. It scarcely requires to be remarked, that those spots of the stomach which are permanently covered with mucus, must necessarily, by degrees, die organically out, and that the internal tissues must also become indurated. Such indurations, when found on dissection, should be cut out, and exposed to a long decoction in water, whereby the hardened mucus would doubtless be dissolved, if not into the original fluid mass of slime, at least into the above-described body, with a recognizable structure. It would then be discovered, that the water used for boiling it is loaded with medicinal matters, and has, in most cases, either an acrid, acid, or biting, or disgusting medicinal taste. We should often be able, also, to discover, by means of re-agents, metallic poisons in the decoction.

In a swelling in the left hypocondrium of a syphilitic patient treated with mercury, F. E. E. found a stone, which contained this metal; it is therefore proved from experience that poisons and medicines, enveloped in slime, may lodge themselves in the body, and that this slime may, in time, be hardened into a strong mass.

It is known to every chemist that certain bodies can, by inspissation, be compressed from a very large volume into an incredibly small one. In this respect, facts have been ascertained which border on the incredible. Mucus can also, by induration, be compressed into an incredibly small space. I hold it to be quite

possible that a mass of slime, which in its fresh state occupies several cubic feet, should, in a state of complete induration, not fill more than a cubic inch.

It is scarcely necessary to remark, that all that has been here said of the lodgment and induration of mucus in the stomach, holds equally good with regard to the bowels; and, indeed, it is an ascertained fact, that long-continued taking of medicine much sooner dries, and partially disorganizes the bowels than the stomach, and that accordingly, in the former, indurated slime is much more frequently found than in the latter. From my experience I would assume that, in practice, the relation is as sixteen to one. The mucus which, by the use of clysters in the water-cure, is thrown off in the stools, has also, when it is already old and indurated, like that in the stomach, a recognizable structure, and is, indeed, reducible by water into smaller masses; but not into its original fluidity and formlessness.

For reasons which I shall hereafter give, crises, with expulsion of slime, do not occur so frequently in other establishments as in mine. Nevertheless, single cases have been observed at Graefenberg and elsewhere, and I do not, therefore, state facts which had not previously been heard of. It is well known that, with few exceptions, only such patients go into water-cure establishments, as have already emptied the boxes of the apothecary to the grounds; and, after having taken medicine for years, have only found themselves worse, and have been by their physicians—if not to their faces, at least behind their backs—declared incurable. Since, as has been shown, the lodgment of mucus is only an effect of much medicine, and as in water-cure establishments the great takers of medicine are chiefly to be found, it follows that a great number of such patients must have hardened mucus in the digestive canal. Nevertheless, I have observed in my establishment that, in about sixteen patients, only one got a vomiting crisis, from which I could conclude with certainty that there was hardened mucus in the stomach. Hence we can deduce how very rare this occurrence must be among the community at large. Although such obstructions in the bowels are much more common, they are only to be found in persons who have taken much medicine. It follows, that in dissections, to which in general only people of the lower classes, who do not take much medicine, are subjected, indurated slime in the digestive canal can only seldom be found. Nevertheless, it would be occasionally found, if my proposal was carried out.

In using clysters in the water-cure, it frequently occurs that considerable masses of mucus are thrown out with the stools, of an abnormal color, but which are formless and half fluid. Such masses are not old and hardened, but have been recently secreted from diseased glands, especially when progressing to recovery. In every case, mucus, which has been long in the digestive canal, and is already hardened, must, after its softening and expulsion by water, have a perceptible structure, and, as above shown, must be, indeed, capable of being softened in water, but not of being dissolved into its original slimy mass. These criteria are quite infallible in answering the question, whether the expelled masses of slime are recently secreted, or old and indurated.

END OF PART I.

PART II.

OBSERVATIONS

ON THE

ERRORS USUALLY COMMITTED IN THE EMPLOYMENT OF WATER AS A REMEDY;

WITH AN

APPENDIX,

CONTAINING

I. Thoughts on Diet and Regimen.
II. On the best Season for the Water-cure.
III. Cases Illustrative of the Treatment of Mucous Obstruction
IV. Notes on the Treatment of Asiatic Cholera by Cold Water with a Case.

"Judex damnatur, cùm nocens absolvitur."

PREFACE BY THE AUTHOR

My establishment at Stuer has been visited by many patients who had previously gone through a partially, or wholly unsuccessful course of water-cure, in other establishments in Germany. From these persons I have received authentic accounts of the mode of practising hydropathy in some very celebrated establishments, which leave no doubt that this new method of cure is carried out mostly in a very perverted manner, and produces frequently results which are undeniably calculated to inspire those who are unaquainted with the subject, with prejudice and dislike to the whole science. This melancholy state of things does not permit me to keep silence until I can address the public in my forthcoming practical work, already alluded to, and has compelled me to dedicate the winter months, which I had originally destined for another work, to expressing the thoughts and warnings which will be found in the following sheets.

H. F.

Stuer, March, 1847.

OBSERVATIONS

ON THE

ERRORS COMMITTED IN HYDROPATHY.

I.

EMPLOYMENT OF MEDICINES AND ABSTRACTION OF BLOOD IN THE WATER-CURE.

Water may be use for chronic disease in two ways—namely, first, to strengthen the whole organism and to maintain the functions in their present state; secondly, to expel morbid matters (which is always preceded by exciting them), and to restore the functions to the normal state (radical water-cure).

For the first kind of water-cure the use of medicines is not advantageous—on the contrary, decidedly injurious; but not productive of immediate danger, because, first, there is no excitement of the morbid matters, and because, secondly, the description of medicines which are given for the presumed purpose of strengthening, do not include the strong poisons. But the employment of medicines in radical water-cures is not only injurious and obviously contrary to reason, but also decidedly dangerous, and often fatal. It is contrary to reason, because medicine produces a suppression of the symptoms, and of the reaction of the organism against the morbid matter, *i. e.*, of the efforts of the body to throw out this matter; whereas a radical cure excites the dormant (enveloped in slime) morbid matters,—that is to say, it releases them from their envelop, and brings them thereby into immediate contact with the organically living parts of the body, by which the signs of reaction (usually called symptoms) are called forth. The appearance of reactive symptoms brings on the acute disease, which in the water-cure is called crisis, in the extended sense. What has been

said shows the inconsistency of the employment of medicine in radical water-cures, and therefore the absolute incompatibility of medicine and water as remedies. Water ought to convert the chronic disease into acute (crisis), medicine converts acute into chronic ; water drags the enemy out of his remotest hiding-places, medicine drives him back into them. The incompatibility of medicine with water is, therefore, evident, and the danger of employing it in radical water-cures, and especially during crisis, is upon a level with the danger to life from medicinal treatment in acute diseases.

All important crises which have their seat out of the digestive organs are combined with ardent fever, many of them with the lower grades of inflammatory symptoms, which rapidly rise to the higher or even highest degrees, when medicine instead of water is employed ; and, finally, many crises are accompanied by loss of consciousness and strong delirium. In all these apparently dangerous circumstances, if water is properly employed, there ensues, in every case, an excretion of morbid matter, perceptible to the senses ; if, on the contrary, medicine or abstraction of blood is employed, the excretion to a sufficient degree becomes impossible, but death again very possible. There are many pseudo-hydropathists among the medical directors of water-cure establishments, who, on the coming on of critical inflammation, take away blood,— who, moreover, administer internally all those poisons which physicians give for active fever and inflammatiom. Such hydropathists must, by degrees, bring hydropathy into discredit ; unfortunately, in Germany, their name is legion.

Another mode of applying medicine externally to critical sores and eruptions is adopted by false hydropathists. These worthies apply plaster to the sores, and prove thereby that they have not comprehended one syllable of the first principles of hydropathy. Critical eruptions and sores discharge morbid matter, mostly of an acrid, corrosive, and frequently also, putrid nature, partly by exhalation in the form of gas, partly by filtration in a drop-like fluid form. This exhalation, as well as filtration, is most decidedly impeded by firmly adhering plasters or salves ; the morbid matters driven to the surface of the sores and eruptions ought to be washed off as often as possible with water, in order that the skin may be purified and rendered capable of attracting new morbid matter from within. When, on the other hand, adhesive plasters made of medicinal substances are applied to the skin, it is thereby not only

not purified from the morbid matter flowing to it from within, but it is moreover compelled to absorb more or less of the medicinal substances in the plaster, which as being heterogeneous to the organism, must produce new disease. But when water-compresses are applied to the eruptions wrung out and covered with something warm, so that a comfortable warmth is maintained, when, besides this, on every change of the bandages, the excreting parts are washed and cleaned, the exhalation and filtration are encouraged in the most efficacious way, since after every washing, from the subsequent reaction, increased excretion is produced, since by the warm wet bandages the highest degree of cutaneous exhalation is effected. A second and important curative indication in the employment of wet bandages consists in this, that the skin absorbs a portion of the vaporized water. Water, as well from its composition as from its elements (oxygen and hydrogen), is one of the most essential constituents of the human body, and especially is absolutely indispensable to the maintenance of the interchange of matter and consequently of excretion.

As in the foregoing the wholesomeness of water and the mischievousness of plasters and salves are already proved on physiological grounds, so are all results of experience in accordance therewith. Critical sores, which in the water-cure are healed by water, leave no traces on the skin, either in its structure or color; whereas the same sores, healed with plasters and salves, leave their traces for a long time, and often for life. I have at this moment a patient, who, more than six months ago, went through the cure in the establishment at E——,* and was treated, by the director thereof, with plaster for the boils which came out. Even now, after the elapse of six months, the places where the sores were have a dark violet color, and the structure of the skin in them is quite abnormal. This establishment is one of the most celebrated in North Germany, and yet critical sores are treated there with plaster, and still there are always patients to be found who subject themselves to such mistreatment.

A patient who had gone through the cure in another establishment got, in the course of it, a critical inflammation of the eye, was treated with medicinal antiphlogistics—namely, mercury and lunar-caustic—and was obliged to leave the establishment with deteriorated sight. He afterwards went through a cure under my written advice, got a return of the inflammation, treated it according to my

* Elgersburg, I believe, is meant.—*Translator.*

instructions with eye-baths and wet bandages, and entirely recovered his sight after the occurrence of copious discharges from the eyes.

II.

MISTAKES IN DISTINGUISHING THE APPLICABILITY OF STRENGTHENING CURES AND RADICAL CURES.

As those patients chiefly have recourse to the water-cure who have already gone through all the boxes of the apothecary, and only found an aggravation of their old sufferings, and usually also new mischief therein; it is unavoidable that among such patients there should be many with organic defects, whether malformations or partial lesions. All patients who are not very old, or who do not suffer from diminished vital power or organic defects, are unconditionally curable, and to be handed over to the radical cure. Where advanced age or diminished vital power exists, a radical cure is impossible and the attempt is injurious. But where organic defects exist, along with a reasonable age and considerable vital power, a radical cure is sometimes possible, sometimes impossible; and therefore sometimes a strengthening cure, sometimes a radical cure must be employed, according to the degree of the organic defect and the relation of its strength to that of the organism. This distinction is one of the most difficult problems in the domain of practical hydropathy, and unfortunately in solving it the greatest errors are committed by hydropathists, especially by medical ones.

In deciding this problem, whether a patient, with an organic defect or defects, is more fitted for the strengthening or for the radical cure, the hydropathist must, once for all, observe this rule —always to decide for the more mild form, if he is not quite sure of the nature of the case. By using, at first, a form of cure more than necessary mild, no other harm can accrue than a prolongation of the cure, whereas, on the contrary, by a too strong employment of water, the patient may be killed off-hand. If less water, and more chilled than the patient can bear, are employed, he will gradually recover under this form of cure, and increase in strength

and sound appearance. Then can the hydropathist, according to circumstances, proceed to a more effective form, *i. e.*, to the radical cure, and nothing will have been lost except a little time.

If, however, when the body is overloaded with morbid matter and organic defects, the water is employed in an exciting form, before the patient has acquired the necessary strength for undergoing the crisis, he may die of the latter; that is, of debility from sores and other evacuations, if these demand more strength than exists; or he may die because the morbid matter in a whole organ, of which a part has already been for a long time the seat of a chronic lesion, is too early released from the enveloping mucus; and this, because the body has not strength to expel it, necessarily produces a galloping increase of the old organic mischief, and thereby death, which then ensues more quickly than it would have done without the water-cure.

As in nature and in life there are nowhere exclusive classes, so is also the strengthening cure not sharply distinguished from the radical; rather have both at one extremity a point of contact, and must therefore often be combined with each other; that is, many patients with organic defects, but capable of a radical cure, would be killed if the water were at once applied to them in the radical form. It must first be employed to strengthen, to abduce and purify by lysis, (gradual not sensuably perceptible excretion of morbid matter), before the effective and exciting form is advisable.

If I were, in a few words, to distinguish the strengthening and abducing from the exciting and radical form, I would group under the former the smaller number, shorter duration, and higher temperature of the baths, further the derivation of blood from the breast and head to the extremities, and, above all, the smaller quantity of drink; to the radical form belong, besides the opposite of these measures, packing the patient to produce sweat, or increased exhalation, with the subsequent cold full baths, as also douche and wave baths; chiefly, however, drinking more than the normal quantum required by a healthy man. As the water which is drunk makes its way through all the blood-vessels of the body, as also through the smallest capillaries, and in virtue of the laws of endosmose (penetrability of the walls of the vessels,) partly, also, through all organic structures, it follows that the water which is drunk beyond thirst must effect, in an increasing proportion, a solution of the foreign matters present in the body, out of the surrounding mucus. It is, however, clear that such a solution and

excitement of the morbid matter produces a violent internal tumult, and that it must be avoided if there is not strength enough to conduct this tumult to a crisis. It results from this explanation, that in conducting a strengthening cure, too much drinking is a dangerous error; it also follows, that much water-drinking, without the use of baths according to circumstances, is decidedly injurious, and may be even dangerous.* My experience leads me to conclude, that the proper measure for water-drinking in a strengthening cure, is about a quart daily; and in a radical cure, from two-and-a-half to three quarts, it being of course understood that no more is to be drunk without thirst. Actual thirst must always be quenched, should ten quarts or more, in the day, be required for that purpose, which frequently happens in crises.

When I said above, that the water which is drunk penetrates all the vessels, and by endosmose partially also all the plastic structures of the body, I am fully justified therein, according to the present views of physiological science; for the assumption of secret roads to the bladder—to which Müller, Strahl and the earlier physiologists had recourse, to explain the then mysterious rapid excretion by urine of substances introduced as drink into the stomach—is in these days recognized as a decided error, and even banished from the domain of physiological hypotheses.

I must make a supplementary remark on organic defects. Until

* When, by long-continued abnormally copious drinking, without the simultaneous corresponding employment of water to the whole skin, morbid matters in the interior of the organism are set free from mucus, their excretion must fall almost exclusively on the urinary organs, since the skin can lend important aid in the excretion of these matters, only when it is daily purified with water. The case may now occur, that these matters flowing in this way to the urinary organs may in the long run gradually depress their excretory power, and convert the excretive form into an abnormal condition. I am of opinion, that by such improper use of water, under certain circumstances, even diabetes may be developed. I met with a circumstance of this kind, long before I had taken up the practice of hydropathy as a profession. A person suffering from diabetes, and who had been previously a great drinker of brandy, thought he was making a water-cure because he daily drank ten or twelve quarts of water, but without bathing; he asked my advice, which I gave him, desiring him to bathe his whole body once or twice daily, and not to drink more water than he felt thirst. The diabetes soon disappeared, and I left the place where he lived. At a later period, he betook himself again to the brandy, and at the same time to immoderate water-drinking; the diabetes came on again; the patient was prevented by his business from bathing, or thought he was; had recourse to a medicinal cure, and very soon afterwards died.

the discovery of hydropathy, organic defects were held to be absolutely incurable, and certainly they are so by medicine. Even the smallest indurations and disorganizations in the interior of the body resist all medicinal treatment.

If, indeed, only those disorganizations which occur in organs essential to life, and which at the same time have attained a high degree, are called organic defects, then, indeed, they are seldom curable by water. But the less important disorganizations, which develop themselves in the course of every chronic disease, are curable by water, but are absolutely incurable by medicine. It need scarcely be observed, that congenital structural defects are not curable by water; only those organical defects are so, which develop themselves in the course of the life, and these are incomparably more numerous than the former.

III.

INJURIOUS INDULGENCES DURING THE WATER-CURE.

High play for money, sensual love and intoxicating liquors are, so far as I know, forbidden in all water-cure establishments; all hydropathists also warn their patients against anger or vexation. We need therefore say nothing of these here, for this pamphlet only treats of those errors in the water-cure which are practically committed by many hydropathists.

Dishes which are difficult of digestion, as pork, goose, or duck —moreover, rich pastry or puddings, cabbage, and the like—have been so often spoken of and blamed, that we need only here mention that these dishes are only fit for persons with strong digestion anywhere, and should never be seen on the table of a water-cure establishment. The case is different with black bread; it is recommended by many directors of establishments as beneficial to all patients; and, nevertheless, it is without doubt, in the majority of cases, an impediment to the cure. By black bread, I understand all bread which is prepared from unsifted rye-flour, and which is mixed, not with milk, but with water. This bread is decidedly more difficult of digestion than fine rye-bread mixed with milk, because the former cannot be baked so dry, and therefore weighs

heavier in the same volume than the latter. A similar relation to the advantage of wheat-bread holds good betwixt this and milk rye-bread. From this alone we may draw the conclusion, that good wheaten bread mixed with milk is lighter of digestion, and wholesomer in stomach disease, than any kind of rye-bread. If we add to this, that wheat is in itself a nobler grain, and richer in gluten, we can the less hesitate to give wheaten bread the preference in all stomach diseases.

I lay especial weight on the fact that wheaten bread is looser and, in the same volume, lighter than rye-bread, for which I have the following reasons in my eye. It is well known that the coats of the stomach swell out more, and secrete more gastric juice, when the stomach has been so filled by a meal that its walls are pretty nearly throughout in contact with the food, than when it is so slightly distended, that only the lower and smaller portion is filled with food. A second motive for my conclusion is the fact, that a weak stomach cannot digest any considerable weight of food, and therewith a large mass of nourishment offered to it at once. From both reasons taken together, we draw the conclusion that people with stomach disease must select such food as, with considerable volume, has a relatively small weight. On the other side, it results that highly concentrated food—*i. e.*, containing much nourishment in small volume—is not fitted for a person with stomach disease. Here, as in most cases, I am opposed to the views of physicians; as, indeed, must be the case, because I set out from opposite principles. Physicians prescribe, in stomach disease, chiefly concentrated nourishment, as eggs, jelly, oysters, &c.* I will make the principle laid down more clear by an example. If, of two substances containing the same quantity of nourishing matter, the one occupies ten times as much space as the other (which may be about the proportion of loose wheaten bread and oysters to each other); and, if so much of the more bulky is eaten as moderately to fill the stomach, only one-tenth of it would be occupied by the relative quantity of the concentrated article of food; and, in the latter case, the same digestive labor would fall upon a very small part of the organ, which, in the case of the more bulky article, would have been diffused over the whole of it. It is, moreover, in itself, clear that one gland connot secrete so much gastric juice as ten, and so on in proportion.

* This can only refer to the German physicians, as all such substances are rejected in similar cases by English medical men.—*Translator.*

To the advantages of wheaten bread already cited, there is joined another. Rye-bread, mixed with water, and of course black bread, fails much oftener than wheaten bread, since it is much oftener doughy; and therefore its penetrability by the gastric juice, and the extraction of its nourishing matter, is more difficult and less complete than in wheaten bread.

