ON THE

CAUSES, CURE,

AND

PREVENTION

OF THE

SICK-HEADACHE.

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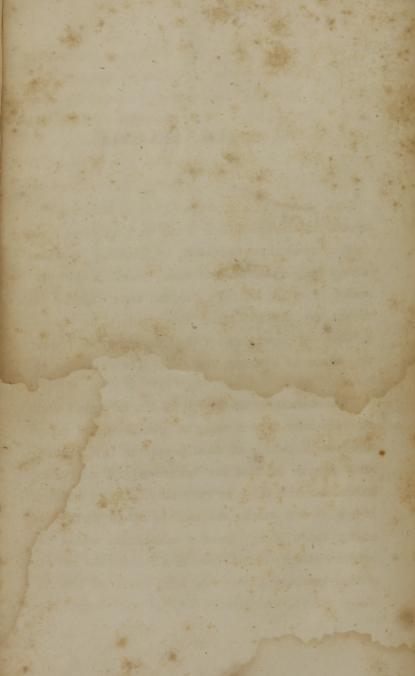
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PREFACE.

The following tract has given me the greatest satisfaction, owing to the numerous communications I have received from persons who have been freed from their distressing complaint, by faithfully pursuing the medical and dietetic treatment prescribed in it. I annex only one of these, (from Amos Ellmaker, Esq.) which is almost unexampled for the early commencement in life of the case it describes, and the severity of its symptoms, and because it is full of instruction. I now send the tract to the world, a fifth time, happy in the reflection, that by following the advice given, it will continue to relieve the sufferings that led to its composition.

J. M.

Philadelphia, February, 1832.



SICK-HEADACHE.

The painful nature of this disease, its annual increase, and a belief that I can suggest some hints on the causes that produce it, by attending to which it may be prevented, and some remedies that will remove it when actually present, have induced me to put my thoughts, and the result of my observations, on paper; and I shall be happy if I prove the means of effecting the relief I wish to the afflicted.

This disease is the result of our advanced state of civilization, the increase of wealth and of enjoyments in the power of most people in this country, and, I may add, of the luxurious and enervating habits in which those in easy circumstances indulge. It is unknown among the natives of our forests, or among those of the frontier inhabitants whose necessities oblige them to live in a manner the reverse of that common among the inhabitants of the Atlantic States, and particularly of our large cities

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and towns, among whom the complaint very generally prevails. Some of their habits, against which I shall caution my readers, are indeed of a nature calculated to lay the foundation of the complaint; but the vigour of their constitutions derived from original stamina, and daily exposure to pure air, aided by constant exercise, are more than sufficient to countervail their bad effects.

Such being the facts, it follows that to secure an exemption from the disease, we ought to endeavour to assimilate our habits as much as possible, to those of that class of society which is happily exempt from it; and it is agreeable to know that this object can be effected without any diminution of rational enjoyment. Part of the general advice I intend to give may indeed be objected to, because those who are affected will be called upon to lay aside habits and some articles of diet, which from having been long indulged in, they may deem necessary to comfort; but those who have not resolution to submit to the privations to be mentioned, must make up their minds to suffer from the complaint;—there is no alternative.

The stomach is the seat and throne of this disease, and affects the head by means of that sympathetic connexion which it holds with it and every organ

of the human body. High living, over-eating, late hours, disposition to acidity in the stomach, partial mastication or long continued use of food of difficult digestion, suppers, indolence, relaxing habits, and the presence of bile in the stomach, are the general remote causes. Our remedies therefore must be directed to the stomach, and the restoration of its nervous functions, the impaired state of which occasions the agony endured by those who labour under the complaint. The desirable change however must be effected by slow degrees; for the stomach gives way slowly, and the means of cure must be gradually applied. Nor ought invalids to become impatient, because after a short trial of the plan recommended, a cure may not be effected. Let them steadily and patiently submit to it, and they may depend upon their hopes not being disappointed. The length of time required to re-establish the tone of the nerves of the stomach, will vary in different persons in proportion to the violence of the disease, the fidelity with which the sufferer follows the advice given, and the susceptibility of the stomach to the impression of the remedies, and food prescribed: the object of their exhibition however will be obtained sooner or later.

An unfortunate, but very erroneous opinion prevails among those afflicted with sick-headache, that there is no cure for it, and hence they submit to exquisite torture with patience and philosophic resignation. But this prejudice is as little founded in reality, as a similar one with respect to the gout, which we now well know yields readily to regimen, regular and proper exercise, and the occasional use of other remedies. I will venture to say, that in every instance in which this prejudice occurs, it will be found that those who entertain it are attached to indulgencies, and a general system of living which have produced their disease, and that they prefer continuing such a course during the intervals of suffering, to giving it up, or to submitting to the steady discipline requisite to a cure.

An attack of the disease most commonly forms in the course of the night, and on awaking, a pain is felt in some part of the head, but generally over one or both eyes. More or less languor attends it, with a diminished or total disrelish for food, and great sensibility to light. After continuing for one or two days, and even longer, if no remedy be taken, a nausea sometimes succeeds, which finally ends in vomiting, or this may easily be excited by a

draught or two of warm water: in either case, relief is soon obtained from the more acute symptom, and sleep follows—though a distressing soreness and confusion of the head succeeds, which gradually goes off, and health is restored. In some cases the pain in the head is preceded by a dulness and heaviness of the eyes, and confusion of the brain, which finally terminate in the fixed pain. Cold feet sometimes precede an attack and constitute the first symptoms of its approach.

The means of cure are naturally divided into medicines, and diet, including regimen: I shall treat of them in that order.

MEDICINES.

In the commencement of a regular plan for the restoration of the tone of the nerves of the stomach, a laxative ought to be the first remedy. Of the numerous class of that description, none is so proper as rhubarb, of which 20, 30, or 35 grains, in powder, may be taken early in the morning in syrup, or in the form of pills of a convenient size, made with the same material, or which is preferable, castile soap, on account of the alkali therein increasing its purgative power. Its activity may be quickened, and the object of its exhibition promoted, by the addition of four or

six grains of calomel, if no objection to it exist, arising from great susceptibility of the salivary glands to the peculiar effect of the mercury on them, or from its harsh operation on the stomach or bowels. During the operation of the medicine, several tea cups of thin gruel made of oat meal or corn meal, to which so much salt has been added as to be perceptible, should be taken. The breakfast after this prescription, and through the treatment, may consist of a cup or two of weak souchong tea, with a soft boiled egg, weak coffee, water in which chocolate nut-shells have been boiled, or prepared cocoa, with a slice of dry stale bread. The dinner must be of the lightest kind, of any of the articles hereafter specified.