Still less digestible, and, we may well say, generally more unwholesome, is rye-bread, when prepared with leaven. The unwholesomeness of this bread manifests itself on the large scale in the production of a disease, which, to an equal extent, is only caused by the use of such bread. The disease consists in a burning at the mouth of the stomach, which ascends the gullet, and produces in the mouth the feeling of a burning acid, with a copious secretion of watery saliva. The disease has a resemblance to heartburn, but is a much higher degree of it, and, in my country, is called by the poorer classes, who eat leavened black bread, "wasserkolk."

The greater digestibility of wheaten bread is obvious, moreover, to the feelings of every stomach-patient; and it is advisable for every one to obey this feeling, rather than an incapable hydropathist, who wishes to force upon him black bread, or even pumpernickel (Westphalian rye-bread). Those patients in water-cure establishments who have a strong stomach may eat black bread without injury, if more agreeable to them, from having been accustomed to it from their youth; for only a person so accustomed can prefer rye-bread to wheaten.

When black bread prepared with leaven is recommended by some friends of water, to assist the action of the bowels, it is quite clear that these gentlemen, in this point, have not considered their views. To be consistent, they might as well recommend baking-up a mild purgative in the bread; for, if the sharp acid of the leaven produces an increased secretion of fluid from the intestinal glands, and thereby more copious stools, this only arises from an abnormal reaction of the bowels against the acrid and unpleasant contact with the acid, and from an effort to purify themselves from it, and to make it less noxious by dilution. It is clear that such bowels, otherwise diseased, and in their normal reaction secreting too little fluid, will only be gradually more and more dried up by the contact of such acrid substances. It is further clear, that assisting the stools by leaven is related to their

encouragement by medicinal substances, although the former is incomparably milder, and only forms the transition.

In torpid and constipated bowels, more copious stools must not be produced by bringing acrid stimulants into contact with the intestinal glands, by which clearly increased desiccation will gradually be induced, as an after-effect (as is the case with all medicinal purgatives); but their action must be restored by affording to the body in general, and the bowels in particular, a sufficient quantity of the great fundamental fluid of all nature and all organisms, water, which is, at the same time, the first of all solvents; especially by the direct application of water are the obstructed portions of the bowels purified, the desiccated vessels filled with fluid, and the single withered glands organized anew.

From the injurious effects of soured bread on constipated bowels, as here stated, we are not to draw the conclusion that it is equally injurious to healthy ones; for there are many substances noxious to a diseased organ, which, to a sound one, do not always, at least, cause perceptible injury. Between all classes there are transition substances, and leaven is one of these between food and poison. Consequently, it is decidedly injurious to one man, and not perceptibly so to another.*

Eating butter with the bread is also not generally admissible in stomach diseases, and in this respect there exists in many establishments the decided abuse of eating too much butter. In this respect, also, wheaten bread deserves to be preferred to rye-bread,

* These observations, founded as they are, on sound pathological views, merit the deepest attention; the more so, as it is a common practice in England to assist the action of the bowels by certain articles of diet; especially by brown or household bread, as it is commonly called. All the objections in the text apply with equal force to this last article in particular; the only difference being, that in this case, the effect is produced by the mechanical irritation of the particles of chaff mixed in the bread, and which cannot fail, in the long run, to produce desiccation and insensibility of the mucous membrane. It is quite intelligible that medical men should recommend such articles, they being decidedly less injurious than physic; but when hydropathists do so, it must be, as M. Francke says, because they have not considered their own views. Priessnitz gave as a reason for recommending black bread to me, that it was necessary to make the stomach work, to give it something to do, to strengthen it by exercise. This may be true of a weak arm or leg, if only weak, and not diseased; but as applied to a diseased organ, it is as manifestly absurd as it would be to attempt to strengthen an inflamed eye by reading in a strong light, or a gouty toe, in the first stage of gout, by taking a long walk.— *Translator.*

since the former, without butter, is always more endurable than the latter, presupposing always that raw milk is drunk along with them. The opposite mistake, that butter must always be withheld, even from patients with sound digestion, is more rare; yet I know at least one establishment where this is the case. In general, for people with sound digestion, a moderate consumption of fat is beneficial, and so much the more so the more northerly the zone in which they reside, especially in winter; for fat is the principal momentum for developing animal heat. It consist of hydrogen and carbon, and heat is principally generated by the combustion in the body of carbon with the inspired oxygen, whereupon the former is again excreted as carbonic acid by the various secreting channels. This is one of the reasons why men with sound digestion suffer less from cold than those with diseased digestion; because the former can digest more fat than the latter.

Another very common fault in many establishments, with regard to diet, consists in recommending the patients to excite thirst by eating honey, and especially honey-cakes. There can be no greater friend of these things than I am; I consider saccharine matter as one of the original and finest articles of nourishment (in the most extended sense) for people in sound health. But when the stomach is diseased and weak, and especially when it is ruined by medicine, it cannot digest concentrated saccharine matter, which passes then into acid. Honey-cakes also contain too much saccharine matter in proportion to the flour; so that a weak stomach cannot digest them normally and quickly. It follows from this, that it is a decided error to allow *all* patients to eat honey and honey-cakes. When these are recommended to excite thirst, this is a second blunder; for when thirst is excited by piquant matters, the water which is drunk is expanded by the organism in diluting, dissolving and digesting these matters, and cannot, therefore be applied to setting free the morbid matters from their old covering of slime. This mode of exciting thirst fails, therefore, entirely in its proposed object. An artificial excitement of thirst by concentrated sweet substances holds the same relation to, and has the same effects, as that by strongly salted food; and yet there is no hydropathist who would prescribe salt herrings for this purpose. When, after eating a pickled herring, much water is drunk, the salt is thereby so diluted that it introduces no noxious juices into the body; but the water so drank cannot be applied by the organism to the solution of old morbid matter. In this point, also, as in every other, the

instinct of man coincides with the true theory; and we may say that the former is the infallible touchstone of the truth of the latter. We must, however, not lose sight of this, that man has an infallible instinct only in a state of health, in a state of acute disease, and during crises. The latter word indicates here that stage of a chronic disease when it is in progress of cure; a patient in the ordinary state of chronic disease has no infallible and absolute instinct; he has often an inclination for things which are decidedly improper for him.

I have often made the remark, in myself and others, that, during the cure of chronic disease, so decided a dislike to piquant substances was felt for a time, that food totally without salt was most pleasant to the taste. Without doubt, an organism gifted with correct instinct is not only the most perfect physician in the world, but is also endowed with absolute infallibility; every demonstration of the instinct is doubtless in exact accordance with the highest and profoundest truths of animal chemistry and physiology, although these branches of knowledge, in the modern scientific forms of our learned world, have only sometimes a blank sheet for the profound truths which are the sources of instinct—nay, frequently present the very opposite of truth, error, as the truth. The above fact, that, during the cure of a chronic disease, an instinctive repugnance is felt against even that small quantity of salt which is demanded by instinct in the normal state of health, doubtless arises from this, that there is an abnormally large quantum of old salts and other acrimonies in the body, which, during the critical period, are set free by the water. When this phenomenon occurred in my case, it went so far, that I ate even fish and eggs without salt; I believed at that time that this was the normal taste in man, and that it would always continue so in me. I had not then penetrated the real nature of this phenomenon, and thought that culinary salt is superfluous for man in all climates, as, indeed, I still hold it to be in certain states of civilization in the torrid zone; because, there, the abundant saccharine matter in the fruits, and the other spices and aromas of the vegetable world, offer a substitute for salt which is preferred by the natural palate. Contrary to my expectation, the desire for a moderate quantity of salt, to all food not in itself piquant, has again returned, and explains to me the true reason of my previous repugnance.

IV.

INJURIOUS OCCUPATIONS DURING THE WATER-CURE.

The radical water-cure of all important chronic diseases excludes all professional occupation. In such a cure, the whole mode of life must turn upon the cure alone. What is more, all social relations must undergo a change of form; it is often very injurious to observe the ordinary rules of politeness, especially during crises. When a person has just taken a bath, and therefore requires to warm himself by exercise, it is always injurious to allow oneself to be chained to his chair at such a moment by a visitor. In water-cure establishments, it is the general custom to renounce all such politeness, and at once to say that one requires exercise. In the social relations of ordinary life, this could not be done without making enemies, or getting the reputation of being singular. It would appear, therefore, that a radical water-cure, under the ordinary social relations and occupations, renders a favorable result doubtful, and that such a result can only be expected with certainty in a water-cure establishment. To this is to be added another circumstance. For the cure of acute diseases every sort of water suffices, if it is at all drinkable; but for the cure of most chronic diseases, we require spring water, which is cold, contains carbonic acid, and yet is soft—*i. e.* free from minerals; by this, we can understand only a relative freedom from mineral substances, and that to the degree that it can be used for all household purposes. Spring and well-water, which contains so much mineral matter that it deposits stone in a kettle which is long used, or which does not wash linen so white as lake or river water, has not the properties required for chronic water-cures. This is a second and very important reason why the cure of chronic diseases, generally, is only possible in water-cure establishments, since the soft spring water here described is only to be found in very few places, and exactly in such places are these establishments situated. Unfortunately there are single exceptions even to this, and those establishments which exceptionally do not possess perfectly good and soft spring-water, contribute very much to bring hydropathy into discredit. There is an establishment in Saxony, the water of which is perceptibly chalky, and the mountains surrounding which contain much chalk, with numerous lime-kilns and quarries in the neighborhood. There

is also one in Mecklenburg, which gets its supply of water from a shallow river, flowing through meadows and morasses, and which, moreover, in summer, is never under 72°. It is difficult to conceive how establishments came to be placed in such localities; but perhaps it arose from this, that such water may be used in acute diseases, and, because it cures them, it was concluded that it was also applicable to chronic cases.

Establishments for carrying on chronic cures in towns have always many and decided disadvantages, as compared with those in the open country; the former have no natural douches, the water is usually not perfectly good, the atmosphere is not perfectly healthy, and moreover, the patients are exposed to numerous temptations in the way of amusements and indulgences, which are incompatible with a radical water-cure. For this reason, patients who quit their own residence seldom resort to town establishments, and these are therefore mostly confined to the inhabitants of the precincts. These patients do not usually eat in the establishment, still less do they lodge in it; they are subjected to all the conventional restraints of society, and the greater number pursue during the cure their household, official, or professional occupations. For these reasons, the water-cure in town establishments must be conducted upon other principles than in those in the open country. A cure in them ought not to have so radical a character, it must keep more or less within the sphere of a strengthening cure. From not knowing or neglecting this principle, much mischief has arisen, which has naturally been assiduously made use of by the doctors, to place the whole science of hydropathy in a bad light with the public.

For patients engaged in business, packings cannot be prescribed without danger, except on the coming on of fever, when business must rest. No douche or wave baths must be taken, nor any exciting sitz-baths, and, moreover, much less water must be drunk than in establishments in the country. The use of water, therefore, must be confined to washings, to warming wet bandages at night, (in business-life they are altogether objectionable during the day,) to derivative sitz-baths, and, under certain circumstances, to a few clysters.

Let me not be misunderstood,—I do not say that all cures carried on in the circle of business are failures, and must fail, but that there is much risk of their failing, and that many such cures have produced more misery than that which they were intended to cure.

V.

EMPLOYMENT OF WATER OF A WRONG TEMPERATURE.

Faults of temperature are seldom committed in the internal use of water, but so much the more frequently in the external.

First, a few words on the temperature of drinking-water. Every one knows that cold water only, as drink, exercises a decided strengthening effect on the stomach. The proper temperature of drinking-water in general is between 43° and 50°; when it is colder than 43°, it has an injurious influence on patients who are inclined to cramps. There are also diseases of the breast, in which water under 50° cannot be drunk without injury. Examples even occur, in which drinking-water in the beginning of the cure must be taken as high as 55°. When it exceeds 59°, however, diseases of the stomach and lower belly can seldom be cured by it, and, in the most favorable cases, the cure is exceedingly tedious. Water of 68° and upwards has always an injurious effect on diseased digestive organs.

The faults of temperature, committed in the external use of water, lie, at present, very seldom in its too great warmth, but usually in the contrary. From this we may with certainty prophecy that it will in future pass into the other extreme, and that perhaps the cold-water cure will be hereafter converted into a warm water-cure, if a reformation which hits the happy medium does not soon appear.

In discussing the temperature, we must first lay down the rule in large letters, (and still better in golden ones,) *that in all acute diseases, with the exception of two cases, the water for a whole bath, or for washing the whole body, must never be used cold,* but always chilled in a scale from 54° to 77°, according to the various constitutions, kinds, and degrees of disease. These two exceptions are, first, when the hydropathist wishes purposely to increase the fever in the acute disease, (which, indeed, is seldom permissible, and never necessary,) and, secondly, when a state of torpidity has come on; *i. e.*, a state of greatly diminished excitability and mobility, to the extent of stupefaction, and such slowness of circulation that the pulse is scarcely to be felt. If in a state of febrile excitement, most especially in nervous fever, cold water is used for a whole washing, or for a half bath, the fever is thereby increased,

whereas, by chilled water, it is mitigated. It is not meant to be said, by this, that we rise to a temperature of 98°, (as a Mecklenburg hydropathist is in the habit of doing,) in acute diseases; we must never go beyond 77°; even when the symptoms are removed by a higher temperature, the morbid matters, which are the true causes of disease, can never in this way be properly excreted. When physicians, who have not learned hydropathy in an establishment, employ this cure in acute diseases, they almost always use too cold water, and when in this way they have dispatched their patient to the church-yard, they say that there is nothing in the water-cure, as they have convinced themselves by experience.

Naturally, I do not mean to say that, by the use of quite cold water, no acute disease can be cured, but only that the result is doubtful; whereas, on the contrary, by using water according to my principles, I hold death from acute disease to be impossible, if not preceded by medicinal treatment. Eight years' experience have confirmed me in this opinion, which was at first founded on the basis of my theory. Among all the acute cases which I have treated, and in which neither medicine has been taken, nor any blood taken away, not a single patient has died, although their number is very considerable, and almost every kind of acute disease has been represented by them,—nervous fever in every stage, rheumatic and catarrhal fever, dysentery, measles and rashes, inflammation of the brain, breast, and bowels. In all cases in which medicine had been taken, or blood abstracted, I declared that the result was doubtful, and of these, about two from among thirty died, both of whom, indeed, had already been given up by the physicians.

To acute diseases, brought out by the impulse of the organism alone, are allied the crises produced by a water-cure. Although the treatment is also therefore cognate, it must however, in crises, be more cautious and comprehensive, because these have been artificially produced, and therefore we are to suppose no superfluous strength in the body, which in a really acute disease most undoubtedly may be the case. In treating crises, especially sores and eruptions, the hydropathist must be well aware that the use of cold water, as a whole bath, increases exanthems; he must, therefore, employ chilled water, whenever considerable fever is combined with them, or when his practised eye, (which, unfortunately, is often enough unpractised,) tells him that the strength of the patient is already sufficiently tasked by the eruptions. When,

under such circumstances, an increase of these is produced by cold water, the patient must die of debility. Even in the strongest man, there is a relative extent of skin surface, beyond which the exanthems cannot extend without producing death.

We will now turn to chronic diseases. Here, again the employment of too warm water is an error rarely occuring. By this error the cure is always prolonged; if the error attain a high pitch the cure may become quite inert, and things then remain as they were. Postive injury—*i. e.*, an increase of the chronic affection—is seldom thereby produced, but this often happens from using too cold water. We may assume that, in water-cure establishments, only the half of the patients should be allowed to use the cold full-bath; and these, also, not in the beginning of the cure, only in the course of it; the other half ought not to come down to water of 50°. By quite cold water, I understand the natural temperature of the springs, which in North Germany varies between 43° and 50°, according to the time of the year and the locality.

Patients with a shattered nervous system, with congestion of blood in the breast and head—moreover, those with considerable enlargement of the vessels in any viscus of the thorax, should not use cold water for a whole bath. The reason is easily to be fonnd. Shattered nerves are made still worse by every shock, whether physical or moral. The cold bath produces an active afflux of blood to the interior, a strong contraction of the blood vessels, muscular fibres, and nerves. This rapid contraction sets the nerves in vibration, from which they, with difficulty, pass into repose; these vibrations often degenerate into cramp-like twitchings. Diseased nerves must be soothed and not excited; but cold water excites them strongly, while chilled water by degrees soothes them, because it is a derivative of the morbid matter and the circulation towards the periphery, without, like cold water, producing those violent contractions of the nerves which exceed their power of reaction. Where, besides this, an inclination to congestion in the breast and head already exists, still more where enlargement of the vessels in the interior of the nobler organs is present, cold water, used for a whole bath, runs the risk of producing a rupture of the vessel, since in the first moment it forces the blood with violence from the periphery towards the central organs.

By employing cold water in patients with very much diseased, especially with very much excited, nerves, the excitement is increased, and, if the practice is persisted in, the patient may be

rendered insane. Such melancholy cases have occurred in more than one ill-conducted establishment, although not by ten times so often as is alleged by physicians. All cases of the kind which have come to my knowledge have occurred in establishments directed by physicians, because a great many of these gentlemen are not acquainted with the use of chilled water. I have treated three patients with nervous disease, who had been previously in the establishment at Elgersburg; all three, immediately on their entry at E———, were bathed in cold water, and soon afterwards sent under the douche ; all three had, by lucky circumstances, in a short time left the treatment, or insanity would have been likewise their lot. Another patient with severe nervous disease at E———, in the summer of 1845, became insane under the employment of cold water, was put into a strait-jacket, and died soon after.

Physicians have naturally trumpeted forth, with the usual exaggerations, the cases in which insanity has occurred during a water-cure, and of course do not omit their commentary upon the physiological causes. They have said, that partly by immoderate drinking, partly by douching upon the head, the brain of the insane persons had been softened. To put these allegations right, let the following serve :—In the water-cure, the douche, even in the worst-conducted establishments, is *never* allowed to come upon the head; as regards immoderate drinking, this occurs only in bad establishments ; and the faults which bunglers commit in practising a science, cannot be laid to the charge of the science itself. Assuming, however, that too much is drunk, a softening of the brain can never be thereby produced, at least not more easily than a softening and dissolution of all the other organs. Water which is drunk in immoderate quantities is very quickly again excreted, and the urinary organs are much more tasked thereby than the brain, and must be much sooner ruined than the latter. The alleged reason, therefore, is not the true one. It lies much more in the immoderate excitement of the nervous system by the cold of the water. A proof of the truth of this explanation is easily given. Under the use of water, of a fitting temperature, a case of insanity has never occurred, and yet chilled water is just as fluid and softening as cold water. The cause cannot therefore lie in the mass of the fluid, but in its temperature. In my practice, no case of insanity has occurred, although two of my patients, on coming into the cure, informed me that fear of this dreadful disease had brought them to me.

Many friends of water have a prejudice that crises can only be produced by the external employment of quite cold water; this, however, is a decided error, although it is true that quite cold water, where it is suited to the state of the patient, produces crisis quicker than chilled water. I can here refer to numerous cases in my own experience:—Madame W——, suffering much from her nerves, got no crises of any kind under the long-continued external use of cold water, by advice of a physician; when she thereafter came to my establishment, I ordered her water of 68°, and with this temperature she got several exanthematous crises one after the other, and made a very capital cure. Madame F——, also suffering from her nerves, had in another establishment with cold-water treatment no crises; in my establishment, under the use of water, which, according to the different states of her disease, was chilled to from 63° to 72°, she got long-continued, violent crises, and was cured.