In southern constitutions, the relaxation of the stomach favouring the passage of bile into it, an attack of the disease is generally brought on by the presence in it of that secretion, the removal of which is therefore indispensably requisite previously to the taking any medicine to relieve the headache, or to the commencement of any regular system of prevention of the disease. An emetic in this case will be absolutely necessary, and the article preferable to all others is ipecacuanha, of which fifteen, twenty, or twenty-five grains, (according to the ease or difficulty of being operated on by it,) may be taken in half a wine-glass of water. Four or six grains of calomel will insure its full operation, and the complete removal of the offending cause. The emetic may be worked off by a tea cup or two of weak chamomile tea, taken at intervals, after the medicine has operated two or three times. The evening is the most suitable time to take the emetic, after the operation of which sound and refreshing sleep most commonly follows. In case the medicine does not operate on the bowels once or twice, the dose of rhubarb and calomel before mentioned, or twenty or twenty-five grains of jalap or rhubarb, with four or five of calomel (if the bowels are difficult to move,) may be taken the following morning or night, and worked of by gruel of corn or oat meal. Nausea from the calomel is in general prevented by the addition of a few drops of essence of peppermint, or a tea-spoonful of compound spirit of lavender. If it come on, it may be relieved by a few spoonsful of a watery infusion of cinnamon or ginger, or by a little mint water. No fear need be entertained of the proportion of calomel prescribed affecting the mouth, (unless the system be uncommonly sensible to its effects,) for the quantity added to the jalap and rhubarb insures its passage through the stomach and bowels-whereas a smaller dose might not be removed, and would then touch the mouth; at any rate its effects will only be temporary.

This important preliminary being settled, the patient must commence with the following medicine.

As I write for others, besides medical men, I shall give the prescription in English.

*Take of prepared rust of iron 1 drachm, (60 grains.)
Columbo root, fresh powdered, 2 do.
Orange peel, 3 do.

Mix and divide into twenty papers: one to be taken morning and evening, in a small quantity of jelly or syrup, and washed down with a wine-glassful of cold water.

After taking the above medicine for four weeks, rhubarb recently powdered, may be substituted for the columba, and if it be desired to render it more grateful, cinnamon may be added to the whole. If the dose be inconveniently large, the number of papers may be increased to thirty. After another month's use of this new prescription, the bitters may be omitted for four or five weeks, and the prepared rust of iron used alone.

The occasional presence of bile or acid in the stomach, an occurrence that is easily known by

^{*} Carbonas Ferri Præparatus, of the Edinb. Pharmacopæia.

the invalid, must be removed by an emetic of ipecacuanha for the first; and by twenty or thirty grains of magnesia; or dried subcarbonate of soda, in the dose of from ten to twenty grains, for the latter, in pills made with castile soap; three or four of which may be taken in a day.

I have known Fowler's mineral solution given with great benefit in this disease: and my confidence in its powers, induces me to recommend it in violent cases.*

The dose may be from eight to ten or twelve drops at the utmost, in half a wine glass of water, early in the morning, for an adult. If nausea be produced, it may be taken when going to bed, or one or two hours after a meal. The addition of a tea-spoonful of compound spirits of lavender, (where this medicine has not previously been added) renders it more agreeable, and prevents nausea. It must be discontinued, for a short time, when swelling in the face, or sense of fulness in the eyes, are perceived. After the return of a fit, it may be

^{*} Dr. J. C. Otto has favoured me with the particulars of two cases of headache, in which he also gave the mineral solution with the most decided benefit. [See the Appendix.]

again commenced. If nausea, or griping, follow its use, the dose must be lessened.*

A tea-spoonful of common salt, dissolved in half a pint of water, and taken frequently in the course of the day, has afforded temporary benefit in a few cases in this city. But I do not recommend it, by reason of its uncertainty.

I have hitherto omitted to notice the use of cider as a remedy in this disease, although long since highly extolled by Dr. N. Dwight of Connecticut.† I read Dr. D's paper shortly after it was published, but could never consent to prescribe his favourite remedy, convinced that the relief obtained by it must only be temporary, and I know that the plan I lay down will cure it permanently, without its assistance. In the case of women, who are most common victims of the disease, I should never think of ordering it, and would shudder at the sound made by drawing the cork from a bottle of cider before breakfast. I have known many, too many instances of ruinous attachment to strong drink, from early

^{*} This composition is arsenic dissolved in water by means of the vegetable alkali. It is perfectly safe, and frequently used. The only caution necessary, when taking it, is not to drink cold water, or to take cold.

[†] New-York Medical Repository, vol. ii.-1797.

morning doses of tincture of Peruvian bark, and the infusion of other vegetable tonics in Port wine, to prevent or cure fever and ague, dyspepsia, or complaints called nervous, to permit me to sanction the use of even cider for sick-headache.

DIET.

It has been long remarked, that "every man is his own physician at forty years of age :" for by that time, it is supposed, he will have ascertained what articles of diet agree best with him. The want of attention in persons not finding out what articles are useful or injurious, by the age of forty, would indicate equal folly with their using any which they have experienced to be noxious. Taking it for granted, therefore, that the discovery of the useful and hurtful has been made, the first direction which reason prescribes is, to use the one, and avoid the other. Persons subject to sick-headache, make the discovery, most commonly, before the age mentioned. But as it may happen, that some have not been so fortunate, and may have persisted, either from ignorance or inattention, in a course of diet extremely hurtful, the following cautions and rules are given.

As bread constitutes so large a portion of our daily aliment, and forms a most important item in the articles by which a cure of this distressing complaint is to be effected, it demands the first notice.

Bread should be light, and none other must be touched. There is no excuse admissable for heavy bread. If corn bread be used, it should be eaten in the form of thin, crisp cakes. I cannot conceive a more injurious article of diet, to a weak stomach. than the hot corn bread of the Southern States. No wheaten bread should be eaten, unless twenty-four hours old. Economy* and health unite in proscribing fresh bread as an article of diet: for, however palatable, it is highly injurious to the stomach, and tries its powers more than almost any other of the causes of disease. During the years of youth, when the natural vigour of the stamina is daily deriving an accession of strength,—or, in constitutions enjoying greater powers of the stomach than are absolutely required for the purposes of digestion, fresh bread may be eaten with impunity for years; but I

^{*} The London Bakers, in their answers to the questions put to them by the committee of the House of Commons in England, appointed during the scarcity of the year 1801, to devise means of affording relief, asserted that three stale loaves were equal to five fresh loaves.

will venture to assert, that every meal in which it is taken, will detract some little from the powers of that organ, and that, in time, it will show its effects. As an attachment and relish for bread one day old is acquired in a short time, the sooner the former is left off the better; indeed a cure must not be expected, so long as the use of fresh bread is indulged in.

In cases of severe affliction from the disease, and where a disposition to acidity prevails in the stomach, it is advisable to lay aside raised bread altogether, and to substitute shipbread or crackers, or rice boiled dry. Where the teeth have failed, biscuit may be soaked in cold water, a short time before they are wanted. Bread made from unbolted wheaten flour is to be preferred to white bread. The species of animal food found to agree best with the invalid should be eaten, and none else. Wild meats, being more tender, and more easily digested than the flesh of domestic animals, must be taken advantage of whenever occasion will permit. Our markets annually furnish, in the proper seasons, abundance of venison, which, of all our meats, is the most proper for those afflicted with a weak stomach, or sick-headache. Game of all kinds, and rabbits, afford an ample variety of tender sist longer without disrelish, than almost any other. The part of the sirloin, containing the tender loin, should be preferred; though other parts, provided they are tender and juicy, may be eaten. Good mutton may be a standing dish. If either be roasted, the overdone outside parts are to be avoided, being difficult of digestion. Beeves' tongues, salted and smoked, and corned beef, are equally proper, and even medicinal, owing to the stimulus of the salt used to cure them. In general, corned beef is not half boiled by American cooks. Slow, steady boiling for several hours, is requisite, to render that article sufficiently tender for a deranged stomach.*

Woodcocks and snipes must not be eaten early in the spring, being then extremely unwholesome. In the spring of 1817, several instances occurred in Boston, of serious indisposition from inattention to this admonition. The pheasant (of Pennsylva-

*Rapid boiling occasions a waste of fuel, dissipates with the steam the volatile and savoury particles of the meat, and thus renders the article less good and palatable. The water in which meat is boiled, should be kept just at the boiling point. The same rule holds in regard to soup.—The knowledge of this secret we owe to Count Rumford.

nia*) has to my knowledge, produced violent sickness and vomiting, when eaten late in the winter, owing to their feeding on the buds of laurel (kalmia latifolia). The breast is always safe food. The lean part of a white fat fillet of veal may be occasionally eaten.† The knuckle of veal must never be touched, being very difficult of digestion.

Of shell-fish, crabs and oysters are the only species allowable. The latter should always be accompanied with a due proportion of bread or biscuit, to compel mastication, and prevent over-eating. Lobsters are inadmissible. I have known more than one violent cholera morbus, and a most obstinate diarrhœa, to proceed from eating lobsters for supper. There can be no objection to trout, rock (streaked bass), black-fish, sea-bass, sheepshead, perch, flounders, and whiting. Boiled fish are generally found more easy of digestion, than when otherwise prepared. The use of other fish must be

^{*} Called Partridge in New-York, and the Eastern States. Tetrao Umbellus or Tympanistes. See the New York Medical Repository, 1st vol. p. 161, for my paper on the subject.

[†] The veal of New Jersey is superior to that of Pennsylvania, owing to the greater attention paid to the diet and treatment of the calf.—For the mode of making such veal, see the "Archives of Useful Knowledge."—Vol. iii. p. 78. Towar & Hogan, No. 249, High-street, Philadelphia.

regulated by the effects produced on the individual eating them.

Soft boiled eggs, poultry, and ham well boiled, may properly constitute a part of the dinner of an invalid. Pork, unless young, and fed on corn and milk, is too strong; and in any case, the lean part only should be eaten. Meat pies are ruinous to the stomach of all subject to sick-headache. But whatever may be the article of animal food that constitutes the material of dinner, the following rules ought to be constantly observed.

- 1. If the meat be not salted, it should be kept as long as possible before it is cooked, that it may be tender. In winter there can be no excuse for inattention to this rule: and even in summer, the cheap and ingeniously contrived refrigerators which are made in this city, enable every one not having the luxury of an icehouse at command, to keep meat two or three days.
- 2. Whether roasted, boiled or stewed, meat ought to be done until tender. French cooks pay much more attention to this point than those of America or England.
- 3. Simplicity in diet is essential to those subject to sick-headache. The weak stomach revolts at the task of overcoming the difficulty of digesting a

dinner composed of numerous ingredients, and either rejects them, and labours to do the hard duty thus imposed. It may succeed, after a time, though every such exertion tends infallibly to encrease the disease in question.

The dinner ought to consist of one dish of animal food, and one or two of vegetables, besides bread; for the stomach is less strained to extraordinary activity, than when several different articles are eaten. Besides, some articles, apparently of the same nature, do not agree when mixed, and may do harm by creating a disturbance in the stomach, the quiet of which it is important to preserve. The principle of this harmony of aliments, applies almost with equal force to vegetables, among which we see agreements and disagreements, almost as great as those we remark in the mixture of two articles of animal food, or of fish and flesh.* There are few articles upon which we can live so long,

^{*} Wonderful cures have been effected by simplicity of diet. The father of professor Cooper of South Carolina, was cured, in London, of an asthma, to which he had been long subject, by an exclusive diet of boiled carrots for two weeks, as recommended by John Wesley, in his "Primitive Physic." During this time he drank little water. He remained well for twelve years; but

without tiring, as beef, potatoes, and rice. These are so innocent, and so well adapted to give tone to the stomach, that they ought to constitute the diet of such as are labouring under a sick-headache, as long as they can be procured, or taken without disrelish. Much of their excellence however, depends upon their cooking. It is essential that the potatoes be mealy, and that the rice be boiled dry: as this article agrees with most persons, every invalid is urged to use it as steadily as possible. Green peas, carrots, parsnips, and small hominy, may occasionally be substituted.