Many people, who have either gone through the water-cure, and got well, or have always been healthy, and are friends of water, are in the habit of bathing during the winter in ice-cold water, in an unwarmed room, or quite in the open air. Although it is quite certain that people in such a state of health cannot catch cold from such baths (under the supposition that they only stay a short time in the water, and that they never go into it with a shiver, or a chilly skin), these cold baths are, nevertheless, beyond all doubt, when long continued, injurious to every person, *without distinction*, because they produce a reaction which, by its violence, by degrees, consumes the vital power much sooner than the moderate reaction of a bath of from 54° to 63° in a warm room; this must be clear to every one. During a water-cure such violent reaction may, for a time be beneficial to strong persons, because it brings the morbid matter more quickly to a critical excretion. But in a dietetic bath, which ought not to excite, but only clean and strengthen the skin, so great a reaction affords no advantage which can equal or outweigh the injury done in the consumption of vital power. Perhaps it may be objected that, as a consequence of my reasoning, the chilled bath again consumes more vital power than the quite dry regime; but this objection is ill-founded, for even if it were confessed that this increased consumption is produced by the chilled bath, this assumed disadvantage is decidedly outweighed by the purification and strengthening of the skin, and the encouragement thereby afforded to the exhalation of excretory matter; in other words, the pre-

vention of stagnation in the fluids. It is moreover false, that by the chilled bath an increased consumption of vital power is called for. This happens just as little as that, by moderate exercise, the vital power is sooner exhausted than in the absence of all exercise. Since the law of the interchange of matter is the most fundamental in human physiology, all those conditions which maintain the normal interchange of matter become thereby true rules for health. These conditions comprehend all natural stimuli used in the proper measure; before all, the internal and external use of water, exercise, and the enjoyment of pure air, which in a perfectly sound regimen, must not be confined to the lungs alone, but must be also, although only at times, extended to the whole skin.

We must, therefore, set down the long-continued use of baths in the open air, in winter, as injurious to every one, and as an excrescence of the water-cure. It is so easy for a healthy man to find out what is wholesome for him; he needs only to follow his instinct. To no man in the world can it be pleasant to jump into the water when it is ice-cold, but it is most agreeable to every healthy person, accustomed to water, to take, even in winter, in a well-warmed room, a bath in water of from 54° to 68°.

Along with this earnest warning against dietetic baths in ice-cold water in the open air, or in a cold room, in winter, I must further observe that these may, by degeees, produce congestions in the breast, even in healthy people.

VI.

ERRORS IN REGARD TO THE NUMBER AND DURATION OF BATHS, AS ALSO THE QUANTITY OF DRINK.

The errors most frequently committed in prescribing the number and duration of baths lie, in the present day, equally on the side of excess. The water-cure has not yet passed, from the stage of overdoing, to the proper standard. Scarcely twenty years have elapsed since its disoovery, and therefore the stage of overdoing has not yet, in general, been overcome by hydropathists any more than by laics. This is a necessity which follows partly from the contrast between the previous medicinal method of cure, and hy-

dropathy; partly from carrying medicinal views into the water-cure; above all, the false idea that water is the direct remedy which removes the disease, or rather, the universal remedy, according to the mode of perception of the old science. But the universal remedy, without which no single disease can be cured, is the organic power of the body, and water is only one of the many conditions under which this power can really heal diseases, *i. e.*, expel morbid matters from the body. The remaining conditions are, pure air, wholesome nourishment, freedom from business and injurious moral influences, a fitting covering for the body, and, according to circumstances, sometimes rest, sometimes exercise. When physicians contest the applicability of hydropathy to all diseases, and support this with the proposition that there is no universal remedy, and that water is consequently not this remedy, these gentlemen speak as blind men do of colors; for water is not the universal remedy in true hydropathy, but the organic power.

As the object of this little treatise is not to give a comprehensive introduction to the proper practice of hydropathy, but only warnings against the more usual practical errors, we cannot here give the principles according to which the number and duration of the baths are to be regulated in every single case. To give such an introduction to the practice of hydropathy is equivalent to indicating all ways, through all provinces of this science, so exactly, that no one can deviate a step, right or left; and, for this, much more time and labor are required than for the indication of those spots in which most wanderers have hitherto lost their road.

The number and duration of the baths must be in proportion to the strength of the patient. The general rules in relation to this precept I will here shortly state, in talking of these errors.

No bath ought to be taken until complete reaction after the preceding bath has come on. This rule is daily infringed in many establishments. When the time before dinner or supper is too short, many patients take a sitz-bath, and then go immediately into the douche; or a sitz-bath, and immediately thereafter a foot-bath;* all these are, under certain circumstances, directly injuri-

* To which is to be added the error so constantly committed by Priessnitz, of ordering an "Abreibung" (rubbing down with a wet sheet), and immediately afterwards a sitz-bath. He also frequently orders several "Abreibungen," one after the other, which can seldom be necessary, and is more frequently dangerous.—*Translator.*

ous; under other circumstances, by such an approximation of the baths, their effect is entirely neutralized.

From the rule above given, follows a second: when one has not time to produce reaction after the one bath, or when one feels that he requires rest, he must leave out the second bath; at all times, when fatigued, rest is better than the bath; one accustoms himself too easily to look upon the prescribed number of baths as a business which must be gone through conscientiously. Instead of this habit, we must impress ourselves with the idea that, when the body desires rest, the bath must unconditionally be omitted. Many hundred times have I preached this doctrine to my patients, and nevertheless I sinned against it myself some months ago, long enough to produce perceptibly injurious consequences. I adduce this to show how difficult it is to avoid this business-like view of the use of baths. I am accustomed, like every true friend of water, to bathe my whole body daily. In the middle of last November I was so overwhelmed with business, that only at midday could I get a spare moment to bathe; but I was then weary with much talking. Added to this, from the establishment being full of patients, I inhabited a room in an adjoining house, which was difficult to heat. I was therefore both weary and chilled; when I had undressed, I got goose-skin and a shiver at the cold water; nevertheless I forced myself to bathe, because otherwise I had the unpleasant feeling of having neglected a duty. The consequence of this bath, thus taken with reluctance and shivering, was, that congestion of blood in the breast came on, as a just punishment for having acted in direct opposition to my own doctrine of following the instinct. As soon as I felt that the mischief was serious, I removed into the establishment, where I could have a chilled bath in a comfortably heated room, immediately on getting up. In a few weeks the affection entirely disappeared, though assuredly, had I persevered in putting a constraint on my instinct, it would have taken a very bad turn. Let every one take warning from my example, and always give up a bath which comes in collision with the desire for rest.

We shall now turn to the special kinds of baths.

1. FULL-BATHS

Can only be taken without danger by patients who do not suffer from congestion of blood. The cold full-bath should last only a

very short time, and indeed not longer than till the whole body is wetted, perhaps a quarter of a minute, except when the patient feels himself comfortable in it, when it can be extended to some minutes. Egregious errors are not uncommon in the use of these baths, especially in the hands of physicians, when they, without knowing the water-cure, will nevertheless employ them. I know a case in which a doctor treated a case of nervous fever with water, and prescribed to her to remain half an hour in a cold full-bath; he would in the meantime visit another patient, and return in half an hour. As was to be expected, however, the patient was obliged, at the end of one minute, to be taken half-dead out of the bath, and died in a few days. After fatal accidents like this, produced by such an insane use of water, we have a chorus of doctors calling out, "Look at the water-cure!"

2. BATHING THE WHOLE BODY

In a half-bath, by affusion, by washing down and in the shower-bath, may certainly last longer than full-baths; nevertheless we must also here inculcate the rule, that one must be more careful of the "too-much" than the "too-little."

3. SITZ-BATHS

Must, according to their various objects, have a different duration, and different temperature. A sitz-bath, for strengthening the stomach, must be combined with rubbing the lower belly, and should not last longer than from ten to fifteen minutes. Again, in hemorrhoidal affections, and chronic affections of the generative organs, it must last from fifteen to thirty minutes. For driving the blood from the breast and head it must, under certain circumstances, be extended to an hour and a half. For this last bath, which we will call the derivative, peculiar prescriptive measures are necessary. When the head or breast are much overloaded with blood, as is often the case in inflammation of the brain and lungs, and as sometimes occurs after excessive sweating, in dry packing, or in intermittent fever, the patient must be first put into a chilled sitz-bath, of from 77° to 85°, in order that by the first shock the bursting of a blood-vessel may not be produced. Then, by drawing off the chilled water, and letting or pouring in cold water, the bath must be gradually reduced to from 43° to 50°, and after

every ten minutes, when the water, from the great heat of the body, has already assumed a higher temperature, the patient must be put into a fresh perfectly cold sitz-bath, and this proceeding continued until the object of deriving the blood is attained. The proper time for the termination of this bath is usually indicated by shivering in the patient, but there are cases in which we must not wait for this. The details on this important head will be treated in my "Practical Introduction." He who understands the proper employment of derivative sitz-baths, febrifuge half-baths, and cold-compresses, needs not, in any inflammation, interfere with the trade of the executioner, by abstracting blood.

A very original sitz-bath was ordered by a physician, for a person whom I accidentally found "*in situ.*" I found the patient upon a large table, with his buttocks in a porcelain washhand-basin, and holding on with his hands by a bolt in the wall, in order that he might not split the basin. In this way do these learned doctors sometimes prescribe baths, of which they know nothing but the names, and of which even the mechanical apparatus and manipulations are totally unknown to them!

4. FOOT-BATHS.

For these baths, before all things the rule must be given, that patients with diseased nerves, who suffer much from cold in the feet, should not employ them immediately on beginning the cure, but must prepare themselves by washing and rubbing the feet for some weeks, for the special foot-bath. I know several cases where patients of this kind were inconsiderately persuaded by friends to use foot-baths, and did themselves injury thereby.

A second precept for the use of foot-baths, is, never to take them when the feet are actually cold; we must rather choose a time when the feet are a little warm, which in most patients of this kind usually occurs in the afternoon or evening.

A third rule is, after the foot-bath to take a walk; or, when it is late in the evening, to go to bed; in general the former is preferable.

Fourthly, the foot-baths, for the purpose of warming the feet, must be distinguished from those for derivation in congestions, when the feet are warm, and especially must their duration be regulated accordingly. It is an abuse to extend the bath for warming the feet longer than ten minutes; in most cases, it ought only

to last a few minutes; whereas, the derivative foot-bath must last from ten to twenty. It must be remarked, however, that in severe congestion of the head or breast, especially in acute diseases, the derivative foot-bath is not sufficiently effective, and that in such cases recourse must be had to the derivative sitz-bath.

We must not expect any speedy effect from the warming foot-baths in most cases; but, in the long run, their effect is so much the more certain, and they form the only means of giving to the feet the same constant temperature with the rest of the body.

5. DOUCHE-BATHS,

Along with fever-exciting half-baths (the use of which is exceedingly rare), and dry packing, belong to the most exciting operations in the water-cure. It follows already from this, that not nearly every patient ought to use them. On an average, the proportion may be nearly this, that the douche is applicable to about the half of the patients in water-cure establishments. In using this bath, it must be specially inculcated, not to extend its duration too long; moreover, many patients should not expose the spine and breast to the stream; the head, pit of the stomach, and organs of generation must *always* be guarded against the direct impulse of the stream. The duration of the douche must be limited between ten and twenty minutes, according to the strength of the patients. It occurs to all hydropathists, that their directions are more frequently exceeded with regard to the douche than any other bath. Because patients know that the douche has a strong effect, in exciting crises, they cannot usually get early enough under it, or stay long enough in it. In my establishment patients have sometimes secretly used it to whom I had forbidden it, others have remained twice as long in it as had been prescribed to them. The latter was the case of Mr. B., a tobacco merchant, from S. From his robust constitution, I had allowed him to douche twice daily, for ten minutes; he was, however, as he afterwards told me himself, not content with this, but douched for twenty minutes each time, and continued this for several weeks. A crisis broke out upon him, with most unusual violence, and kept him to his bed for weeks. The unusually violent character which this crisis assumed, arose undoubtedly from the excess in douching. The other patients in the establishment were horrified at it, and considered the escape of the patient impossible; nevertheless, under my

treatment, the disease took a healing course and discharged its causal matters in stinking sweats of extraordinary copiousness. What was the acknowledgment of the public for this cure? My opponents spread a report that Mr. B.'s condition had been quite unfitted for the douche, that the first time of using it he had got spasms, and lain for weeks in a hopeless state, and had to thank God that he escaped with life.

As the douche serves the purpose of exciting the morbid matter, and hastening the crisis, it follows necessarily that it must be of cold water, or at least of water which is not warmer than 54°. Douches which get their supply of water in summer from rivers or lakes are quite useless at this time of the year, and present an internal contradiction between their mechanical and chemico-physical operation.

6. PACKINGS

Are divided into dry and wet. In the latter, the patient is laid naked in a strong sheet, well wrung out of water, and thereafter tightly packed in blankets and beds, so that a considerable warming of the body and exhalation from it are produced.

a. Dry Packings are quite inapplicable in all acute diseases, and even in chronic they should only be used for patients who have a robust and and full-blooded body, and moreover, good nerves and organs of digestion, and who do not suffer from congestion. These packings have no effect and no value, when sweat is not produced by them; but, for all patients with diseased nerves, such a mode of producing sweat is very exciting, and therefore injurious. In venereal, mercurial, gouty, and rheumatic persons, with strong nerves, as also in some other states of disease, they are advantageous; but in most establishments there are always proportionally but few patients who should use them. When they produce excitement, congestion, anxiety, or cramp-like affections, the patient must be immediately taken out and handed over in future to the wet packing. Patients for whom the dry packing is adapted ought not to lie longer than from half an hour to an hour and a half in sweat, and must then have a cold bath. A chilled bath should not be used after dry packing, since less strength of nerves and body is required for the cold bath than for the dry packing.

b. Wet Packings are much more generally applicable than the dry, as appears from what has been said. In most acute diseases,

which are combined with ardent fever, wet packing must be employed, if the fever does not yield to the simple half-bath, or rubbing down with wet towels. In patients who suffer much from congestion, or from organic defects in the thoracic viscera, or from a strong disposition to cramps, they are not applicable; moreover, in acute diseases, whose seat is in the organs of digestion, if the accompanying fever is subordinate to the symptoms of the other disease, as is often the case in dysentery, cholera, &c., they ought not to be used.

Egregious errors are daily committed in the use of wet packings, especially in acute disease. It must be laid down as a chief rule, that no sweat is to be forced out of them, and that the patient must be immediately unpacked and bathed, when he experiences any uneasy or oppressive warmth or heat. If, however, the patient either falls asleep, or breaks out easily and without excitement into sweat, he ought to remain in it as long as he feels comfortable, and should not be awoke. When he is taken out of the packing, he is to be bathed; and, in acute diseases, always in chilled water.

The use of wet packing in an improper place, as well as extending it too long, is dangerous; and, if carried to a high degree, may even prove fatal.

Last summer I was called to a patient in a town twenty miles from this, who had fallen ill from rheumatic fever, and who had treated himself with water, and especially with wet packings. He wished to produce sweat thereby, and had aggravated by this means an old defect in the breast to such a degree that death appeared near at hand, under the symptoms of an inflammation of the heart, and was only with difficulty averted by derivative water-treatment.

The number of packings to be used in one day is very various, according to the nature of the disease and constitution. In acute diseases and crises, it may be necessary to employ five or six within twenty-four hours, if the constitution and the fever are exceedingly strong. In chronic disease, at most two should be used daily; in weak and nervous patients, not more than one; for many of the latter, it is better to leave it out on certain days, and for some of them it is altogether objectionable; this last is, moreover, especially applicable to diseases of the abdomen.

The manner in which physicians, who have not learned hydropathy in an establishment, frequently employ wet packings in acute disease, and especially in nervous fever, proves that water may be

made an instrument of torture and destruction. Doctor M—, in P——, prescribed for a patient with nervous fever, a wet packing, and left him lying seven hours (!) in it; whereupon the patient was bathed, and immediately thereafter packed up again for seven hours more. He was very soon cured of all earthly ills, and the doctor had proved that it is possible to kill men not only with medicine, but with water; he set the crown to his work by afterwards assuring all his patients that he had practically tried the water-cure, and found that there was nothing in it: not forgetting to add a warning against using water in disease. To comprehend the absurdity of this and other similar cases we must recollect that the duration of a packing, in acute disease, is generally only half an hour, and should seldom be extended to an hour.

7. CLYSTERS.

Are used very differently by different hydropathists. Some prescribe clysters only during constipation, others only during it and acute diarrhœa, others, however, under many other circumstances.

a. Of the use of clysters in constipation we need say very little here, since all hydropathists concur in this point and their advantages must be obvious even to laics.

b. The beneficial effects of clysters in acute and critical diarrhœa do not at first sight appear so obvious to many laics. Clysters assist the stools; how, then, can it be useful to employ them in diarrhœa, where there are already too many stools? This question is often proposed even by physicians, and is easily answered. In every acute and critical diarrhœa, the organism endeavors to expel morbid matters from the bowels, which are often acrid and corrosive, often of a putrid nature. For this purpose the intestines secrete, from their glands and other vessels, an abnormal quantity of fluid, in order, by this means, to wash out the morbid matters and purify themselves. It is quite obvious that it must be advantageous to assist these curative efforts of the body by water. Water which is drunk is absorbed partly in the stomach and still more in the small intestines, and does not reach the rectum, the last of the large bowels; it can only be made to reach it by the enema-syringe. The truth of my theory is strikingly confirmed by the bodily feelings and instinct. As well in critical diarrhœa in the water-cure as in many kinds of acute diarrhœa, there comes on after every stool a violent burning and pain in the

rectum. These painful feelings are produced by the excretion of acrid morbid matters, some of which remain for a time on the walls of the rectum. Water clysters soothe these pains at once, and on being repeated remove them entirely. They are an indescribable comfort in these diseases; they dilute and mitigate the acrid matters to which the organism, without the help of water, often succumbs, and they assist their excretion; once taken, they are always decidedly demanded by instinct. When, for instance, a dysenteric patient, who has not yet been brought, by medicinal treatment, into a low torpid condition, and who has still copious discharges, gets a water-clyster, he anxiously desires to have more. I have observed this in patients of every age and sex. In other cases of acute diarrhœa, in cholera, and above all in the critical diarrhœa of the water-cure, the case is the same; in the latter, especially, a sort of ardent thirst for clysters is often felt in the rectum, and sometimes more than twelve in twenty-four hours are urgently demanded. There are many establishments in which vomiting and purging crises are very rare, because the directors do not understand the proper employment of water in diseases of the lower belly. Most decidedly this is the weak side of most establishments; even the most celebrated hydropathist in the world is much less successful in these diseases than in all others. In spite of this, the water-cure in these diseases, even in ill-conducted establishments, is beyond comparison more efficacious than all medicinal remedies taken together.

If, in any one kind of disease, it is necessary that the hydropathist should be able to sympathize in all modes and shades of it, and therefore that he should himself have had it and have been cured of it, this is undoubtedly the case in abdominal diseases and the affections of the nerves therewith. Here I have a right to speak authoritatively, because I have experienced these painful diseases in an extraordinary degree, and yet cured myself thereof.

In the autumn of 1846, there occurred in this district, and especially in the neighboring Prussian Mark, an epidemical dysentery such as had not been known within the memory of man. In small towns of 2000 inhabitants there were at times sixteen or eighteen corpses above ground at one time, and the sextons were obliged to take additional assistants. During this epidemic I had the best opportunity of practically putting to shame the physicians, who forbade their patients all use of cold water, even to quench their thirst, and declared it mortal. On the breaking out of the epi-

demic, a prejudice prevailed far and wide that the water-cure was not applicable in dysentery, on which account the public did not resort to me until the doctors had thickly peopled the church-yard After some patients had been cured by the water-cure, with surprising quickness, partly by me in the immediate neighborhood, partly by my assistant, M. Kahl, at greater distances, the requisitions came in so fast that we could not attend to them. I lost not a single patient, not one had sequelæ, while of those medicinally treated a great number died, and those who escaped with life got chronic disease.