4. Slow and complete mastication of food is indispensable. The pleasure, moreover, of eating, is very much increased thereby; because the organs of taste are more forcibly impressed than when the food is a shorter time retained on them, by im-

having returned to his former generous living he was again attacked.—I have heard of another cure by the same diet.

The disease called "broken-wind," in horses, which is no more than the asthma in the human species, is cured in England by an exclusive diet of the same vegetable.

A lady in Philadelphia was cured of a most severe rheumatism by a diet of milk solely; and Dr. Cheyne records, that Dr. Taylor, a contemporary with himself, was cured of epilepsy by the same diet. English Malady, p. 255. Our books of medicine record many other cures effected by rigorous simplicity of diet.

perfect mastication. Another advantage of slow eating is, that by the stomach being gradually distended, there is less danger of its being overloaded, and less sensibly affected by the subsequent relaxation, than if the food be hastily swallowed. When slowly and fully comminuted, the food is also more equally exposed to the action of the saliva and gastric liquor, which are designed by nature to dissolve it. The digestion of food is thus promoted. Long intervals between meals render the adoption of this practice very difficult; for the keenness of the sensation of hunger involuntarily forces us to eat quickly. The invalid should, therefore, never permit that sensation to proceed further than to cause a relish for food, which should consequently be taken as often as is requisite, without reference to the regular hours of the family meals. Various articles can always be at hand. But on the contrary, unappeased hunger is not less injurious, than adding to the load in the stomach before the previous meal has been digested. The inevitable consequence of this repletion is, that digestion is disturbed, the organ is unduly roused to overaction, and, in the end, evinces the loss of vigour, by the occasional derangement of its nerves, and the production of the distressing sympathetic affection of the pain of the head.

The effects of such indiscretion are often shown several days after it has been committed; but most commonly the next day.

5. Moderation in diet must always be attended to. The stomach may be injured, by being overloaded with simple food, as certainly, though not so speedily, as by other food of improper quality. The invalid should leave off eating, the moment the first distention of the stomach is perceived. Slow mastication favours satiety, without inducing undue distention. The dinner should consist principally of vegetables. Most persons in the United States, eat much more animal food than is necessary for or consistent with health.

The rule with respect to butter shall be short. A more innocent article of food is not to be found than pure fresh butter, nor a more injurious one than strong butter. The former may, therefore, be safely taken in moderation, provided it be not found to disagree with the stomach. This point can easily be settled by the invalid. Many physicians, without consistency or reflection, cry out against fresh butter as noxious, and yet will prescribe

repeated doses of castor-oil, without once inquiring whether it is not, as it often is, offensive from rancidity. The most innocent mode of using butter is to spread it cold on bread twelve hours old, or on biscuit, previously soaked.

Soups of every kind, are highly injurious, and ought, therefore, to be proscribed from among the articles of diet of those troubled with sick-headache. They suddenly distend the stomach without giving tone, and, in the way usually made, are injurious, from the grease they contain, and which from the heat they are subjected to, are much disposed to create acidity. I know a lady who ascribes her relief from sick-headache, in part, to her leaving off the use of this article, of which she had been fond, and now enjoys excellent health.

The best gravy of all roasted meat is its own liquor. An invalid's stomach is better without any. The rancid fried liquid fat, passing under the name of gravy, is ruinous to the stomach of those subject to sick-headache. Vinegar pickles must be shunned. They are injurious from the indigestible nature of the solid article, and from the acid used in their preservation. But mustard and horseradish may be safely eaten; they are gently stimulating, and, in an habitual colic, arising from gout, I have known

the latter eaten, at all hours, with the most marked benefit. The discovery of its utility was accidental.

Vegetable acids of all kinds, and fruits, are highly injurious. Some of the latter may be more particularly hurtful, on account of the difficult digestion of their skins. Cherries in one case, and apples in another, excited severe attacks of the disease. I have also known them to produce a return of chronic rheumatism and gout.

It will be observed that I have said nothing about desserts. I proscribe them all. There can indeed, be no objection to plain puddings made of rice, bread, biscuit, or potatoes, provided the butter in them is not found to disagree with the stomach, and provided they are eaten sparingly, and after a moderate dinner. Calves-feet jelly, without wine, is equally innocent, and may be taken to the extent of a glass with safety. A plain apple-pie, with well baked and very light crust, may also be occasionally eaten, with the same caution as to quantity: but I hold up both hands against rich pastry, and a variety of rich puddings which the ingenuity of cooks have invented to please the palate at the expense of health. They are death to a stomach subject to the derangement of nerves producing sick-headache. The invalid is better without any dessert; for granting that the articles are in themselves innocent, yet they may be injurious by their bulk, and by disagreeing with those constituting the substantial part of the dinner. Besides the stomach acts with most vigour when employed in digesting the fewest articles; and, therefore, it is wrong to try its powers by undue exertion, or even to risk its derangement by a mixture of food. If any argument be necessary to urge the adoption of this simple diet, and to reconcile those subject to sick-headache, or dyspepsia, to the deprivation of their usual supposed comforts, let it be remembered, that the more steadily they submit to the discipline recommended, the sooner the object of it will be attained. Let them also reflect, that in exchanging temporary sensual gratification, and consequent suffering, for the habits and food that will, in a short time, prove as agreeable as those they have relinquished, they will also acquire light pleasant feelings, elasticity and serenity of mind, and all those sensations arising from the enjoyment of continual good health, and freedom from pain; and above all, for uninterrupted capacity to discharge the duties which their various situations in life may demand. They must. however, bear in mind one of the cardinal rules of philosophising, established by Newton, "that the same causes, under similar circumstances, produce the same effects;" the commentary on which, in the present case is, that a return to old practices will unquestionably, sooner or later, cause a return of their complaints. I can assure them, however, that they will, in a short time, become reconciled to the rational mode of life recommended, and that they will not only afterwards pursue it from choice, but advise others to adopt it.

Tea and coffee must be taken in great moderation. In place of them, for breakfast, the articles noted in page 10, or a small portion of some of the varieties of animal food, mentioned in the chapter on diet, may be substituted; with the addition of sound bottled claret, if the acid of this wine should not disagree with the stomach. The claret must be diluted with water. An American gentleman informed me, that a severe headache, to which he had long been subject, left him shortly after his arrival in France, by substituting claret at breakfast for coffee. The change of climate doubtless greatly assisted the cure. In the evening a cup of souchong may be taken with safety; but it would be better to omit it, and to take a few oysters, or a soft boiled egg or two, an hour at least before bed time. Regular suppers must be wholly laid aside.

One more hint may be necessary. The same principle operates in our conduct in respect to diet as to morals. Many persons are preserved from crimes until tempted. Invalids should, therefore, avoid dinner and supper parties, for they thereby escape the inducement to transgress the rules prescribed for their cure, the importunities and remarks upon their forbearance from the thoughtless and inconsiderate, and the reflections which may prove mortifying to them from seeing others, either in high health, or who setting bad health at defiance, are eating freely of what they may call the good things before them.

2. DRINKS. The best solvent for our food is pure water. That such was the use to which it was intended to be applied, by the benevolent Creator of all things, might be concluded from its universal abundance; yet, as a substitute for it, the ingenuity of man "has sought out many inventions." Let every one afflicted with the sick-headache be assured of the fact, of the superiority of water as a diluent, and throw aside wine, spirit, and malt liquors. In the winter, if the coldness of the water should prove disagreeable, or give pain when taken, these effects

may be prevented by pouring boiling water on toasted bread or biscuit, and permitting the temperature of the water to descend to a degree that may be found pleasant. It may then be taken at meals, or at any other time in the course of the day when required. This toast infusion is far preferable, and more palatable, than that made by infusing a hot toast in cold water. No water can be more pure, or better tasted, than that of the Schuylkill, which constitutes the common drink of the citizens of this city; but others, who may not be blessed with water naturally pure, should if possible, use distilled water; the benefit of which the late and experienced Dr. Heberden,* of London, thought might be as great in many chronic complaints of the stomach and bowels, as the most famous mineral waters are in other disorders. Dr. Lamb says he was cured of a sickheadache by the use of distilled water, and that he was informed of the same complaint having been relieved in others by using it, particularly by a gentleman more than sixty years of age. † The same author relates several cases of the decided good

^{*} Med. Trans. Lond. Vol. I.

[†] Reports on Regimen in Chronic Diseases, page 289. London, 1815.

effects of distilled water in various chronic complaints, as cancer, gout, obstinate cutaneous eruptions, &c.* Dr. Adairt also adds several facts of its medicinal powers. If distilled water be used, the first gallon that comes over should be thrown away. For want of it, the water may be boiled; and, in both cases, it should be put into an upright churn, without a cover, and agitated for some time, to impregnate it with the air which it loses by either operation, and, for want of which, it has a vapid and peculiar taste. In places where the water is obviously impure, or bad tasted, it ought to be passed through a filtering stone, or, which is better, a filtering apparatus, previously to being drank, and as these are now to be had in Philadelphia, at moderate prices, there can be no difficulty on the subject of water. The water drinker will find, after a short trial, that he will never want the luxury of an appetite; that the sensibility of the organs of taste is increased, and that he will thereby add to the pleasure of eating.

But it must be remembered, that a cardinal point in the cure of all diseases of debility in the stomach, or of derangements in its functions, is to take

^{*} Essay on Constitutional Diseases.

[†] Medical Cautions, p. 236.

no more drink at meals than is sufficient to promote the solution of the food in its natural solvents, and its passage out of the stomach. Half a pint, or a little more, is enough.

The operation of the good effects of the tender modes of cooking, in France, are prevented by the large draughts taken by the people of that country at dinner: and indigestion is known to be a prevailing disease among them. During the day thirst must be assuaged, either by plain water, or by water impregnated with carbonic acid, the method of doing which is now generally known. Where acidity prevails in the stomach, ten or fifteen grains of the super carbonates of soda or of potash, should be added to each glass without syrup. Half a tumbler is enough for one draught. More would cause uneasy distention of the stomach. This drink, taken daily, has, in one case, suspended a severe sick-headache for several months. The alkali may be dissolved in a wine-glass of milk. and pure water taken after it, if aërated water cannot be procured.

The tonic effects of malt liquors on the human body, when not contra-indicated by some circumstance, would naturally lead those not acquainted with them, to expect that they would be highly beneficial in the present complaint: but they are injurious, from containing more or less free acid,* and must, therefore, be avoided. In particular, I must caution all persons, as well healthy as invalid, from indiscriminately drinking British malt liquors, much of which I regard as highly pernicious, owing to the artificial and noxious articles substituted for the legitimate ingredients, hops and malt,† or mixed therewith.

Attention to the state of the bowels is of essential importance in this disease. Costiveness not only disposes to its origination, but increases the

* This may be proved by the effervescence that takes place upon adding a few grains of calcined magnesia, or carbonate of potash, to a wine-glass of malt liquor. The observation equally applies to all wines.

† Those who wish to see this subject treated at length, may consult my two papers, one inserted in Coxe's Medical Museum, vol. 3, p. 150; and another in the Medical Recorder, Philadelphia, 1818, vol. 1.—I may here state the ingredients of much English porter, ale, and beer, as given by British writers:—Grains of paradise, red pepper, black pepper, coriander seed, coculus indicus, (an intoxicating drug,) quassia root, liquorice, brown sugar, shag tobacco, green vitriol, alum, aloes.—Many brewers are driven to these adulterations by the high duties on hops, malt, and on their brewed liquors. Mr. Accum has given to the world ample details of the shocking adulterations of malt liquors, and of other articles of food and drink in England, in his work on culinary poisons.

disposition to frequent attacks of it. The bowels must, therefore, be constantly kept open by the use of occasional doses of medicine, when necessity may require it. The Congress Spring water, at Saratoga, is the best laxative for the purpose; for it is the peculiar property of this admirable water not to weaken like other purgatives. Three tumblers full, taken early in the morning, are enough at a time. When drank on the spot, a tumbler of the Flatrock water, which is a pure chalybeate, may be taken in the afternoon. Where the Congress water cannot be procured, rhubarb may be substituted, and, to prevent it giving pain, three or four drops of the essence of peppermint may be added to the dose; or about thirty grains of the root may be cut up and chewed; the effects, when thus used, will be more slow and natural than when a full dose in powder is taken. If there be an aversion to this excellent medicine, Fothergill's pills, or castor-oil,* may be substituted. Spinach. when in season, simply prepared, and slightly seasoned, should be eaten at dinner, when constipa-

^{*} The filtered castor-oil which is now commonly kept by apothecaries, can be taken by persons of most delicate stomachs. Rinsing the mouth with lavender compound, previously to taking the oil, will effectually prevent the taste of it.

tion comes on. Where acidity prevails in the stomach, half a drachm to a drachm of calcined magnesia may be taken in milk. A more agreeable mode of taking it, is to mix it with artificial mineral water, to which a small quantity of ginger-syrup is added. Half a pint of the water is a dose.