It is well known that during dysentery there is a violent thirst for water, as a natural manifestation of the instinct, which in all acute diseases indicates the way to, and the means of, cure. A method of cure which, far from satisfying the demands of instinct, rather lays on the strongest prohibition against them, is in direct contradiction to nature, and, in the eye of every thinking man, thereby stamps upon itself the impress of untruth. Most incomprehensibly, medical science forbids dysenteric patients to quench their thirst with water. Physicians who do not do this, are already out of the domain of the legitimate science. All physicians in this country for fifty miles around, of whose treatment of dysentery I heard, forbade the satisfying thirst with water. In this way scenes have occurred in some places which strongly remind us of the fate of Tantalus. A collector of taxes in the Prussian town of P——, who, during dysentery, had so much the more thirst for water that he had previously enjoyed an uninjured and robust constitution, after he was forbidden by his doctor to drink, got a vessel with water placed at his bed-side and put his hands into it, and looked anxiously at it, but did not drink, so that he literally endured the torments of Tantalus. He lay for more than a month ill of dysentery, did not die, but by the abominable medicinal mistreatment, and the prohibition of water-drinking, he contracted a paralysis of the rectum, from which he suffers to this day, so that the excrements constantly pass off involuntary and without his being aware of it. Moreover, he is lamed to such a degeee that he cannot leave the house. This man, in his best years, and previously of a robust constitution, has been, by the "rational science of medicine," not only rendered incapable of service, but also brought to the painful condition of a cripple. Here is one of the millions who, by the medicinal method of cure, have been made incapable of labor, and consequently thrown as a burden on the

State. Pauperism, which only dates from later times, and which is one of the most alarming phenomena of the present day, has, without doubt, more than one cause, but the first of them is decidedly the science of medicine; the second may be brandy, the *protégé* of medicine, for only under its horrible dominion could the human race go astray after brandy; under the rule of hydropathy, brandy-drinking is impossible. Physicians have always been the foremost among the defenders of brandy.*

In dysentery there is an inflammation in the large bowels; the water which is drunk, as above shown, does not penetrate so far, consequently the hydropathist must apply it by means of clysters. Experience has fully confirmed this, for only by the use of clysters does the water-cure become a sovereign remedy against dysentery. Unfortunately there are false hydropathists, who in their ignorance, do not comprehend this fact, and frequently thereby convert dysentery into a nervous fever. When this has occurred, or has come on as a consequence of medicinal treatment, and water is then employed, dysentery again comes on in the course of the cure, and the nervous fever disappears, because by the medicine the dysentery is never cured, only stopped and suppressed. Patients with dysentery, who immediately on the breaking out of the disease sought my assistance, were, for the most part, radically cured in a few days, although the disease had set in with bloody diarrhœa, and with a dozen of stools in a few hours. How malignant the disease was is to be seen, not only from the number of deaths under medicinal treatment, but also from this, that frequently under treatment with house-remedies, there were evacuations of blood from the mouth and nose.

Among the more common sequelæ of medicinal cures of dysentery were these: swelling of the knee, and, as a consequence, relative lameness; moreover, nervous affections, deafness, and blindness. The latter affections were, however, in individual cases, also occasioned by the suppression of the dysentery, by drinking quantities of rum and other noxious house-remedies.

One of the chief arguments of physicians against the applicabllity of the water-cure to all diseases is the proposition that there are opposite diseases, and that it is impossible to cure these by one and the same remedy. In the mode of operation of clysters on

* This reproach, like many of the others directed against the faculty, however well merited in Germany, does not, I am happy to say, apply to my professional brethren in England.—*Translator.*

diarrhœa and constipation just laid down, there is a conclusive retort to this proposition. It is quite as easy, in all other really or apparently opposite diseases, to produce the proofs that the water-cure heals both kinds.

The employment of clysters to dissolve and eliminate old and more or less hardened mucus from the large bowels, is unknown to most hydropathists. but is, nevertheless, a most essential part of the water-cure against most chronic diseases. It is disputed by many physicians, that mucus can lodge itself, and become indurated in the walls of the bowels. In healthy and strong bowels, it is certainly not possible; but in those which have been weakened, partially dried up, hardened, and disorganized, by disease and long-continued medicine, it is not only possible, but unfortunately too often the case, as has been shown at length in Part I.

According to my experience, most chronic patients who have taken medicine for a long time, and especially if they have taken many acrid remedies, have hardened mucus in the bowels. The symptoms which lead us to conclude that this is the case in a high degree, are sluggish stools, imperfect digestion, and defective nutrition. When the hydropathist supposes such a state of things, he must prescribe two or three water clysters daily. Under no circumstances can any harm accrue from this, if measure and temperature are duly observed. Bungling hydropathists have indeed pretended that, by such a use of clysters, an injurious secretion of healthy slime might be produced. This idea betrays great ignorance of the mode of operation of water upon the whole of the organic structures, and especially on the glands of the digestive canal. Water, as the mildest of all fluids, can produce an abnormal secretion of slime in the bowels only under two circumstances —namely, first, when the mucous glands are diseased, and loaded with acrid matter; and, secondly, when indurated slime is present. In the first case, the abnormal secretion occurs because the diseased glands throw out from their interior, with the assistance of the water, the foreign matters, which are mostly of an acrid nature, and which is not possible without this abnormal secretion. In the second case, when tough or hardened slime is present in the walls of the bowels, and is dissolved by the water, an abnormal secretion of mucus from the rectum must be thereby produced. If, however, neither of these is the case, if the bowels are free from old slime, and their glands are healthy, then water-clysters, when not too cold, and not too large, can produce no abnormal secretion of

mucus. This only occurs, in healthy glands, from the contact of acrid matters heterogeneous to the human hody. Water, as a fundamental constituent of the body, and as the mildest of all fluids, cannot produce an abnormal secretion from healthy glands, either in the stomach or in the bowels. My experience has fully confirmed this truth, for the secretions of mucus occasioned by clysters never occur in the beginning of a water-cure, which yet must be the case, if water, as a clyster, directly, and of itself, produced this abnormal secretion in all the bowels. What is still more, after a longer or shorter continuance of the abnormal secretion, it disappears entirely, whatever number of clysters is taken. In this there is a still clearer proof that the abnormal secretion does not contain fresh, healthy mucus, but always either old and indurated mucus, or fresh mucus containing acrid morbid matter.

I will here forestall an objection which might be with some plausibility advanced. If water is kept for some time in the mouth, saliva is secreted, and mixes itself with the water. From this it may be concluded that water-clysters equally, of necessity, and without other causes, should produce an abnormal secretion of mucus in the rectum. But this conclusion rests upon an error. The mouth and throat is not destined, and therefore not constituted, to retain foreign substances for a long time; but the act of digestion demands as a condition that all substances coming into contact with the salivary glands should be mixed with saliva. With the rectum the case is reversed; it *is* destined to lodge foreign substances for a long time, and it is *not* destined to transfuse these substances with a fluid assisting digestion, but only with a mucus fluid, necessary for their transport. But, as for the transport of water no other fluid is necessary, by rather the water is a means of transport for the solid excrements, it follows, from both these reasons, that a water-clyster, by itself alone, can produce no abnormal secretion of mucus in the bowel, and that a conclusion drawn from the mouth and throat has no analogy in the case of the bowel—not to speak of the difference in the nature of the secretion in the two cases.

We may say, unconditionally, that when, as a consequence of the use of the clysters in chronic disease, any injurious effect follows, the cause is never to be sought directly in the use of the clysters, but always in their false employment, or some other fault of the cure. For it is a common fault that they are taken too large. They must never contain more than one-fifth of a quart, in

children and small women still less; when the rectum has an instinctive desire for more, it is better to take a second after some time, than a double one at once. Moreover, it must not always be taken in this quantity. If, during the operation, a feeling of resistance in the rectum presents itself, the injection must not be persisted in. It is a common phenomenon, that the same patient at different times requires a very different measure of clysters. By observing these precautionary measures, an abnormal distention of the rectum can never occur.

Ice-cold winter water must not be used for the clysters. In the beginning of the cure, and in very nervous constitutions, as also at certain periods in the case of females, they should not even be used of the temperature of the spring. Individual opponents of clysters in chronic disease, have pretended that, by their long-continued use, the rectum is dried up, thereby proving that these gentlemen have no correct idea of the first effects of cold water on the organs of the human body. That organ or that part which is especially brought daily into contact with cold water, becomes by degrees stronger, because, as a consequence of the organic reaction, the blood and other fluids press into it, and circulate actively, which is a condition of increased nutrition. No stimulus which is assimilable, and accordingly no natural stimulus, can by the longest use produce a drying-up, or weakening of an organ; although this necessarily occurs from the use of stimuli which contain unassimilable matters, and accordingly from every medicinal stimulus. It is, moreover, a fact which must strike every thinking person, that a drying by means of water contains an internal contradiction, especially in the human body, in the whole fluids of which water is the first and most necessary constituent of fluidity. In contradiction to this alleged objection, cold clysters, too long continued in combination with copious water-drinking, may have the effect of giving the nutritive organs a preponderance over those of thought—*i. e.*, the person may look less after the interests of intellectual life than those of sensuality; it being well understood that we do not here mean any reduction or disturbance of the intellectual functions to the degree of torpidity or idiotcy, but only a preponderance of the sensual over the intellectual. It results from this, that in water we have in our hands a means of re-establishing the equilibrium between morbidly-excited intellectual activity on the one side, and morbidly-depressed digestive activity on the other.

Another more plausible objection to the continued use of clys-

ters is, that they become a want, and must be continued for life. It is certainly true, that when, by clysters, a slime crisis has been excited in the bowels, they cannot be left off till the crisis is at an end, which sometimes may take a very long time. Moreover, it is true that, after the termination of the crisis, on first discontinuing the clysters, there is an unpleasant feeling when at stool, as the natural consequence of giving up a long-continued habit; but only a very short time elapses before this disappears, and the clysters can be omitted without any disadvantage or unpleasant feeling.

It may be assumed as certain, that when any permanent injury has been produced by the clysters, they have either been improperly employed, too large, too cold, or too often, or they have been discontinued too soon, while a slime crisis was still going on in the bowels.

I have collected a number of cases, to show how nutrition is encouraged by purifying the bowels by means of clysters. Very lean persons have always gained weight very quickly in my establishment, sometimes to an almost incredible degree. One patient, in the course of three months gained nearly forty pounds. Now, every one who knows the water-cure, knows that the flesh is made by it much firmer and harder than it formerly was, and that there is no fat in the case. Wine, brandy, and medicine make the muscles soft and spongy.

VII.

ERRORS IN REGARD TO CLOTHING AND TEMPERATURE OF ROOMS.

In no other point is the true water-cure more sinned against than in this. To make people hardy is the watchword of all water-friends; and, most certainly, proper hardening is of incalculable influence on the happiness of human society, and, if properly diffused, would extend to all political and social conditions. But the mode of hardening which is now carried on by many hydropathists is fundamentally false, produces much misery, and therefore does the water-cure much harm.

Chronic patients, in relation to food and drink, have frequently

no proper instinct, because their nerves of taste and digestive organs have been generally deadened to such a degree, by acrid articles of food, by alcoholic drinks, tobacco, and especially medicine, that the natural stimuli (water, milk, and wholesome mild food) make no sufficient impression upon them, call forth no sufficient reaction, and produce, therefore, only disagreeable, mawkish sensations, and even feelings of disgust. A patient of this kind, on his entrance into the water-cure, must therefore be watched, and nothing must be left to his instinct. The relations of the cuticular nervous system in most of these cases are, however, more favorable. These nerves are not deadened by unnatural and poisonous stimuli (with inconsiderable exceptions); they are only softened and weakened, through the defective operation of the natural stimuli—air and water. For this reason, we can and must, in by far the greater number of cases, leave the regulation of the temperature of the room and clothing to the instinct, even of a chronic patient; this proposition is of immense importance for the water-cure. From not attending to it innumerable cures are ruined. Hardening, in regard to clothing and temperature of rooms, must not proceed from the moral will of the patient, but from his sensual impulses. In a properly conducted cure, there comes, sooner or later, a time when even the most effeminate, and most pampered patient longs for cooler clothing. In the beginning of the cure, especially in the cold season, it sometimes occurs that the patient requires even warmer clothing than before. The cure rests upon the encouragement of the excretions, and of nutrition. Among these excretions, cuticular exhalation is one of the most important; it is well known that the skin exhales not at all, or, at most, only imperfectly, when it is in a state of shivering; consequently, during the cure, care must be taken, before all things, to maintain a comfortable warmth of the body, after and between the baths. For this purpose, exercise and suitable clothing must co-operate. It is, in general, a most dangerous notion, to think of replacing the warmth which is abstracted from the body by light clothing, through increased exertion. In some establishments, the preference is given to gymnastic exercises over walking. These exercises are an inestimable lever for raising the health, the strength, and the happiness as well of the individual as of whole nations. Would to God, that our gymnasia, in which the body is crippled, and the spirit and will ruined by learning by heart, could be at once converted into ancient Greek gymnasia! But gymnastic

exercises are only for healthy people; for chronic patients in the water-cure, the exercise of walking is more advantageous. If the treatment is so arranged as to call forth crises, and thereby accelerate as much as possible the cure, then gymnastic exercises are utterly objectionable for the vast majority of patients; the excitement of the morbid matter, still more the gradual healing of internal disorganizations, demand a state of body which is incompatible with these exercises. In such a state, by violent and sudden muscular exertions, internal lesions may be produced, which in a normal state of health, or even in the ordinary state of chronic disease, are not to be feared. The hydropathist, who, for whatever reason, wishes to excite as few crises as possible in his patients, has no better means for this purpose than letting them daily freeze; the frost then impels them to fatiguing bodily labor, such as splitting wood, or gymnastic exercises.

All that has been said of these exercises holds equally good of dancing, during the cure. To all people with weak nerves, as well as those under critical excitement, dancing is decidedly injurious.

I have said above, that often, in the first period of the cure, warmer clothing and room temperature are required than before the cure. The truth of this proposition is confirmed by the feelings of the patient, who usually has a longing for warmer clothing and a warmer room. The baths, and, still more, the water which is drunk, abstract a considerable quantity of warmth from the body, which is most perceptible in the beginning of the cure. On the other hand, those effects of the cure, which increase the generation of heat in the body, appear at first by degrees, but in their full extent only after the end of the cure; for the warmth of the body is increased by strengthening the cutaneous system, accelerating the circulation in the periphery, increasing the mass of blood, which again is a result of increased digestive power, and perhaps more than all this by purification of the body from morbid matter. Animal heat develops itself principally by the combustion of carbon with the oxygen of the inspired air and the water which is drunk, so as to form carbonic acid. Carbon, the chief element of heat, is introduced into the body only in the food, so that when the digestion is strengthened, and more is eaten, more carbon is burned, and consequently the warmth of the body rises. The most carbon, naturally in relation to weight, is contained in fat; it is well known, however, that only a strong stomach can elaborate

much fat; and it is equally well known to all water-friends that the desire for fat, and the capability of digesting it, increases in the same proportion as the strength of the stomach. It is obvious that all the causes of increased heat here cited cannot be effective in the beginning of a water-cure. If we add to this, that heat is abstracted from the body by the cold water, (in virtue of the law of equalization of heat between two bodies of different temperature,) the conclusion is evident, that in the beginning of the cure lighter clothing must not be forced upon the patient, but that frequently, on the contrary, an increase of the artificial means of maintaining heat is necessary. When, in the course of the cure, morbid matters are excited and conducted to the skin to be exhaled, a comfortable state of warmth is then also a necessary condition of the cure; when the excited morbid matters cannot be exhaled from coldness of the skin, the body is injured instead of being cured. The fundamental rule, in reference to room-warmth and clothing during the cure, must therefore run thus:—arrange both according to your feelings of comfort. By this important rule, it is not intended that we should wear more clothing than is agreeable to the feelings, as is often done from fear of taking cold. In establishments, it must be specially looked to, that a temperature of 64° is maintained in the bath-rooms. To many patients, this temperature is unpleasant, and they prefer that of 54° to 56°, but it does them no injury if it rises to 64°, whereas others, of a nervous constitution, may be injured by one of 56°. When possible, it is best to have rooms of both temperatures; but unwarmed bath-rooms in winter are utterly objectionable.

When the human body, without sufficient clothing or a sufficient room-temperature, is exposed continuously to a feeling of cold, it reacts against it by accelerated circulation, as the only means of keeping itself at least relatively warm. Accelerated circulation which is produced by bodily exercise is, in a proper degree, and in right duration, most advantageous to the health, because it encourages the necessary interchange of matter. But the long-continued acceleration of the circulation, which in a state of rest sets in as a means of reaction against cold, consumes the vital power much more quickly than in a state of comfort, and, moreover, does not assist the interchange of matter, because the pores of the skin shut themselves up when surrounded by an unpleasant cold. Shivering is repugnant to the feelings, and is therefore an unnat-

ural condition, and produces mischief. The ancient Germans clothed themselves warmly in buffalo skins, and all savages seek for a comfortable feeling of warmth.

I have heard of many water-cures, in which the patients were kept continually cold, and in which no cure of their diseases was effected, but a striking acceleration of the symptoms of age, particularly in the face. A properly conducted cure not only makes men healthy and strong, but also makes their appearance younger and better looking.

The prevention or delay of the cure, and an increased consumption of vital power, are the usual effects of the frost water-cure. In special cases, sudden and violent forms of disease also come on, as the effects of this system. I am acquainted with many melancholy examples of this.*

The more I hear of other water-establishments, the more I am alarmed that, in time, the water-cure should degenerate and go to ruin. It seems as if the great majority of those directors, who are at the same time physicians, aim at giving a direction to hydropathy, by which it may be conducted into the convenient track of the old bath-cures. These gentlemen are in the habit of advising their patients, as soon as they have gained a little strength, to leave the cure, with an earnest recommendation to come back next year. Such a mode of treatment is indeed very convenient, and very profitable for the directors; it is convenient, because in this way but few crises occur; profitable, because the patients are never cured, and remain tributary for life. If, nevertheless, a crisis *will* come to an outbreak, they suppress it with medicine and abstraction of blood, if the patient allows it. Bungling hydropathists have an awful fear of crises, because they are aware that they are not equal to them. They frequently say, at once, to their patients, that no crises are required for a radical cure. The proportion of successful crises to the number of patients in an establishment forms the surest standard for measuring the capacity or incapacity of the directing hydropathist. There are establishments in which crises are a rarity, and in which, out of fifty patients, one at most gets a real and severe crisis. In my establishment, out of thirty patients, who have remained longer than two

* These are unfortunately but too common, particularly at Graefenberg, as will be seen in Part III.—*Translator.*

weeks, not above one upon an average has left without having crises, and the most of those who left in this way got a crisis soon after, at home. In the year 1845-6, during the period from the middle of October to the middle of November, the larger half of my patients had severe crises, and about a third of the remaining half had slighter ones.

APPENDIX.

A.

THE BEST DIET.

From the "Spirit of the Graefenberg Water-Cure." (Third Edition, 1840.)

The present generation strives after spiritual regeneration. It should first of all become corporeally young and healthy, throw off its cholera belly-bands and woollen shirts—above all, get itself a new skin in the cold bath.

Having hitherto discussed the manner of curing ourselves of disease, I will now give my opinion as to the best method of protecting ourselves from sickness in future.

In the morning, when you awake, jump clean out of the bed-clothes, as if you were ready booted and spurred, and refresh your skin with a cold bath.* Those who cannot have a bath, can at least have water thrown over them, or can wash their whole bodies with a towel; this every one can do.

If you are not quite warm when you awake, rub your skin with your hands till it is quite warm, and then bathe.

After your bath, move about in the open air till the reaction of warmth comes on, and pursue your walk for an hour. If circumstances prevent your taking a walk, move about in the house, or cover yourself up warm, till perfect reaction comes on.

After your walk, breakfast on bread and butter and raw cold milk, uncreamed, and as fresh as possible.

Here a remark on the coldness of food and drink:—

Everything warm weakens the stomach; all cold things strengthen it. Truly, the first period of transition from warm to cold diet, is, for a weakened stomach, most sensible and disagreeable; but it soon becomes habit, and strengthens to a wonderful degree. The reason why cold strengthens the stomach is the same as regards the skin. If anything warm is applied to the skin or stomach, the first effect is an increased temperature; therefore the reaction, which always strives to re-establish the equilibrium, produces a reduced temperature and diminished activity. With cold the case is reversed; besides this most beneficial reaction of warmth and increased activity, it imparts, moreover, to the stomach and skin, the advantage of constriction of their fibres.

Experience in the water-cure has fully confirmed the benefit of cold, or

* That is, in summer; in winter it must be chilled, say from 59 to 62 degrees.—*Translator.*

much-cooled food; people who suffered in a high degree from weakness of digestion, have been cured by some months of cold diet, assisted by a light appropriate treatment.

Now for a defence of milk:—

The general opinion is that milk produces slime (mucus, phlegm); but this can only be said of boiled milk. As soon as one has accustomed himself to raw milk, he finds its beneficial influence on the stomach; besides, it contains the most useful of all nutritive matters, and as an antidote to acrid juices, as well as to new or old medicinal poisoning, its efficacy is undoubted.

Those who cannot overcome their repugnance to raw milk, should take only water to their bread and butter, and replace the milk by a piece of cold roast meat, or anything else they like, provided it is simple, not fermented, not from foreign zones, and above all, no coffee.

I protest against all foreign productions on this ground, that the edible productions of one zone are intended by nature to be used, and are therefore only wholesome in their native climates.* In high north latitudes, fat is found in superfluity, but nothing spicy. Therefore, when in Lapland, eat lots of fat, that you may not succumb to the cold; but beware of spices, which there would generate inflammation.

In the hot south, fat is wanting in the *animal* kingdom, and the *vegetable* produces hot spices. Therefore, if, in the Moluccas, you do not eat dishes without fat and with plenty of spice, you will fall a victim to a disease whose seat is the lower belly.

No one can dispute these results of experience, and as little the conclusion I draw from it—that is, to avoid the productions of foreign zones if you wish to eat and drink what is wholesome.

Therefore, leave coffee and tea† till you get to Arabia and China; there you may swallow them to your heart's content, they will do you good.

The hurtfulness of fermented and intoxicating liquors is seldom disputed. But it is often said, "taken in moderation they do no harm;" this is an illusion; moderately used, they do moderate mischief. Therefore, do not allow wine to become a daily necessity, and when on rare occasions you do drink a little, choose the lighter wines of France or Germany in preference, and take plenty of water in the intervals. Even were intoxicating drinks of themselves innocuous, their daily use would be dangerous, from their frequent falsification and adulteration.

So far I agree with Priessnitz; but here comes a divergence. At the dinner-table I do not willingly mess with him. At dinner Priessnitz is a true German of the good old hereditary cut; he recommends homely fare, not even rejecting smoked or pickled flesh, dumplings, or strudeln.‡

Now with regard to salt meat:—it is for more than one reason to be avoided. It introduces so much acrid matter into the body that a healthy man has enough to do to get rid of it—even if he succeeds—still less can a

* This is decidedly true to a certain extent; but, as stated in the text, is somewhat too sweeping, as it would exclude sugar, and some other articles, which are also wholesome in temperate climates.—*Translator.*

† I would claim an exemption for black tea, which is the production of a zone the climate of which differs but little from that of Europe; but it must be drunk cool, and not too strong.—*Translator.*

‡ A species of tart, excessively heavy, with apples, sour milk, and occasionally sauer-kraut; the latter kind is a Hungarian delicacy.—*Translator.*

body, containing morbid matter, hope to get the better of a salt-diet. Besides salted substances are injurious to the stomach, and stand in the same category with bitter stomachics. Thirdly, salt meat contains very little nutritive matter, as every chemist can prove; this consists in gluten, not in the fibres, and gluten is coagulated and rendered indigestible by the salt. Of a truth, the public in Germany is of a different opinion; it considers salt flesh as nutricious, because it remains long in the stomach, without thinking that it owes this property solely to its difficult digestibility. Finally, the stuff smells ill, is offensive to a delicate nose, and disgusting to a correct palate.

Leave pickled meat to the sailor; he has nothing else, and can moreover manage it best, as his whole way of life, daily exposure to sea-air, frequent involuntary salt-baths, and plenty of exercise, make a sort of shark of him.

Priessnitz gives his patients, even those whose stomachs are diseased, boiled meat as well as roasted. Like all South Germans, as well as most North Germans, he appears to have no idea of the proper constitution of a roast. This is only to be learned from the English; God be praised for the juicy beef-steaks produced at their tables!

When soup is made from meat, the latter goes to the dogs—not into human stomachs. So they say in England, and with justice, for such meat is not nutritions, it is difficult of digestion, and so ill-tasted to a civilized palate that it prefers dry bread.

Meat should not be baked, but roasted, and so that it retains the red flesh-juice inside; only in this way is it well-tasted, easy of digestion, easily masticated, and highly nutritious. But if, after the fashion of our grandfathers, flesh is baked or steamed for hours, all the red juice flies off in vapor, and is devoured by the air. Moreover, it is a condition that the flesh for a good roast should be that of an animal, if not young, at least not of a patriarchal age.

The roasts in an Austrian kitchen, are exactly the opposite of what is here given as the *beau ideal* of a roast; nay, they go frequently so far in bad housekeeping as previously to extract a soup from the predestined roast. This is not merely blameable, it is criminal, and every civilized guest ought to revenge it with sabre and pistols!

Priessnitz excludes the flesh of no kind of beasts from his table; he allows, even to the weak of digestion pork, duck, and goose. It is not pretty to eat these unclean beasts; I believe it is also unwholesome. If they produce no distinct disease, they spoil the juices. Great Rumohr! why had you not the power to give laws to the German kitchen! M. Rumohr says, in his Spirit of the Art of Cookery, "If one would not ask too much of a civilized man, we must not expect him to eat pork."

On the other hand, Priessnitz does not approve of game, because he says it produces too much blood. It is to me inexplicable how a man of his strong natural sense can consider the noble game growing up in the green forest as inferior to the beasts which are crammed in stalls, in the midst of dung! But, even then, is blood a disease? Too much blood?—this, too, in a water-diet! No—long live game! or rather let it die, that we may eat it!!

As regards vegetables, again, Priessnitz is a South German down to sauer-kraut. A child of ill-luck, like myself, may have to undergo the following dinner at Graefenberg:—

1. Bouillon, with liver dumplings!

2. Boiled beef, with onion sauce!

3. Roast pork and sauerkraut!

4. Tyrolese apple tarts, and sour milk dumplings, with plenty of grease!

Truly, a man can get over a good deal, and even outlive it, when he has no choice.

Priessnitz warns dyspeptics against soup; and here he is right. Soup makes too little impression on torpid stomachs to excite their activity. Above all, warm soups weaken the stomach. Secondly, all soup is unwholesome, because it takes the place of water.

Cold water is the first of all digestives, for the simplest of all reasons, because it helps the stomach to soak the food, to draw the nutritious matter out of it; and secondly, because, by the reaction it excites, it brings out the requisite and persistent high temperature of the stomach.

Soup, on the contrary, does not decompose the food, it must itself be decomposed; and this is asking too much from gastric juice.

"But, how then?" says an old lady. "People for centuries have recommended soup to sick folks;—and this, handed down to us from our ancestors, turns out all of a sudden to be folly."

My good lady, spare us all such objections. The wisdom of our ancestors burned witches, and yet there never was such a thing as a witch.

If people would only attend to their own instinct! All acutely sick long for cold water; all stomach-sick loathe soup.

Instead of meals after the old German fashion, I propound as follows:—

First, no soup, and *one* dish, as the stomach digests more easily the same quantity, if it is of simple quality, than if of a composite nature; and because, for weak digestion, the temptation of too much is increased by variety.

Let this one dish consist of good roast meat, from a respectable beast—in preference, game; then young bullocks or poultry; then sheep, calves, kids, &c. With this roast, eat either a compote of fruit, or some vegetable, as rice. potatoes, carrots, or any other that does not stink—as is the case, saving your presence, with cabbage. This uncleanly production takes the liberty of stinking on the table. The proposition holds good, that what stinks is difficult of digestion, and not wholesome. Is it to be believed that Nature has given us noses for nothing?

Lastly, after your roast, eat nothing but good bread and butter, or a biscuit. Fruit may be allowed for good stomachs.

Women generally prefer "mehlspeisen;"* and these are as suitable for them as flesh is for men. Then the whole meal may consist of a "mehlspeise," with fruit, bread, and milk.

In the evening, at Graefenberg, nothing is taken but bread, butter, and milk; though, truly, in gigantic quantities. If you *will* eat so soon before going to bed, it is better to have recourse to cold roast beef, fish, or pudding.† If to this we add, drink only milk or water, accustom yourself to be thirsty, move about a great deal, sit little, rather stand or lie; here we have the rules for the day's work.

* This term comprehends puddings, pancakes, cakes, &c., also rice and milk, sago milk, &c., but not pastry.—*Translator.*

† It must be recollected, that over all Germany the dinner-hour is early, usually one p. m., or at latest two; so that it becomes almost necessary to make a light supper.—*Translator.*

When the palate is purified and regenerated, it finds in milk the excitement and the spice which gourmands do in cognac and cayenne.

CLOTHING.

Wear nothing woollen on your naked skin. Wool excites sweat, and sweat is to be avoided at all times, especially if you do not mean to bathe after it.

Accustom yourself to moderate clothing, *but do no violence to yourself.* If you are inclined to be chilly, and have no comfortable warmth on your skin, it is a proof that you have got morbid matter in you, and that the central functions have got the upperhand of the peripheral. Go through a course of water-cure, and this will supply the place of an extra coat.

BATHS.

Before I had heard of Priessnitz or Oertel, I knew that daily baths are necessary for health. The forest, and the wild animals in it, had taught me this. Above all, I meditated on the difference between civilized life and that of nature, and how to replace artificially the useful in nature. Every animal is daily bathed in dew, rain, snow, in a river, or in a lake; consequently, I concluded, a daily cold-bath must be healthy.

Further. In a natural life, most cold water gets at the feet and under-parts of the body ; consequently, it must be necessary to use more water to the feet and legs than to the body. In my theory it is an axiom, that water, where it is most used, produces most activity and warmth, and conducts off most morbid matter. " Feet warm, head cool," this we knew long ago, but not how to produce it ; it must be by bathing, the head less, the feet more.

Salt water has not the simple property of dissolving substances, but rather that of corroding them by its acrimonies and salts, and is therefore useless as a cure. For, after a salt-water bath, the body reacts not only against the solvent power but also against the acids and salts ; and as the major part of its activity is directed against the latter, it cannot employ its undivided power against the old morbid matter. In short, all salt water, and the so-called health springs (mineral waters), belong to the category of medicine, as all these impure waters contain medicinal substances.

Finally, therefore, take a whole bath, or wash the whole body, in cold or chilled water, the first thing in the morning, and a foot-bath before going to bed at night. The latter is also the best preservative against cold feet in bed.

B.

THE BEST SEASON FOR THE WATER-CURE.

From Report on the Stuer Establishment for 1846.

I must here observe that much the greater number of cures were completed during the summer months, and the quickest and most brilliant all occurred at this season. Hydropathists and directors of establishments have endeavored to persuade the public that the cold season is best adapted for the water-cure. It is difficult to believe that such can be their real opinion. A mo-

ment's reflection must show that, during the cold season, the organism is already sufficiently tasked in resisting the cold, and keeping up the animal heat, without having the additional burden thrown upon it of expelling morbid matter and curing disease. It is quite true that the cold or warm season is equally adapted for some patients, and that most of them who have begun the cure may with safety and advantage continue it during the former; but, for the great majority, this season is not adapted for the beginning of the cure, whereas the warm season answers equally for all.

The cures effected in my establishment also refute the opinion that water-cure establishments must necessarily be situated in a mountainous country. Those districts alone are unhealthy and unfavorable to the water-cure which contains many fens and marshes, or which have a mass of putrifying vegetables on the surface, as in primeval forest; and, finally, those which have a substratum of clay or loam, through which the rain-water cannot penetrate, and consequently putrifies by exposure to the air.

C.

CASES ILLUSTRATIVE OF THE TREATMENT OF MUCOUS OBSTRUCTION.

[To show the effects of the application of M. Francke's theory of mucous obstruction, two cases are subjoined, as related by the patients themselves. M. Franke observes that he could have given at least twenty more of the same description, had this not entailed needless repetition.—*Translator.*]

CASE I.

On my arrival in the establishment at Stuer, I suffered principally from loss of appetite and indigestion, evidently arising from severe mucous obstruction in the bowels. By advice of M. Francke, I began immediately to use lavements as the only means of dissolving the old mucus. After I had used them five weeks, uninterruptedly, there began evacuations of slime, which had not a whitish color, but were dark grey, passed off in large lumps, and hung together like threads. This continued till the ninth week, assisted by vomitings of similar mucus; after that time all evacuations of mucus ceased, and my stomach is so purified and strengthened, that I eat with great appetite, and can digest all kinds of food, the whole being the result of lavements properly used.

(Signed) A. Erfurth, Cand. Theol.

Stuer, 13th November, 1846.

CASE II.

In the water establishment at Stuer, I have been completely cured by M. Francke of deep-rooted chronic stomach-disease, which manifested itself in constipation and indigestion. During the whole six months, I took at least three water-clysters daily. About the sixth week, after beginning the cure, there came on evacuations of mucus, which had often a greyish color, and consisted frequently of firm, string-like masses, of the thickness of a

straw, and the length of a finger. This evacuation of slime continued two months and a half; but, for these last two months, although the clysters were daily taken, there was no further evacuation of mucus.

(Signed) J. TORNOW, Proprietor.

Stuer, 5th November, 1846.

CASE III.

The above cases are fair examples of the ordinary course of these affections in civil life, in Europe. The next case is the translator's own, and being of tropical origin, will be found more interesting and instructive, as being much more obstinate and complicated.

R. B., ætat. 49.—Has served twenty years in the East, as a military surgeon.

In the earlier part of his service in India, he had suffered from rheumatism and dysentery, but was restored to health by change of air to Europe, and a residence of eighteen months in the fine climate of Persia. He enjoyed robust health for some years after his return to India; but after an attack of jungle fever, brought on by visiting an unhealthy district, his health began gradually to decline, and broke down at last under the fatigue and anxiety attendant on his professional duties, when his regiment was attacked on its march by cholera. The result was a very aggravated form of dyspepsia, attended with much irritability of the intestinal canal, uneasiness after eating, flatus, and the other usual symptoms of that disease. After trying, without effect, a great variety of remedies (which destroyed all confidence in medicine), he had recourse to repeated change of climate, including a voyage to, and residence in, Australia—but in vain; the only result being that the progress of the disease was a little checked.

On his return to Europe, in 1844, he met with Dr. Johnson's able publication on Hydropathy, which induced him to give the water-cure a trial. He accordingly spent twelve months under Dr. J.'s care, with great benefit to his general health; but the complaint showed a tendency to return, after a course of mineral waters at Homburg, to which he rather inconsistently had recourse, and he then determined on trying hydropathy at the fountain head. Proceeding to Graefenburg, he put himself under Priessnitz's care, and underwent a pretty sharp course of treatment for eight months, during which, however, he rather lost than gained ground. Fortunately for him, a German friend directed his attention to Francke's works, the perusal of which produced a complete revolution in his feelings and opinions, and opened his eyes to the nature of his own complaint, which he at once discovered to be that described in a preceding section, under the name of mucous obstruction (verschleimung) of the intestinal canal. He lost no time in quitting Graefenberg, and proceeded to put himself under M. Francke's care in Mecklenburgh, where he had just opened an establishment.

Here he was put under a very mild course of treatment, bathing in a chilled half-bath, at 62°, in the morning, and taking two sitz-baths (cold), at twelve and half-past four; the principal remedy, however, consisting in lavements of pure water, not exceeding 6 oz. in quantity, at first chilled, and the temperature gradually reduced to that of ordinary spring water, taken three times a day; at half-past ten (*after* the usual ordinary evacuation of the bowels), half-past four, and ten p. m. In addition to this he was directed to

drink from ten to twelve half-pint tumblers of cold water in the course of the day, to take repeated short walks, so as to be as much as possible in the open air, without fatiguing himself, and to adhere rigidly to his usual restricted diet, viz., milk, with bread and butter and egg, for breakfast; plain meat and bread for dinner. All stimuli (including tea, coffee, and wine) being, of course, prohibited, as also vegetables.

The excitement produced by the treatment at Graefenberg was at first succeeded by considerable depression, but this soon passed off, and his whole system became tranquillized. Nothing particular occurred till the end of the eighth week, when he suddenly began to pass quantities of old hardened mucus; with the natural evacuations it came away in lumps, webs, and long strings, tough, adhesive, and tenacious, but not mixed with the fæces, only *adhering* to them. The lavements brought it away generally unmixed with fæces, and somewhat more softened, but still tough and tenacious—it varied much in color, being usually of a dirty grey, sometimes dirty whitish, more rarely reddish brown, and always *non*-transparent. The quantity also varied exceedingly, frequently amounting to two or three table-spoonfuls in the day, at other times much less (excluding, of course, the freshly secreted mucus occasionally mixed with it, and which was readily recognizable by its transparency and jelly-like consistency). The process was attended with little or no inconvenience, and seldom with constitutional disturbance—occasionally a little pricking or pinching, in the bowels, at first referable to the large intestines, afterwards to the small ones. There also was frequently much flatus. The only constant pathognomic symptom (universal in all similar cases) was broken sleep, not exactly restlessness, but interrupted sleep.

The process continued without interruption for three months, during which he gained much in flesh, strength, and appearance. He then removed to Berlin for the winter, where the process was at first checked, and afterwards somewhat delayed, by the bad quality of the water; but on proceeding, in April, to join M. Francke, at his new establishment in Bavaria, the discharge came on again in redoubled quantity, and the progress of the purificatory process could be distinctly traced *upwards* through the intestinal canal, and into the stomach. Latterly, there was some febrile excitement, and occasional irritability of the liver, with copious bilious discharges—(these were much allayed by wet packing)—but, on the whole, he gained perceptibly in health and power of digestion.

The sudden death of M. Francke, in July, 1848, occasioned his removal to Boppard, on the Rhine, the moist warm climate of which seemed to have a prejudicial effect on his liver. He then came on to England, and spent a few weeks at Ben Rhydding, in Yorkshire, where the discharge of mucus—after lasting, with slight intermission, for fourteen months—came *seemingly* to a close, and he was advised to give up all treatment. There was some irritability in the intestinal canal for a time; but this has been gradually subsiding, and he is now in very fair health, having nothing to complain of but a slight degree of increased susceptibility to changes of weather, and new articles of food. As a measure of precaution, and with a view to test the entire absence of hardened mucus in the intestinal canal (respecting which he is somewhat doubtful, from the manner in which the process terminated), he proposes undergoing a short final course of treatment this spring.