It would certainly conduce to the promotion of the vigour of the body, or, at least, prevent the increase of muscular relaxation, if enervating feather beds were laid aside, and mattresses of hair, or Southern moss, substituted. In summer, a feather bed is an absurdity. Even in winter, a short time will reconcile the most delicate to mattresses, when they will invariably be preferred to feather beds. In my own case, a feverish restlessness is always excited by sleeping three nights in succession on a feather bed, at any season. In cold weather, a blanket may be put over the mattress.

EXERCISE.

Exercise is an essential remedy in the cure of the sick-headache. But under the word exercise, so much is comprehended, that it is necessary to enter into detail respecting it. No species of bo-

dily motion, no variety of the species of exercise commonly used will have the desired effect, unless under proper regulations, and in conjunction with a due observance of the whole system of conduct laid down in the present set of directions. It is only one of the means prescribed, and may be defeated by, or even interfere with the rest that are essential, by being improperly used, or by inattention to other directions. The exercise must be in the open air, and occasionally before breakfast. If taken in the house, it fatigues without effecting any change in the system. Riding on horseback, on account of the agitation of the internal viscera, is, of all species of exercise, the most proper; and should be constantly taken, every morning, when the weather will permit. A long journey is much preferable to daily short rides at home, on account of the exhilarating and medicinal effects of the continued change of scene and of air on the system. Occasional stops should be made, and exercise on foot taken. Exercise, however, alone, will not cure or prevent the disease, which is known to affect persons of the most active dispositions, and possessing considerable muscular vigour.

Females may swing the leads, or find some other healthy bodily exercise. Fatigue, whether

from out-door exercise, or domestic employment, must be carefully avoided. If it be not convenient, to take a long journey, daily rides at home, or walking exercise, may be substituted. Some business, or object of investigation, ought always to be had in view when exercise is taken, as a visit to a friend, the local topography or geology, mineralogy or botany of the country, &c. &c. To this must be added gentle frictions from right to left, on the side, and region of the stomach and bowels, with the fleshbrush or flannel, for a few minutes, every morning before rising, and after meals. The benefit of this remedy, though slow, is certain.

CHANGE OF AIR.

A powerful remedy, in the cure of this disease, is a change of air. The influence of the air of a place, in the production of diseases, is evident from a variety of facts; and the prevention and cure of them obtained by a temporary change of air, or permanent removal of residence, is no less indisputable.

In the case of acute fevers, of the slow kind, this is very perceptible,* and in chronic complaints, the

^{*} In the war of the American revolution, the sick soldiers, ill with the typhus fever, were removed by Dr. Tilton, from the hos-

effect is no less certain, though more gradual; and here I may remark, that, notwithstanding the great advances made in medicine and chemistry, in Europe and the United States, within the last thirty years, the problem of explaining the rationale of this simple fact remains unsolved. The common atmosphere of almost every part of the world has been examined by the eudiometer; that of places enjoying the most uninterrupted health, and that of others notorious for their morbid influence upon the inhabitants; on land and sea, on high mountains and in deep pits; that of hospitals and private houses filled with malignant diseases; and yet the air of those different places has been found, by analysis, so nearly alike, that it is impossible to account for either the morbid or healthy effects they produce on the human body, from the difference in their chemical

pital into an orchard, during the day, with the most decided good effects. The lady of a medical gentleman, (and a native of England,) who had been reduced to the lowest state of existence by a seasoning fever, in Jamaica, was removed in a covered bed, carried on a frame by men, from a town on the sea-coast to the country, at night, and felt the first sensation of returning health after a few minutes' breathing the refreshing air from the mountains, to which she was removed.—This fact I had first from the lady herself, and afterwards from her husband.

composition. The fact is, nevertheless, certain. Remove a yellow, bloated, flaccid, debilitated person from a rice swamp, or the marshy districts of our sea-coast or rivers, to a healthy mountainous situation, and he will be so changed in a month as to be scarcely known by those who had seen him when sick. The perfection of the instrument used for the analysis of air, may some day enable us to explain the interesting fact. The government which would stimulate men of science, by a very large reward, to discover the defects of the present eudiometer, so as to enable the world to discover the real causes of the malignant quality of one air, and the salubrity of another, would deserve the everlasting thanks of mankind.

A striking effect of the change of air in the sickheadache, occurred in a citizen of Philadelphia, who, from his sixteenth year, had been subject thereto, and in whom, until he had passed his fortieth year, it annually increased in force and frequency, so as to render his life miserable. A few years since he removed from the small and confined house, in which he had lived for many years, to one of larger size, having a spacious garden; and the consequence was, that, in the course of two years his headache became much less frequent, and his general health improved.*

OTHER CAUTIONS.

Diseased teeth frequently excite this disease. In the commencement of a cure, therefore, all stumps that give occasional pain, and all hollow teeth not to be rendered useful by plugging, should be extracted. Slight decays in other teeth must be cut out, and the cavities plugged.

Early hours are essential to the cure of the complaint. This refers to bed-time and rising, and the invalid should make it a point never to indulge in the unsound sleep that is apt to follow lying in bed in the morning, after being awake some time. The languor induced by a long continued recumbent posture of the body, promotes that torpor of the digestive organs which contributes to the origination of the disease, and its continuance. A headache almost invariably ensues from such practice, with the loss of that refreshing sensation arising from the sound repose of the preceding night.