February, 1849.

D.

NOTE ON THE TREATMENT OF CHOLERA BY COLD WATER.—By the Translator.

It will doubtless, at this time, when cholera is prevalent all over Europe, be both interesting and useful to know how the disease was treated by Priessnitz, at Graefenberg, during the last epidemic of 1832-33, when, as stated on good authority, he had from thirty to forty cases brought to him, and did not lose one. The subjoined was taken down from his own lips by a German friend, who communicated it to the translator:—

"In slight cases, it was found sufficient to use sitz-baths at 59°, continued, in some cases, as long as two hours, with uninterrupted friction of the abdomen and extremites, and thereafter one or two lavements.

"In severe cases, where cramps, numbness, and paralysis had already come on, the patient was put into a half-bath, at 59°, and violently rubbed till every part of the body had regained the natural warmth. (This was said, in some cases, to have required several hours.) The patient was then packed in a wet sheet, till gentle perspiration came on, followed by a short cooling in a shallow bath. To this were added frequent lavements of cold water, and sitz-baths at 59° for an hour, or one hour and a half, according as severe pain in the belly or cramps in the bowels occurred; plentiful draughts of cold water being administered all the time.

"The after-cure consisted in repeated wet packing, two sitz-baths daily, and compresses round the body, at first quite wet, afterwards more wrung out; also two lavements daily. The patient to eat nothing during the acute stage; after it is over, as little as possible for two or three days, and that little cold. Light white bread and cold water is the best diet."

So far Priessnitz. The mode of treatment recommended by M. Francke (whom the translator considers a better authority) was somewhat modified. He used the sitz-baths and shallow baths at a temperature of 65° to 68°, and for not more than twenty minutes at a time. Instead of the wet packing, he put the patient to bed, and covered him up warm, till perspiration came on, when he was washed in a half-bath, or if *very weak*, gently washed down in bed; the cold water as drink, was given in small and divided quantities, but frequently, so as to relieve thirst, and clear out the stomach.

The translator was fortunate enough to witness the treatment of the subjoined case, which occurred just after M. Francke's melancholy death, and was conducted on his principles, by his pupil and assistant, M. Hahn:—

Professor K——, of Hamm, on arriving at Alexandersbad (on the 5th of August last), from a district where cholera was then prevalent, felt unwell towards evening, had pain in the bowels, griping, and other unpleasant symptoms. During the night, these symptoms increased, and he was attacked with purging and vomiting, accompanied by violent spasms. On being first visited by M. Hahn, at four a. m., he presented all the symptoms of Asiatic cholera—violent vomiting and purging of congee-like (rice-water) matter, with white flocculi floating in it; severe spasms of the abdomen, back, and legs; sunken countenance, coldness of skin and breath, weak fluttering pulse, intense thirst, &c.

He was first put into a sitz-bath at 68°, and strongly rubbed for ten minutes, which relieved him much, and he slept for half an hour. An enema of six ounces of cold water was then administered, which, however, he could only retain for a minute or two, the dejections being still slightly tinged with bile.* He was then put into a half-bath at 68°, and very strongly rubbed for five minutes, which relieved the cramps. The rubbing was repeated in bed, both with wet and dry cloths, when the cramps recurred, and he had three more enemata, one after each evacuation, being able now to retain them better; the bath was also repeated towards evening. During the whole time he was allowed to drink freely of cold water, in small portions at a time, which, at first, induced vomiting, and brought away vast masses of dirty grey-colored slime.

Towards evening the spasms abated, bile again made its appearance in the evacuations, the secretion of urine was re-established, and he rapidly recovered. Next day he was quite convalescent.

Having witnessed and treated many hundred cases of Asiatic cholera, the translator is enabled to say that this case (which he watched carefully) presented all the usual symptoms of the disease; and that, although not of *great* severity, the speedy effects of the hydropathic treatment give us reason for hoping that its timely application may, in a great majority of cases, be attended with similar success.

* This is not usual in cases of cholera; but I am informed by my friend, Dr. Fleming (formerly of the Madras Medical Service), that he has observed it not unfrequently.

END OF PART II.

PART III.

CRITIQUE

ON THE

HYDROPATHIC METHOD OF TREATMENT

OF

VINCENT PRIESSNITZ,

AT

GRAEFENBERG.

———— Nought to extenuate,
Nor aught set down in malice.

PREFATORY REMARKS BY THE TRANSLATOR.

Mr. Francke having been removed from the sphere of his useful labors by a premature death, it becomes the more imperative on his disciples and followers to raise their voices against the abuses which have crept into the practice of hydropathy, and in particular those which have been fostered by the example of the great founder of the art himself,—abuses, which, if not speedily corrected, bid fair to reduce this noble science to a system of blind empiricism.

In the following Critique, the author himself states the reasons which have induced him to come forward as the opponent and critic of his former master. At the same time, so great was his love of justice, his wish to act in the spirit of the motto which I have prefaced, that one of his last requests to me was, that I would carefully correct an error, or rather an unintentional exaggeration into which he had been led. In the Critique it is stated that Priessnitz is in the habit of treating acute diseases with cold water. That he has done so in several instances, even of late years, rests on evidence which it is impossible to doubt. But we have been assured by a gentleman, who has had constant opportunities of observing his practice in acute disease for the last three years, that the following is his *usual* mode of proceeding.

After the patient has been packed in a wet sheet, he is put, first of all, into a bath of chilled (abgeschrecktes) water, and rubbed for three minutes; he is then plunged into the cold bath, and immediately replaced in the chilled bath, where he is again rubbed for three minutes; the process being usually repeated three times, so as to occupy altogether about ten minutes.

Now this mode of proceeding,—although in Mr. Francke's opinion objectionable, in many cases highly so, inasmuch as *cold* water should seldom or never be used in acute disease,—is not so decidedly pernicious as the employment of cold water alone, and Priessnitz is entitled to the full benefit of the correction.

From close and attentive personal observation of Priessnitz's practice, during a residence of eight months at Graefenberg, I can add my personal testimony to the perfect correctness of Mr. Francke's statements, and, as far as my humble judgment goes, to the justice of his criticisms.

In one respect, it seems to me that he has hardly been severe enough in his strictures—I mean with respect to diet; and it is the more necessary to allude to this, since in some late publications an attempt has been made to slur over, or explain away, the defects in this important part of Priessnitz's practice. The following is an exact sketch of the diet which was furnished the patients during my residence, and I have the best authority for stating that no improvement has taken place. The breakfast consisted of rye bread, pretty good, though sour; black bread, made of a mixture of rye, barley, and oats, very coarsely ground, and full of chaff and other impurities, (no white bread of any kind being furnished, though it was to be purchased in the lobby); milk, sweet, and sour curdled; butter, in summer, fresh and pretty good; in winter, invariably salt, and very bad. The breakfast recommended by Priessnitz to all patients, without exception, was black bread and butter, and sour milk. For dinner, five days a week, beef of very bad quality, boiled or stewed to rags, and covered with a greasy sauce; the other two days, veal, from calves a few weeks old, rarely mutton, more frequently pork, with suet dumplings, or bacon sausages, occasionally salt pork or ham, with lentils: on Sunday, an additional dish of poultry, generally duck or goose. The second course consisted of tarts of various kinds, of a very rich coarse pastry, containing apples, prunes, sour milk, curds, poppy seeds, or sour krout; cakes and rolls, filled with bad butter; now and then, very good rice milk, or milk with wheat groats, more rarely rice or millet pudding: potatoes were occasionally furnished, but seldom any other vegetable, except a coarse kind of spinach.

Supper the same as breakfast, with the addition of potatoes.

When to this is added, that not the slightest restraint was put upon the appetites of the patients, which, moreover, were inordinately excited by excessive exercise, very light clothing, and the immoderate quantity of water drank, it is scarcely necessary to add that excess was the rule, and that almost every one ate at least twice as much as he ought to have done. I will now leave it to every unprejudiced person to decide whether such a diet is calculated to restore weakened powers of digestion; or, indeed, to agree with persons laboring under any disease whatsoever.

I must do Priessnitz the justice to say, that, in my own individual instance, he gave me some cautions as to diet. After having been under treatment for six weeks, I had a severe bilious attack, arising from congestion of the liver, produced by the severe treatment to which I had been subjected: upon this he modified the treatment, and desired me to eat moderately, and to give up sour milk and black bread (which he erroneously supposed I had hitherto been eating), and to use white bread instead. But *exceptio probat regulam*—I could not, on minute inquiry, ascertain that, in a single other instance, a similar caution had

been given, and the astonishment which the mention of it occasioned among the other patients is a proof of its unusual occurrence.

Were I asked what class of patients I should recommend to go to Graefenberg, I must conscientiously answer, none. It is manifestly impossible for patients, with any affection of the digestive organs, to hope for cure, or alleviation, under such a system of diet as the above. And even in the cases of young, and otherwise healthy persons, with strong nerves and sound digestions, it is obvious that the cure must be indefinitely protracted by it. In the numerous cases of boils constantly occurring at Graefenberg, I am satisfied that they were frequently caused, and the discharge in all of them kept up, by the coarseness and indigestible nature of the food. It would, otherwise, be impossible to account for a fact of common occurrence there, viz., that a patient may have so-called crises, with a constant discharge, for six, eight, or twelve months consecutively, without their producing any perceptible effect on his complaint; and this may also give a clue to the extraordinary length to which the treatment is sometimes protracted, it being nothing unusual to hear of patients having been three years at Graefenberg.

I may add, that, from intelligence lately received from Graefenberg, there seems reason to believe that the publication of this Critique has had *some* effect in inducing Priessnitz to modify his treatment; and it would rejoice all the followers of the art, of which he is the undoubted founder, were he again to revert still more to his early principles and practice.

R. B.

February, 1849.

CRITIQUE ON PRIESSNITZ.

In a preceding section,* in speaking of hydriatic errors, I touched upon the alterations which Priessnitz in later times had made in his mode of treatment, without, however, going farther into the subject, because I considered the communications made to me relative thereto as false, since Priessnitz himself, in a letter to me, disavowed them. This answer, at the time, removed a load from my breast; for I believed that I was thus relieved from the duty of coming forward with a public and undisguised criticism against the discoverer of hydropathy. Unfortunately, since that time, the most decided and concurring statements, from various perfectly authentic sources, have convinced me that Priessnitz, in that letter, has disavowed his own mode of proceeding with regard to his treatment. I must, indeed, confess that I have not seen with my own eyes any part of the proceedings here stated; but the sources from which I have drawn are so certain, that I can openly vouch for their truth. In cases where I had any hesitation in giving this security, I will make the statements in question, not in the form of facts, but in that of communications.

Before I subject the merits and the errors of Priessnitz to a criticism, the reader will permit me to say two words of my personal position as regards him and the critique I am about to give.

I must openly avow that all water-friends with whom I have spoken on the subject, have advised me unanimously not to come forward against Priessnitz, but to keep silence, even if convinced of his errors. My opposition to Priessnitz, say they, will produce an unfortunate rupture in the combined domain of hydropathy; new food will be given for doubting the principles of hydropathy;

* The section here alluded to was omitted, as being purely controversial, and of no interest to the English reader. It was stated therein, *inter alia*, that Mr. Francke having heard reports of Priessnitz's proceedings, wrote to him on the subject, and that in his reply he denied their truth.—*Translator.*

the opponents of the water-cure will triumph, and will turn the thing to account quite differently from what I can previously calculate upon—*enfin*, Priessnitz is so colossal an authority, and I myself have done so much to elevate him thereunto, that, as may be foreseen, the victory will remain with him, and I shall then have only injured myself and my sphere of operation. It may be that these advisers are right, and that worldly prudence commands me to keep silence. But how, I ask, is it possible to keep silence? how is it possible, for prudential reasons, to betray the truth? For concealment of the truth is as much treason against it as falsehood itself. As strong as any conviction can be rooted in the human soul, so firm is my conviction of the eternal truth of hydropathy; so firm, moreover, is my conviction, that only by the overthrow of medicine, and the victory of hydropathy, with all its consequences, can the human race be snatched from misery—so firm, finally, is my conviction, that in the false track into which Priessnitz, in later times, has conducted hydropathy, this great and, for mankind, blessed discovery, must necessarily be led to ruin. Has any one an idea how, with such convictions, it is possible to keep silence? For my part I have no conception of this possibility. The soul which is powerfully impressed by a great idea, must yield to this impression, if it would not burst under the expansion of compressed thought. I *must* speak, because I cannot keep silence.

I have to thank Priessnitz for my life; this is true, at least in an indirect sense. I perceived, indeed, after I had been treated by him nearly two months at Graefenberg, that his treatment was false, and could never lead to a cure.* On this account I left the house, and went to a remote house in the colony,† in order to treat myself according to my own judgment; and soon afterwards, when I had got a clear idea of the nature of my cure, I returned home. Nevertheless, I should never have arrived at a knowledge of the general water-cure, as well as of my own particular one, if the great and ingenious discoveries which Priessnitz had made, had not served me as a basis for further inquiries. Without all doubt I should have been long returned to dust, if Priessnitz

* I suffered, among other things, from insupportable nervous pains and abdominal affections, with abnormally severe indurations in the digestive canal, and was reduced and weakened to the utmost degree, yet Priessnitz made me sweat in a dry blanket twice daily, and prescribed *no clysters*.

† A well-known place close to Graefenberg.—*Translator.*

had not before me discovered most of the principles of hydropathy.

I have, therefore, to thank Priessnitz for my life. My friends brought forward this motive also to induce me to keep silence. But I could find no tranquillity in this; I cannot allow my feelings of gratitude to an individual to make me a traitor to the truth.

The reader will pardon me, if in what precedes I have spoken of myself and my personal views and feelings, before proceeding to the critique itself. This exposition tranquillizes me; and, therefore, I hope that the reader will excuse it.

In criticizing the merits and the aberrations of Priessnitz, I will discuss the former first, partly because chronology requires it, partly because, like every water-friend, I would rather cast my eyes on the lights than on the shades in the character of this great man.

Priessnitz is the discoverer of hydropathy. Whatever may be alleged against this—whatever may be said of the former employment of water in disease, these are all chatterings of men who have not the slightest idea of Priessnitz's system, and of true hydropathy. The earlier employment of water was totally without principle, it wanted all germs of a science.

Priessnitz has made the following discoveries and inventions in hydropathy:—

1. He has invented almost the entire mechanism of it, and that, with remarkable sagacity, and such perfect mastery, that the future can scarcely produce any improvement on it.

2. Priessnitz has discovered the first fundamental idea of the employment of water in chronic disease, which is, that cold water conducts the circulation, heat, and organic power, into that part of the body with which it is most frequently brought into contact. This idea, which is a necessary corner-stone to hydriatic science, was so little guessed at by physicians, before Priessnitz, that it was rather a part of their narrow system to put the parts of the body, into which they wished to conduct blood and heat, into warm water, and to employ cold water where they wished to abstract these. From this fundamental error alone there can be no pretension to a system of hydropathy before Priessnitz's time.

3. Priessnitz has also discovered the second fundamental idea of hydropathy—that the cold bath is refreshing and beneficial, *only* when the skin is warm or sweating.

It is well known that physicians, before Priessnitz's time, had no idea of this also. They prescribed, without exception, a previous cooling in the air before the bath is taken, not knowing that in the air it is easy to catch cold, but never in water, if we go into it warm, and only remain a short time in it, because the water then produces more powerful reaction.

4. Priessnitz perceived the necessity of a distinction between the derivative and exciting employment of water. This most necessary idea never entered the mind of any physician before him.

That Priessnitz perceived the necessity of an antiphlogistic employment of water is, indeed, no new thought, for this form had been long known to physicians. Nevertheless, it is to be remarked that physicians had completely mistaken this form, and that Priessnitz came much nearer the truth, although, as I shall hereafter show, he has never rightly understood the antiphologistic treatment to its full extent, and in all its practical shades.

• I must here remark, that Priessnitz has never known, and to this day, does not know, the last of the four essentially different modes of employing water—namely, the soothing. By the derivative treatment, indeed, we may produce a tranquillizing of single organs, but seldom a soothing of the whole organism, the nerves of which are much affected. Priessnitz's sycophants, who never think for themselves, but are mere imitators, have accordingly divided hydriatic treatment into exciting, derivative, and anti-inflammatory, without mentioning or knowing the direct and absolutely soothing.

5. Priessnitz perceived, or with a peculiar hydriatic instinct guessed, that when chronic disease, in the water-cure, takes on the acute form, the organism is thereby striving at a cure, and, in most cases, can only in this way attain it. He had thereby built the bridge to the idea that all acute diseases are curative efforts of the organism, which idea I have brought forward in my writings, and made it the foundation of my system.

In this way, whether by knowledge, or by instinct and good luck, did Priessnitz overcome the greatest of all the difficulties which opposed themselves to the human race on the way to discover hydropathy.

Of this great, and with difficulty attainable idea, physicians had, least of all, a notion or a presentiment, and yet, without it, no system of hydropathy is possible.

Priessnitz is the discover and the hero of hydropathy—a won-

derfully great hero ; because, with intrepid, undismayed soul, he ventured to steer through the Scylla and Charybdis of crises, is he the hero of hydropathy. He who knows the human mind, who can rightly appreciate the might and the force of the prejudices and authority of a thousand years, cannot fail to be astonished that it was in the power of a man, on the coming on of a violent acute disease, in a chronic water-cure, to perceive that this was the way to a cure, and that he had the steadfast courage to steer the ship forwards through these whirlpools and breakers.

Priessnitz is the discover and hero of hydropathy ; but he is not its master and finisher. Columbus was the discover of America, and yet he saw only a very small portion of this quarter of the world. Priessnitz's discovery of the mechanism of hydropathy, and the four fundamental ideas above stated, are indispensable materials for the edifice of the new science, but they are not its exclusive foundations. The most important of all is wanting, and that is this :—In the healthy man, and in those with acute disease, instinct is the unerring guide to the preservation of health, as well as to the cure of disease ; and in chronic disease, next to the remains of instinct, from the healthy state, the analogies obtained by correct conclusions from the manifestations of instinct in acute disease, form the standard for the prescriptions of the physician. When, without this one idea, we have all the others before us, the great as well as the small, the principal as well as the subordinate, we have only a chaos, which is far removed from the organically arranged essence of a science. Without this one thought there reigns in the domain of hydropathy a darkness, in which at every step, an error is possible, and in which the physician gropes about like a half-blind man. This one idea is the guiding spirit through the sea of the chaos, it is the fructifying element of light and heat for the thousand slumbering germs, which, without it, can never awake to perfect organic life.

This idea I have laid as the foundation of hydropathy. In my enthusiasm for Priessnitz, I ascribed this idea to him ; but Priessnitz, of himself, never guessed at it, and, to this day, has never comprehended its practical consequences. Without it, and the development of all its consequences, we can neither have a true system of hydropathy, nor a complete hydropathist. If I discovered this idea, and in my enthusiasm for Priessnitz ascribed it to him, is this to be made a reproach to me ? For my part, I hold it to be, if not more prudent, at least more noble, to ascribe our

own intellectual acquisitions and thoughts to a man whom we admire, than to steal the ideas of another.

As Priessnitz has never comprehended this idea of instinct, he has never known how to observe a medium, and has always swayed from one extreme to another, without being able to find the one immutable road in hydropathy. It is however certain that, ten years ago, he was infinitely nearer the truth than now, and that, of late years, he has always been deviating more and more from the right path. We shall first discuss the errors into which he has at all times fallen.