^{*} His wife also has been entirely relieved from a painful rheumatic affection, under which she had for a long time laboured.

A thick cotton night-cap or flannel cap lined with muslin, should be constantly worn at night, in cold weather, in order to preserve an uniformity of temperature of the head with the rest of the body.

Cold feet frequently excite the disease. Care must be taken, therefore, to guard the feet from cold and wet by cork-soaled, or Indian rubber overshoes, which are now made with great neatness, and by wearing warm stockings. Flannel socks should also be worn in winter when going to bed, and may be pulled off in the course of the night, when the warmth of the body has become equally diffused.

No one subject to sick-headache should sleep with a fire in the chamber; for the diminution of temperature that often takes place in the course of the night, from the fire going out, or from a change in the weather, disposes the system to catarrh, and every such indisposition retards the cure of the disease. This remark does not apply to Canada, or the eastern states, where the severity of the cold renders the preservation of an uniform temperature in the whole house, during winter, an object of unceasing attention; nor to those who have the means of keeping up a regular heat in their chambers during the night. The thermometer should

not be permitted to rise above 60°. The proper practice is, to have a fire kindled, early in the morning, in a sheet-iron stove, which heats quickly, or to dress in an adjoining room, where there is a fire.

If bed-curtains be used, they should not be closed, in order to prevent the breathing a confined atmosphere, which would be caused by surrounding the bed with them, and tend to perpetuate the disease.

If the system feel exhausted by the discharge of the morning domestic duties, or by those of benevolence or mercy out of doors, and require repose after dinner, to recover its energies, sleep for half an hour, may be indulged in, to great advantage, with the body in an erect position, or nearly so. A recumbent posture should never be adopted, if a cure be hoped for. The practice of many females in perfect health, who have done nothing to incur bodily fatigue, and whose circumstances do not render a personal attention to their families continually necessary, of regularly going to bed after dinner, for an hour or more, is productive of the most enervating effects, and should never be adopted, by young persons who are desirous to preserve or acquire firm muscles, good complexions, or strong nerves.

No one who values the preservation of a vigorous

state of the surface, or wishes to prevent the gradual diminution of its tone, should ever permit a warming pan to enter the bed. In cases of natural delicacy of constitution, a flannel gown may be used to sleep in. One of the surest methods to invigorate the skin, and to prevent a disposition to take cold, is to rub some part of the body every morning, on rising, with a coarse towel dipped in cold water. The refreshing sensation arising from this practice is so great, that no one who tries it will deprive himself of the gratification. The well known sympathy between the surface and the stomach, authorises a belief that the practice would prove a powerful auxiliary to the system recommended for the cure of the sick-headache.

The passions of the mind must be kept under with especial care. Every mental irritation will add strength to the disease, and retard the wholesome operation of the remedies prescribed for its cure. The common effect of giving way to any provocation, for fretting, peevishness, or resentment, is an attack of the complaint. A determination should be made to overcome this disposition. One effect of the system of diet recommended for the cure of the complaint, is a happy revolution in the temper, from

great irritability to philosophic endurance of the little evils of life, and the power of self-command. Mind and the corporeal functions are intimately connected and mutually act and react on each other. Every source of domestic irritation should, if possible, be avoided. The troubles of life affect the digestive organs very sensibly, and operate with increased force when they are joined to improper food, or other remote causes of the disease.

Treatment of an Attack of the Complaint.

If the disease announce its approach, which it sometimes does, by certain promonitory signs, as heaviness of the eyes, or confusion of the head, no time ought to be lost in arresting its progress. If the prevalence of an acid or of bile in the stomach be known, attention must be paid to their removal. If the first be present, twenty or thirty grains of calcined magnesia, or ten or fifteen grains of super-carbonate of soda or of potash, may be taken in a tumbler of artificial mineral water; and if this cannot be procured, they may be mixed with new milk or gum-arabic water: to both, the addition of

orgeat,* syrup of sugar, or of ginger, all render the draught more agreeable.

Bile is to be removed by an emetic of ipecacuanha, as recommended above; after which, if relief be not obtained, fifteen, twenty, or thirty drops of laudanum may be taken in half a wine-glassful of water, with the addition of a tea-spoonful of compound spirit of lavender, and sleep encouraged by retiring to bed in a dark room. † If, on awaking, the pain in the head should not have disappeared, its removal will be promoted by the person remaining in bed, and repeating the dose. It is better however, to take enough at first, to ensure a sound sleep for several hours; after which it commonly happens that no symptom of the disease remains, except a slight confusion of the head, arising from the effects of the laudanum: but this will disappear in a short time, by taking a cup of clear strong coffee, without sugar or cream.

- * This pleasant syrup may be procured at any of the French confectioners in Philadelphia.
- † Laudanum should never be taken unless when perfectly clear. When thick or muddy, it contains a portion of solid opium, and the usual dose will be too great. In the case of children, I have known two deaths from inattention to this circumstance.

In this way relief from the present symptoms will be certain, and by repeating the foregoing process a few times, when the attack returns, it will be shortened, the habit of the disease be broken; and by due care to avoid the causes that excite it, and to the use of the medicines, diet and regimen recommended, its return may be prevented.

APPENDIX.

Philadelphia, March 27th, 1819.

MY DEAR SIR,

I now send you, agreeably to promise, an account of the two cases mentioned in conversation. The first may be considered as genuine sick-headache, the usual characteristic affection of the stomach always attending the attack. The other has been communicated from the singularity of its history and termination.

The late Mrs. D-was afflicted, for nearly thirty years, with sick-headache. At first, it attacked her about once in three months; but it gradually increased in frequency, so that, ultimately, she suffered a return of it every week. She remained in this state a long time. It commenced always early in the morning, before she arose, with a violent pain in the right temple, accompanied by the usual affection of the stomach; and, when vomiting took place, there was uniformly an alleviation of the symptoms. Perceiving, from experience, the necessity of remaining perfectly quiet, she at length, whenever attacked, continued in bed the whole day; the next morning she was nearly as comfortable as usual, feeling no more than might be expected from the sufferings of the previous illness. The frequency and violence of the disease made serious inroads on her happiness. Anxious to become well and possessing ample fortune, she took every thing the materia medica contained, that was supposed calculated to relieve her, but to no purpose; nor was the strictest attention to diet, and jaunts to various mineral springs, productive of any advantage. She ultimately submitted to take Dr. Fowler's solution of arsenic, and commenced with three drops three times a-day, and, after a considerable time, the dose was increased to six drops

during this space of time. At length the dose was augmented to eight drops, for a short period; but this quantity nauseating, a smaller one was administered, and it was gradually diminished to that with which she began. She took the medicine in this manner for nine months, during all which time she was free from the disease, nor were any unpleasant circumstances ever perceived from the long use of the arsenic. Presuming that she was now well, the solution was laid aside. Three months afterwards, she had a severe attack of her old complaint; in consequence of which she recommenced with the medicine, and took it about three weeks. After this she was never again affected, although she lived seven years.