The most prominent of these is his entire misconception of the state of diseased nerves, and his consequent spurring and driving of his patients to unceasing exercise, too much drinking, and too much and too cold bathing. There is no doubt that, for most chronic patients in the water-cure, much exercise is necessary; but it is equally certain that for these patients some hours of rest in the day are also necessary. If from three to six hours are daily devoted to exercise, this is enough for all, and for the majority of patients it is absolutely necessary that after meals they should either sleep or rest.

Priessnitz, on the other hand, drives his patients at all times, and even immediately after meals, not only to walking, but many of them to gymnastic exercises and even to severe bodily labor. In this way the treatment becomes exciting to all patients. But for nervous patients, and for the most of those with abdominal affections, it is urgently necessary that is should be tranquillizing. Nerves which are much affected cannot be healed otherwise than by producing a state of repose—I might almost say of agreeable indolence; which state, nevertheless, does not exclude much daily exercise, but which, especially after meals, finds a sensible pleasure in repose and "*il dolce far niente.*" This transition of diseased nerves from over-excitement, and the weakness combined with it, into a state of repose, was at all times impossible under Priessnitz's mode of cure. I will not say that none of his patients have been cured of nervous affections—for many of them do not observe his directions, but follow the warnings of instinct, and I myself belong to this category. The Graefenberg zealots, after the example of their master, wished to drive me to unceasing running about; but I felt the ruinousness of the exertion in all my nerves. I walked daily for about three hours, and spent from four to six hours lying on the bed, sometimes sleeping, sometimes occupied with light

reading, sometimes in talking, and sometimes in pure thoughtless indolence. Altogether we are justified in saying, that Priessnitz would have cured very few people if all his patients had strictly followed his prescriptions. It is fortunate for his fame, that instinct in many patients is more powerful than their obedience to him.

It has been disputed at all times, and especially at Graefenberg, whether, after meals, rest or exercise was most advantageous. That such a dispute was possible is a melancholy proof that men have deviated widely from nature, and that they do not understand how to deduce rules of health from the observation of nature. All those animals, without a single exception, which satisfy their hunger in a short time, give themselves up to repose after a meal; and, beyond a doubt, man belongs to this class. For he does not require five or six hours of slow grazing to satisfy himself; on the contrary, like predatory animals, he finishes this business in a short time, if he has his whole meal before him, and does not stop to talk. Even the animals which eat slowly and live upon vegetables, when satisfied, lie down to rest. Moreover, it is well known to physiologists, that experiments have been made as to whether digestion went on better with exercise or with rest after a meal. For this purpose dogs of equal age and equal strength were fed exactly alike, after which one of them was left to himself and to rest, a second was made to take moderate, and the third severe, exercise. When the animals were killed, at the end of two or three hours, it was found that the dog which had rested had digested the best, and the one which had been severely exercised, the worst. Moreover, theoretic physiology likewise gives its voice in favor of rest after a meal. When one organ of the body labors hard, the processes of the other groups of organs not related to, but opposed to it, are relatively impeded. When digestion is going on, the processes of thought sink; under intense thought, again, the process of digestion sinks. If the stomach is to digest strongly, its coats must assume a state of strong turgescence, and in order to do this an abnormal quantity of blood must circulate in them; whereas, by exercise, the blood is conducted into the limbs and their muscles; consequently, exercise with a full stomach prevents the turgescence of its coats, and thereby impedes digestion. It may be objected that, according to experience, bodily exertion increases hunger. This is undoubtedly true. But bodily labor and exercise do not increase hunger by strengthening the

digestive powers while the stomach is full, but by assisting the interchange of matter in the body, *i. e.*, by producing the expulsion of the excretory fluids and substances, and thereby assisting the rapid elaboration of the blood into organic matter, whereby, naturally, an increased demand for blood, and therewith an increased demand for nourishment are produced. That, besides this, bodily exercise, when the stomach is not quite full, directly assists the digestive powers is, perhaps, probable, although by no means established. The affections of the digestive organs, which we find in all sedentary people, arise probably more from the sitting position, which is highly injurious to the stomach and lower belly, and which produces stagnation of the circulation in the latter, than from want of exercise. Experience, at least, seems to show this. Fatted animals, which get no exercise, but remain in a recumbent position, have no difficulty of digestion. The fat wives of the negro-sultans, who are always lying down, never complain of indigestion. By this reasoning I am naturally very far from advising a want of exercise; all that I wish to say is, that it is much more injurious to digestion to sit too much, without the necessary exercise, than to lie too much. Sitting is, indisputably, the most unhealthy position which a man can assume; walking and lying in proportionate alternation form the healthiest regime.

If, in healthy people, rest after meals assists digestion, there cannot be a doubt that, for sick people in general, it is much more necessary. Nevertheless, we must here remark, that there are isolated rare states of disease in which rest after meals is actively injurious, and that there are numerous chronic affections in which the transition from the exercise regime into that of rest, after meals, produces unpleasant bodily sensations. This phenomenon is explained, when we recollect that habit exercises such a power over the organism that the transition, from many accustomed unwholesome articles of food and drink, to wholesome ones produces feelings of sickness, as well as the transition from accustomed unwholesome occupations to unusually healthy ones.

That, moreover, Priessnitz does not understand the proper treatment of nervous and abdominal disease, and that in these diseases in general very bad cures are made at Graefenberg, is not said here for the first time; I have already stated it in several of my writings. I have cured these diseases in the highest degree in my own person, and I know, therefore, how preposterous his treatment of my case was, and how, on the other hand, such treatment

must be conducted. I have cured many other patients of this kind, and in these cures, among many other interesting observations, I have made this one—that the transition of morbidly excited and disorded nerves into a state of agreeable repose, often takes place under slight and agreeable shiverings, which, however, only come on periodically and disappear as soon as tranquillity is fairly attained.

Another of Priessnitz's faults, connected with the above, is his total ignorance of the effects of intellectual exertions upon nervous patients. When I arrived at Graefenberg, with my nerves excited to a degree approaching to insanity, I asked him if I might compose during the cure, and he permitted it without hesitation. Fortunately for me, my room companion, Baron von B——, who had been already three years at Graefenberg, said to me, "Ask Priessnitz nothing about nerves, he has not an idea of them. Avoid most carefully every intellectual exertion, as otherwise you will make yourself quite miserable."

A second fault, which Priessnitz has always had, though formerly in a less degree, at present constantly increasing, is his excessive employment of water with regard to the quantity of drink and the number of baths. The evil effects of this proceeding have been already discussed in Part II. Most especially is it a decided mistake, when a second bath is taken before the reaction after the first has set in. This fault is committed by Priessnitz in a much greater degree now than ten years ago. He frequently directs his patients to have the whole body rubbed down with a wet sheet, and immediately thereafter to take a sitz-bath, or *vice versa*. As it is well known that the principal effects of a bath rest upon the coming on of reaction, the mischievousness of this proceeding is self-evident. Priessnitz makes many of his patients wet their whole bodies four or even five times a day. A full-bath, two douches, and a rubbing down with a wet sheet, occur frequently in one day at Graefenberg. To this are to be added local baths—sitz-baths, foot-baths, &c. This treatment increases the evil effects of too much exercise, because it allows no tranquillity of the nerves to take place, and produces an useless consumption of vital power.

A third fault is that Priessnitz at all times has used the water too cold for the most of his patients. I have already shown in detail what pernicious effects too low a temperature of the bath has on nervous patients. Tranquillizing the nerves is in this way impossible. Priessnitz employs the water much too cold, not only

in chronic, but also in acute diseases. In chronic diseases, it may be assumed that, under proper treatment, in the cold season, upon an average, scarcely the half of the patients should be put in the cold "wanne" (plunge-bath); Priessnitz, however, sends all his patients into it, and usually at the very beginning of the cure. In acute diseases, the seat of which is not in the digestive canal, water at a temperature of 48° (as at Graefenberg) should only be used for a whole bath, when a state of torpor exists. There is no doubt that cold water may be used, quite in the spirit of medicinal treatment, for the forcible suppression of the symptoms; but in this case there can be no thought of an actual cure—*i. e.*, of a complete expulsion of the morbid matter. I will illustrate the perversity of Priessnitz's employment of water in acute disease by an example in detail. In inflammatory diseases, especially in inflammations of the lungs, Priessnitz puts the patients usually into a full cold bath, and leaves them in it until all pain disappears, and the power of reaction is suppressed. His principle runs thus: the first bath, in inflammatory fevers, must be so employed, that the symptoms of inflammation do not return after the bath. For, says he, the patients get a repugnance and a shuddering against a repetition of this proceeding; which is perfectly true, when so utterly perverted at this is. The reaction after the cold bath produces increased excitement, if the bath is not continued until the power of reaction is suppressed. It follows from this, that, after the cold full-bath, either an increase or a suppression of the inflammation must ensue, both of which are equally pernicious. This bath, in such cases, has also another essential disadvantage, as compared with the chilled half-bath and affusion in a sitting posture. For it is necessary, in inflammations, especially when the blood has already undergone a chemical change of its constitution, that large quantities of water should be rapidly introduced into the general circulation. Drinking alone is far from being sufficient for this purpose. The skin must absorb much water, but its pores shut themselves up in the cold full-bath, and consequently cannot absorb water. Only when the patient is out of the bath, and is not in too cold an atmosphere, does the absorption begin. It follows from this, that inflammatory diseases must be treated by such a humefaction with chilled water, that the body is not constantly under water, but is partially exposed to the air. As, moreover, chilled water produces less reaction than cold, it follows that, in all states of disease, where an exaltation of the vital processes is dan-

gerous and injurious, chilled water must necessarily be used. Accordingly, the treatment of inflammatory complaints should be as follows:—The patient is put into a half-bath, which does not contain more than six inches of chilled water, and is partly washed with the wet hands, partly has the water poured gently over him at proper intervals out of glasses. Such a half-bath may require to be continued for more than half an hour, in strong men suffering from active disease. It must be continued until a shivering, or at least a coolness, comes on. Up to this time, the skin absorbs the water greedily. (It follows, that the bath should not be taken in cold rooms—*i. e.*, in a temperature under 64°.) After the bath, the patient is dried, put to bed, and either covered up warm, or, when the practised eye of the hydropathist foresees rapid reaction, and the speedy return of the inflammatory fever, he must, immediately, after the bath, be packed in a wet sheet. If, in it, tranquillity, sleep, or sweat come on, he is to be let alone, as long as he either sleeps or feels himself comfortable. On a return of the restlessness he is to be unpacked, and washed with chilled water. If, however, while in the sheet, along with the reaction of warmth, considerable restlessness comes on, he is to be immediately put into a fresh wet sheet. If abnormally severe restlessness comes on, similar to that before the first long-continued chilled bath, the latter is to be repeated. Under this treatment, the patient never gets a repugnance or shudder at the repetition of the bath, as is the case with the cold full-bath. On the contrary, he feels, as often as it is necessary, a desire for it; and, indeed, under my method of treatment, after it has once begun, little more is required than to ask the patient what he would like, and forthwith satisfy his desires. I have never lost a patient with acute disease; scarcely one when medicines or abstractions of blood had been already employed. I have treated all sorts of acute diseases in various stages, and always there have ensued critical excretions of morbid matter, perceptible by the senses in the course of the cure, and no chronic sequelæ have ever occurred. I know of several deaths which have occurred in acute cases under Priessnitz, and, beyond this, of several cases where chronic disease succeeded the acute affections treated by him. He treated his own daughter Sophie (who was lately married to a Hungarian) for inflammation of the lungs; and it is well known to the patients at Graefenberg that since that time she suffers from palpitation of the heart, which she never pre-

viously had.* By this perverted employment of water, therefore, the inflammation was not cured, but only suppressed.

It must be remarked, with regard to the above observations on the treatment of inflammatory disease, that they are to be taken as a sketch only, and not as a complete guide. For, very frequently, we must also employ cold local baths, or cold compresses, and derivative sitz-baths. That the thirst is always to be thoroughly quenched with water is a matter of course.

In exanthems of various kinds, also, Priessnitz employs the water for local baths much too cold. Cases have occurred at Graefenberg in which eruptions and sores lost their healing character, and assumed a destructive one, and have even occasioned organic devastations. The cause of this consists entirely in the use of too cold water for the local baths and the wet bandages.

Water used too cold and too often produces, in time, on the skin and digestive canal, either the effect of diminishing their reaction, and therewith reducing the organic activity, or it brings on cramp-like excitement. Patients who subject themselves rigidly to Priessnitz's present mode of treatment have all to expect, in the course of time, that they will no longer be able to bear any cold bath, that either they will not recover their warmth after it, or will get cramps, presupposing that they continue the cure at Graefenberg, as is usually the case, for years.

Priessnitz formerly used water for clysters in too large quantity, and too cold. There are patients who cannot, without injury, take clysters, for any length of time, under 68°; there are others who cannot bear more than half the quantity which Priessnitz formerly ordered; nay, the same patients must often, under different circumstances, use clysters of various quantity and temperature. Priessnitz occasioned much mischief by his method of employing clysters, and this has induced him to give them entirely up, in chronic diseases. If he has been induced, by the evil effects of their *abuse*, to give up their *use*, he must, to be consistent, in some years, give up *all* baths; for his present mode of proceeding, with regard to the number and temperature of baths, and especially with regard to artificial means of producing warmth, has already produced enormous mischief, although in its full extent it is only of late date, and will, without doubt, shortly show its evil effects

* Priessnitz denies this; but M. Francke's authority was a gentleman of undoubted veracity, who had it from the young lady's own mouth.—*Translator.*

still more distinctly. Farther on I shall speak more in detail of the evil effects of his present frost-regime.

A fourth fault, which he has at all times committed, and still commits, consists in prescribing a false diet. This subject has already been discussed in Part II., and I will here only add a few observations. Sour milk and leavened black bread, in most people, increase the stools precisely by their acidity. I have shown that this process is injurious in principle. On the other hand, however, it is a decided fact, that the human body can so accustom itself to bad food, that the transition to wholesome nourishment may produce in it symptoms of disease. In this way the use of wheaten bread and sweet milk may produce constipation in people who have been long accustomed to black bread and sour milk. From these propositions, taken together, it follows, that the transition from the latter to the former must, in many patients, be only gradually brought about, if it is not to produce inconvenience, and even injury. This, however, does not affect the fact, that wheaten bread and sweet milk are wholesomer than their opposites. Sour milk has entered the stage of fermentation. He who declares it to be absolutely more wholesome than sweet milk, cannot, in consistency, call beer and other fermented liquors absolutely unwholesome, although more so than sour milk, which forms a transition substance, and one of such a nature that, beyond a doubt, healthy men may remain healthy for life under its daily use. It may, therefore, be sometimes recommended as a means of transition to water-diet, especially for those who have previously consumed spirituous liquors in excess. All this, however, in no wise affects the principle, and it remains quite certain that it is advantageous for sick people to turn gradually from the sour to the sweet, presupposing that this can be effected in such a way as to produce no perceptible inconvenience, and especially no constipation. According to my experience, this modus is always attainable, if properly gone about. That wheaten bread of itself does not produce constipation, we can see from those nations who in general eat nothing else. We can also see from them that it is a much stronger article of nourishment than black rye-bread. The English and Americans, especially the lower orders, are incomparably stronger than the Germans. A German laborer is not able to compete with an American, as I have frequently observed with my own eyes.

The remaining subjects connected with diet, and as relating to Priessnitz, have been already discussed in Part II.

When I went through the cure at Graefenberg, in 1837, Priessnitz's mode of proceeding was quite different from his present one. I have, in what precedes, spoken of the faults which he has at all times committed, as well nine years ago as to-day. I will now shortly say a few words on the faults which he then had, and which he has now laid aside. These were, that he at that time carried sweating to an excess. Not only did he make people sweat in a dry blanket, for whom sweating was totally improper, but he always allowed those for whom it was adapted to sweat too long. As previously explained, all patients with disordered nerves, or abdominal affections, should not be packed dry, and many of them not even in the wet sheet. At present, Priessnitz frequently orders wet packing for many patients for whom it is totally unadapted; but, nine years ago, he would have made a great majority of the same people sweat in a dry blanket. Under his former method of cure, Priessnitz made only very moderate cures of abdominal and nervous affections, but most extraordinary ones in all those who had strong, or even moderately strong stomachs and nerves. Under these conditions, he made most brilliant cures in gout, rheumatism, scrofula, hemorrhoids, syphilis, deafness, blindness, rickets, ringworm, and other malignant eruptions and sores, fistulæ, and even cancer. These cures, when compared with those effected by the most celebrated physicians, appeared quite miraculous, and were well calculated to excite the highest enthusiasm for hydropathy and its great discoverer. Unfortunately, since that time, Priessnitz has not gone forward in the path of truth, but in that of error. In nervous and abdominal affections, much more unfavorable results are now obtained at Graefenberg than formerly; and in the other diseases abovenamed, in which Priessnitz was formerly so successful, radical cures are, in the present day, only exceptionally effected, and require a much longer time than formerly; besides that, they are scarcely possible, except when the patients, partly, at least, follow the impulses of their own instinct, in opposition to his prescriptions. The chief fault of his present method of cure, as compared with the former, consists in this, that he prescribes a frost-regime to his patients, which those who know human nature cannot avoid calling an absolutely insane one; moreover, in this, that he pushes still further the worrying his patients by too many baths, and too much exer-

cise; and, finally, that he now only prescribes clysters in chronic disease, as an exception, and for a very short time, in exceedingly rare cases, or, perhaps, not at all. At least this is what I have been assured of by all those persons* who have lately gone through a cure at Graefenberg.

Priessnitz makes his patients go about, summer and winter, in the lightest clothing; in the depth of winter, in thin linen coats and pantaloons, most of them without stockings, neckcloths, or any covering on the head. Along with this he advises them not to heat their rooms in the coldest weather, and allows, at most, a temperature of 54°.† A great number of his patients have actually carried this out, not once warming their rooms during the whole winter, and going about in summer clothing. They obtain thereby the praise of their physician—but health never.

In Part II., I have already stated some reasons why continued freezing, in a cold room, and light clothing, are highly injurious. The organism cannot protect itself against the surrounding cold, otherwise than by the exaltation of several vital processes, and especially by an acceleration of the circulation up to the pitch of febrile excitement. It is self-evident, that such exposure to cold, when long continued, must consume the vital power by anticipation. It is also of itself clear, that, when the organism is forced to make abnormal efforts against evil influences without, it has, least of all, the power to react against internal, old, morbid matter, and to expel it. It may be, perhaps, objected, that I myself, in my pathology, have stated that cold, by releasing and agitating the morbid matter, may produce an acute disease and a crisis, and thereby may become a real remedy. The answer to this is a ready one. First, I observed that when the constitution of a patient admits of so forcible an excitement of the morbid matter, it must be done *always* by exposure to cold, in *water*, and never in *air*, because, after the former, the reaction and the re-warming sets in incomparably more surely and more strongly than after the latter. Secondly, I observe that, after every exposure to cold, purposely made to produce a crisis, care must be necessarily taken to produce the consequent re-warming and reaction, by satisfying the instinctive demands of the body. Accordingly,

* To this I can testify; in my own case, he told me to use a clyster if I had much pain in the bowels, *but not otherwise;* and to the best of my belief he did not go even so far in a single other case while I was there.—*Translator*

† I believe he now allows 59° to 62°, at least in some cases.—*Translator.*

when for this purpose we expose ourselves to cold air, we must thereafter be constantly careful to maintain comfortably warm clothing, and an agreeable room-temperature. When, on the other hand, the body is constantly exposed for days, weeks, months—nay, for a whole winter—to an unnatural degree of cold, *i. e.*, a cold at which every man feels an instinctive shuddering, an expulsion of the excited morbid matter is absolutely impossible:—firstly, because the organism, to maintain its merely normal warmth, must expend its powers on a febrile circulation of the blood, and cannot carry out the critical processes; and secondly, because exhalation is impeded, the pores are shut, and even the small vessels lying more inwardly are contracted by the cold. But, for the expulsion of morbid matter, the opposite of all this is absolutely necessary. The combined power of the organism must be at the disposal of the critical processes, excretion and exhalation must take place in an increased degree, and all the vessels towards the periphery must remain open, and, in ordinary cases, must even be capable of abnormal expansion. A person who has passed the day in an unwarmed room, and in summer-clothing, during winter, can scarcely effect the usual normal cuticular exhalation during the nightly warming in bed; in the long run, he most certainly cannot. How, then, can any reflecting man imagine that, during such a frost-regime, the organism can be in a condition, besides the daily normal exhalation, to complete the abnormal, critical excretions, which, in general, under the most favorable circumstances, can only be effected by a greatly increased expenditure of power?

The ideas which I have here laid down, prove that even the strongest man, with the best nerves, under such an absurd frost-regime as is now carried on at Graefenberg, in winter, is either not at all, or only rarely and incompletely, in a condition to effect a critical expulsion of old morbid matter. If we now turn our eyes to the nervous patient, we shall find that the effects of such a regime on his body, not only render a cure of old affections impossible, but must aggravate these, and moreover expose him to the positive danger of new diseases. A cure of diseased nerves is only possible by tranquillizing the nervous system. But cold exercises on the human body a decidedly exciting influence. When the frost-regime is long-continued, it may, by the excitement thereby produced, occasion an outbreak of insanity, and this has been, as I have learned from the best authority, more than once the case with Graefenberg patients, although it did not occur till shortly

after they had left the establishment. That it has occurred frequently in other establishments, and especially in those directed by physicians, has been already stated. When I at that time said that it had occurred *only* in the latter class of establishments, I spoke according to the best of my knowledge, but which, indeed, as I now see, was erroneous. I must confess that I am astonished that every nervous patient, when exposed to the Graefenberg frost-regime, does not fall a prey to insanity. Without doubt, this would happen much oftener, if the patients did not so frequently set aside Priessnitz's prescriptions in favor of their own instinct. Long ago, a proverb found its way in at Graefenberg, which proves the frequency of the latter fact, and which, moreover, is a heavy accusation against Priessnitz's present mode of cure. The proverb runs thus:—"He who follows the cure worst, makes the best cure." Moreover, the water-cure is now very generally reviled at Graefenberg, which can only happen when the hydropathist carries it on falsely, and especially when he illtreats the human instinct.

When too much water, or too long-continued cold, or both together are employed, the effects are precisely the same as those of medicinal stimuli. There always comes a time when the reaction is either worn out, or degenerates into cramps. Both these forms of disease produced by the Graefenberg frost-regime, have come under my observation. There is, at present, a Graefenberg patient in my establishment, who, with good nerves and a good stomach, went through the cure for twenty-eight months at Graefenberg, for gout, and, unfortunately, followed Priessnitz's prescriptions only too exactly. This unfortunate is not only not cured of his gout, which at his age, under proper treatment, ought, without doubt, to have been done in less than six months; but, from the long-continued frost-regime, his power of generating heat has sunk so far that he now (in the month of March) shivers violently, with a temperature of 74° in his room. He must have it at 82°, or at least 80°, to feel himself comfortably warm. This is a distinct proof, from experience, that by the Graefenberg frost-regime the generation of heat and power of reaction against cold are not strengthened and exalted, but depressed and consumed. As a contrast to this, all the other patients who, from the first, have been under my care, and have always been directed to guide themselves by instinct, in regard to clothing and warmth, heat their rooms on an average only to 64°, some only to 59°, a few to 68°, and at this temperature feel themselves quite comfortable.

The unlucky Graefenberger has sat for six weeks in a temperature of from 78° to 82°, and is not yet thoroughly thawed. A similar fate awaits every one who freezes, for a long time, at Graefenberg.* For some, a few months are sufficient to produce this effect; occasionally, in stronger people, years are required.

The opposite phenomenon, the production of cramps, is exemplified in the case of a lady, who, after the employment of excessive cold, in a water-cure, in the establishment at R——, when she came under my care, whenever she was wet with water, got cramps in the part to which it was applied, and even had cramps in the throat when drinking; she had never had a trace of these affections before, and I sent her forthwith home, as I considered the case incurable. It is, in general, quite certain that a falsely-employed water-cure is the greatest impediment to recovery by the subsequent employment of a proper one, because, under a false use of water, the body loses its normal power of reaction against water.

When Priessnitz is asked in what way he conceives and explains a cure by his frost-regime, he replies: "By the contracting operation of cold the morbid matters are drawn together and expelled." This dogma betrays a complete confusion of ideas. In so far as cold contracts the organic structures of the body, it certainly brings the morbid matter contained therein into a small space, but it does not in the least alter the local relation of the morbid matter to the surrounding organic atoms. Least of all, should we imagine, that, by the contraction of the organic structures, the morbid matters contained therein are drawn together into one place, in which a sore is then formed. For such a "drawing together" there is, on the contrary, required an expansion of the organic structure, by a greater afflux of fluids (for the purpose of dissolving the mucus), and the increased warmth thereby postulated, and, moreover, an expansion and enlargement of the small fine canals and vessels for conducting the morbid matter through them to a point of concentration, in which the sore is then formed. This favorite explanation of Priessnitz is, therefore, visibly, a complete mistake. Nine years ago, he was much more prudent than now, for he never then entered into any theoretical explanations of, and reasons for his practical prescriptions. At that time, one

* I can, unfortunately, confirm this also from personal experience, although I was very far from following the frost-regime to its full extent. It is now nine months since I left Graefenberg, and, although my health is greatly improved, I cannot bear cold nearly so well as before I went there.—*Translator.*

could at least suppose something great and deeply conceived ; now he himself convinces his hearers that his physiological knowledge is but slight, and that he is no profound thinker, in the true sense of the word. In denying him this quality, it may excite astonishment that I, nevertheless, ascribed to him the greatest and most important discoveries in hydropathy, nay, that I claimed for him the discovery of the whole science. Both, however, are perfectly compatible. Many men have made great discoveries and inventions without being great geniuses. Barthold Schwarz invented gunpowder without having any intellectual merit therein. It has often been said that Priessnitz has drawn the most of his greatest discoveries, not from the depths of his own mind, but from the observations and discussions of his patients. Moreover, he is, to an extraordinary degree, a favored child of fortune. Chance has thrown the costliest pearl into the lap of many a man.

By way of example, I will bring forward another of his practical errors, and, along with it, his perverted theoretical explanation.

He makes patients with palpitation of the heart and other affections, from which he supposes the existence of an expansion of the vessels in the thorax, take cold baths, and justifies this prescription by saying that the cold has a contracting effect, and thereby contracts the expanded vessels. He overlooks, what is so very obvious, that the contracting influence which the cold bath exercises on the periphery of the body produces a sudden and abnormally strong afflux of blood into the internal vessels, and thereby an increased expansion of those in the viscera—that is, exactly the contrary of what he intended. This proceeding, by the by, not only impedes the cure, but is directly dangerous, because a disruption of the already expanded blood-vessel may be produced by it.

I will conclude my observations on the effects of the Graefenberg frost-regime with this, that, by such long exposure to cold, the daily exhalation is impeded to such a degree, that, after some time, a puffy appearance of the face usually comes on, often combined with a complexion of a blueish shade. When, thereafter, the patient returns to a rational line of conduct with regard to temperature, the puffiness usually disappears, and the febrile circulation is tranquillized ; but there then always succeeds a sinking of the power of reaction and temperature of the body far below the normal point. I have heard from eye-witnesses that they often have recognized a Graefenberg patient, who had left the place six months before, by seeing him sitting in the sun in the dog-days,

or wrapped up in fur in a steam-boat, and yet saying that he was never warm, and never had been warm, since he left Graefenberg. So long as the cold acts as a powerful stimulus on an organism which still has its power of reaction, it keeps it in a state of excitement, which, in many respects, has a resemblance to that produced by spirituous liquors. During this excitement, the unfortunates believe that the exaltation of their vital processes arises from strength, instead of from over-excitement. Nine years ago, Priessnitz was so far removed from his present frost-regime that the whole of his patients, in the beginning of October, had their rooms comfortably warmed, and wore clothing appropriate to the season: no one was seen in summer clothing. Now, most patients wear the latter in January, when the mercury sinks 10° below zero (Rr.) He commits also a similar excess in prescribing air-baths. Nine years ago, these were totally unknown at Graefenberg. When drawing attention, in my first work, to the good effects of air-baths, I did not forget to add that they were only wholesome when they occasioned agreeable feelings, and, consequently, that they must not be taken when the air was very cold. Priessnitz, on the contrary, prescribes them to be taken in an unwarmed room, or even outside, during severe cold, in winter. An example of the kind has been related to me on credible authority, which is well calculated to frighten every sensible man away from Graefenberg. Priessnitz directed a patient to take the douche during severe cold, and after it to split wood for half an hour, naked; for which purpose an axe and billets of wood were brought to the place, and this almost fabulous scene actually took place.

I must confess that, in the article upon air-baths, in the first edition of my book, I have myself given utterance to the error that, by continued exposure, one might bring himself to go naked, or at least in very light clothing, during the severest cold, because I thought that, by the stimulus of the air on the naked skin, a sufficiently warming reaction would be produced; I hoped to bring myself to this. But as, in the progress of this proceeding, my instinct remonstrated vehemently against it, I gave it up, and recognized my error; and I have never recommended anything of the kind to one of my patients, not even in the beginning of my practice. Theory may err, but actual instinct never. Therefore, in hydropathy, instinct must always prescribe the chief rules. Priessnitz, however, at every moment, treads instinct under foot. On this account, his method of cure has long lost all pretensions to

the name of a natural method. There is a want of nature in his present treatment, which, in its extreme points, almost touches upon the unnatural in the poison-method of cure. In the conclusion which I drew in that book, that, because air and water strengthen the skin, a man might bring this to such a point as to wear light clothing in winter, I did not consider that, in the organic world, the effects of any cause do not increase in the same measure as the cause, and that most especially reaction does not increase in the same measure as action, but that, under a certain increase of action, reaction is extinguished. Further, I did not consider that there never really occurs in nature any phenomenon which arises from one simple cause, and therefore can be explained by this one cause; but that every effect is produced by compound causes. As I must confess that I wrote the first edition of that work in a morbid state of enthusiasm, without myself having had sufficient experience, excrescences and extremes are easily explainable, and were almost to be expected. These errors, however, were only theoretical, and never could have the slightest influence on my practice, either on myself or others, because I conceded to instinct an unbounded sovereignty ever all conclusions and over all animals. I added, with regard to air-baths and going naked, that they were only advisable when they produced agreeable sensations. But it is unpardonable that Priessnitz, in good health, and moreover, endowed with an unusual degree of coolness, after twenty years' practice, and experience more extensive than that of almost any physician, should have gone astray into the most adventurous and mischievous extremes. It appears to me that a psychological explanation of this phenomenon is difficult to find. The idea so often alleged by his opponents, that his present mode of treatment does not proceed from conviction, but from calculating self-interest, I am compelled by my inmost convictions to reject. Priessnitz, indeed, is incapable of any soaring ideas; his whole soul is thoroughly cold and calculating; but every one who knows him intimately holds him, nevertheless, to be an upright man. He has, moreover, proved his uprightness by treating his wife and children in sickness just as he treats his patients. His opponents say that he has changed his previous treatment for the present form, because, now, much fewer crises occur, and he has therefore time to treat more than four times the number; moreover, that his cures are twice as long as formerly—even in the rare event that they end favorably. These reproaches have certainly an appearance of

foundation; but they justify no conscientious man, upon such a basis, which is nothing more than conjecture, in declaring a hitherto blameless man to be a charlatan. When I stated, in Part II., that Priessnitz had in writing denied facts which, nevertheless, daily occur in his treatment, and that he thereby disavowed his own mode of proceeding, no conclusion as to the dishonesty of his intentions can be drawn therefrom. Those who know him well, know what a dislike he has to controversy, how much he avoids all discussion, as well from inclination as from want of time; and from this point of view entirely is his denial of his own mode of proceeding to be judged.

Nine years ago he committed the error of over-exciting and worrying his patients by too much bodily exertion, and he knew nothing of one of the most important modifications of the water-cure—the soothing-treatment. This fault has of late years increased in an enormous progression. At that time Priessnitz contented himself with recommending to his patients excessive walking and running. Now he makes them go through gymnastic exercises, split wood, and load dung. In Part II. I have already shown the mischievousness of such exertions for most chronic patients.

After having theoretically proved the falsity and relative mischievousness of Priessnitz's present method of treatment, I would direct attention to the bad results of it as compared with the former, as furnishing proofs from experience. The great majority go away uncured; the few who are cured owe this good luck more to the influence of instinct than to their obedience to Priessnitz, and especially to the fortunate circumstance that they were at Graefenberg in the warm season, and had good or moderate nerves. I well know that Priessnitz at the head, and the blind host of imitators after him, speak of the excellence of the winter-cure. Nay, the present medical superintendent of Marienberg, near Boppart, has published, in all the journals, that the summer is unfavorable for the cure! On this head I would refer to what I have said on winter and summer cures, in the yearly report for 1846 of my establishment at Stuer. I have therein shown that the cures effected by me took place in so short a time as would, according to the Graefenberg standard, have been held absolutely insufficient. It is there shown that I have cured radically, in the space of a few months, diseases which, by other hydropathists, were considered incurable; for instance, a case of long-standing epilepsy in three months, a case of chorea in two months, one of old gout in three

months. I have moreover stated, that patients who had been long in other establishments, and also at Graefenberg, from the observations they had made, were of opinion that, proportionately, twenty to thirty times as many crises occurred as at Graefenberg; whereby I would especially remark, that these crises occur under a treatment which, as compared with that of Graefenberg, is exceedingly mild and gentle. While Priessnitz makes the most of his patients take three or four whole baths, or complete washings, every day, I prescribe for the most of mine only one whole bath daily (I understand by whole bath every complete wetting of the body, as also the douche); for a few, too; and only in very few cases, three; never four. Priessnitz also orders local baths for a much longer time than I do. He uses the water much colder than I do in most cases, and he does not allow his patients the rest along with exercise which I recommend. As it is thus proved that under proper treatment, with a much milder employment of water, incomparably more crises appear than under the double or threefold stronger and colder employment of water, we have herein a proof of the untruth of the assertion made by some physicians, that crises are produced by mistreatment with water, and are nowise excretions of old morbid matter. It is no uncommon occurrence at Graefenberg to find patients who are already in their third or fourth year; nay, there are some who have been under treatment five, six, or seven years. At Graefenberg there are to be found persons who have gone there strong, and with only slight abdominal affections, and who are still there in the third year without being cured. The average residence of patients in my establishment has been about three months. It were to be wished, certainly, that many of them had remained somewhat longer; for to cure radically every old disease in two or three months is not possible.

To return to Priessnitz: I must confess that I have not been able to obtain authentic accounts of his treatment of ladies during *certain periods*, and I cannot believe in the truth of what Mr. Munde reproaches him with, in this respect. If, however, it is really true that he allows most ladies, at these particular periods, to carry on the cure, it can certainly only be explained by their disobedience in this point, that the most of them are not entirely ruined. Nevertheless, Mr. Munde maintains that it is the case.

Up to the time at which I had obtained authentic accounts of Priessnitz's errors, I could never explain to myself how so irrational an institution as that of Schroth, at Lindewiese, could exist in the

neighborhood of Graefenberg, and, what is more, that Schroth should get the most of his patients from Graefenberg (usually after they had been frozen and worried for years without any benefit). With regard to Schroth's thirst-cure, I may observe, that one class of diseases may possibly be cured by it, just as by poison, namely, that class of diseases which is produced by living animals in the body. It is well known that itch arises from and is kept up by the itch-mite. In syphilis a similar cause has not indeed been fully demonstrated, but it is in the highest degree probable. It must be confessed that there is no contradiction in the idea of removing this class of diseases by killing the mites by means injurious to the human organism; they may be killed by a relative poisoning of the body; it is also possible that they may be killed by making them perish of thirst. In all other diseases, however, the causes of which are foreign and unorganic matters in the body, thirst and poison can indeed suppress the reaction of the body against the disease, but can never actually cure the latter, as I have already at length explained. To suppress the symptoms, physicians use poison and blood-letting, and Schroth employs the torments of thirst. That the symptoms (the curative struggle of the body) may be suppressed by such maltreatment is not only theoretically obvious, but has been often proved by experience. But it is equally clearly proved that a real cure, *i. e.* an expulsion of the morbid matter, is by such maltreatment either rendered quite impossible, or at least much more difficult.

I am at the end of my criticism upon Priessnitz, and I feel as if I had rolled a stone from my breast. Silent I could not be. Another expedient suggested to me by an enlightened water-friend, namely, to send the criticism in manuscript to Priessnitz, and to communicate it to no other person, appeared to me likewise, in every respect, useless. One who knows mankind can scarcely believe that a man like Priessnitz, who for years has been loaded with flattery and honors by all sorts of people, especially by those holding social rank,—who already has assumed the princely custom of listening unwillingly to the naked truth,—that such a man would allow himself to be brought back into the right path, by one who had been his former pupil. Even if this were possible, the private communication of my criticism to Priessnitz would not at all attain my object, since the great majority of his scholars, or rather the whole body of them, with one or two exceptions, have followed their teacher in all his errors; and because the greater

number of these false hydropathists might yet ruin thousands, if a warning was not given to put them in the right way, and to keep the public from being led by them into the wrong one.*

My friends have also represented to me, that scarcely a year has elapsed since I dedicated a book to Priessnitz in enthusiastic terms, and that I would make myself ridiculous by coming forward so soon with a condemnatory criticism against him. But I have no heart for such a motive. Can a man hesitate between two ways, in one of which he *may* make himself ridiculous, but may also save thousands from misery; and on the other, may escape ridicule, but allow thousands, whom he knows to be in danger, to rush into its arms? If I do make myself ridiculous by writing, in the same year, an honorary dedication, and a sharp criticism upon Priessnitz, I have at least the consolation that the ridicule secures me from the suspicion of self-interest, a suspicion which ordinary minds are fond of hunting out and attributing, rather than any other motive. A year ago I had heard that, in general, Priessnitz had altered his mode of treatment very much, and so full of confidence in him was I, that I blindly assumed that he had laid aside those faults which I had found in him nine years ago. Had I then known what I now do, I would not have dedicated my book to him, and would have warned all people against going to Graefenberg.

If the blind worshippers of Priessnitz make it a reproach to me, that I am altered with respect to him, I reply, that to be consistent I *must* be altered with regard to him, since, during the nine years that I have observed him, he has become quite another person. To have remained the same towards him, I must have altered all my own hydriatic views, which is impossible.

[The original concludes with some severe but just strictures on a book by Mr. Munde,—"Mèmoirs of a Water Doctor,"—a weak and gossiping publication; in which, with much abuse of Priessnitz, and great self-laudation, he intermingles some malicious and ill-founded aspersions on Mr. Francke's writings. The controversy has no interest for English readers, and is therefore omitted.—*Translator.*]

* This is, unfortunately, but too true; the vast majority of hydropathists, in Germany at least, are servile imitators of Priessnitz, without his tact and experience to redeem, in some degree, their errors.—*Translator.*