J. R., at the age of eleven years, was attacked with pain in his head, shortly after a recovery from what was supposed to be an affection of his liver. The whole head suffered, but the forehead more especially, and was disposed to become very warm. The paroxysms were daily, but they did not recur at the same hour, nor were they equally severe or lasting. They, however, gradually increased in violence from the commencement; but nevertheless he went to school, for the first two years of his having the disease: the last year he remained unemployed, for this was the period it continued. The attack could be brought on at any time by a little exposure to heat, over-exertion, or by putting on a hat that was rather tight: in fact, the slightest incident seemed to be powerful enough to occasion it. He always slept well, and arose free from headache, nor was it ever attended with nausea. Notwithstanding the duration of the disease, he took very little medicine: for his parents were informed by a physician of great character, in the town in which they lived, that it would be of no service, and that a surer reliance could be placed on those changes, which time would produce in his constitution. Such was the confidence reposed in this opinion, that nothing was done during a residence of six months in Philadelphia, when I accidentally saw the lad in great agony, as I was prescribing for his brother. Conceiving that his was a proper case for medical treatment, and that an attempt ought to be made to relieve him, I informed his anxious parents, that some alleviation at least could reasonably be calculated on, especially as he had once been free from headache for ten days, in consequence of taking several emetics, being the only period in three years that he had not a daily paroxysm. I directed him to take five drops of Fowler's solution of arsenic three times a-day, and to continue its use a fortnight. No change was effected in his complaint during this time, nor for forty-eight hours afterwards: it then left him, and he has not had the least symptom of it since, although two years have elapsed.—I have frequently prescribed this medicine for pain in the head, and occasionally with great benefit, even when the disease could not be considered intermittent fever in this form; but I never perceived such great benefit to ensue, as in these two instances.

I am, with great respect, yours,

JOHN C. OTTO.

DR. MEASE.

From Amos Ellmaker, Esq. to his Brother in Philadelphia.

Lancaster, February 7, 1830.

DEAR BROTHER,

It is very natural that the benevolence of Dr. Mease should derive gratification from the consciousness of having relieved numbers in a most distressing complaint, by his Essay on Sick-Headache.

I never knew, or heard of one, who suffered from the complaint as much as I have, from the age of fifteen years. In the year 1802, till about 1820, many of the precepts of Dr. M., I had discovered by experience, but did not feel, (and it is strange that I did not,) the importance of a constant adherence to them. After reading his essay, I followed all his directions as to diet and regimen most faithfully, for about seven years, and one item as to the medical treatment always since, and the consequence was, that

instead of having most terrible attacks, averaging as often as two in a month, and lasting from one to three days, and instead of passing many a month as I had often done, without being one hour totally free from the disease, I had not more than two or three attacks in a year, and these rarely continued longer than one day.

My experience does not accord with some of the ideas of Dr. M.; owing, I suppose, to some constitutional peculiarity. I think I have not less than fifty times tried purgative and laxative medicines, at the beginning, and in all stages of the disease, and never with any benefit, but commonly with the addition of new evils. In as many as half of the severest attacks, the agonizing pains in my ears, jaws, neck, throat, shoulders, and back of the head, would disperse over the whole body, passing down the arms and legs, benumbing the limbs as in a galvanic shock; but this never happened when the bowels were open either accidentally, or from medicine. Purgatives often shortened an attack and relieved the sickness a little, but always increased the acute pain in the head.

The item of medicine before alluded to was rhubarb, an article which, if it were not so cheap and plentiful, would be deemed by the faculty one of the most valuable in the whole materia medica. After my system was improved by the diet and regimen of Dr. M., I never failed to divert an attack by rhubarb when I discovered its approach in time, and did not make a mistake and take too much of that medicine. With me the admonitory symptom has always been a heavy and burning sensation directly on the top of the head, accompanied with soreness of the skin, discovered by tapping on the top of the head with a finger; when I discovered this symptom, if I took as much rhubarb as the stomach would bear without purging, or creating more than one motion, it never missed to divert or disperse the disease. Sometimes from being engaged in court or otherwise, I did not discover or attend to the above admonitory symptom in time, and then I had an ordinary attack; but this happened only two or three times a year as before mentioned, and was not usually very severe, nor did it last more than a day.

There is a very great difference in rhubarb root. Some that is insipid to the taste purges freely, relaxes the stomach, and is in-

jurious in this disease. Some is too astringent and bitter. By long experience and close observation, I can tell the moment I see and smell a specimen, the kind that suits me, but it is hard to describe it. Rhubarb properly managed, is a tonic to the stomach, expels flatulency, promotes strongly the proper secretions through the skin by the kidneys, and the bowels.

When there is danger of an attack from a sudden relaxation of the stomach, produced by drinking too much water, tea, or coffee, or from sitting up late, or undue mental exertion too long continued, eight or ten grains of black pepper, broken by the teeth, and swallowed with a mouthful of water, has, in my case frequently prevented it.

At the end of a severe spell, when the feverish and acute pain is over, and the head feels empty, I have often hastened a complete restoration by eating some dried salt beef: but it is a ticklish remedy; for if taken only a little too soon, it is sure to revive and continue the complaint.

After every severe spell, all my nerves and muscles feel shattered and torn for some hours; or a day, as if I had recently come off the rack; the limbs often refusing to obey the will, moving sideways, for instance, when wished to go forwards. All this, I suppose, arose from the morbid irritability of my nerves or muscles, or both, which you are acquainted with, and which was no doubt the cause of the long disease in my ears, the same I suspect that now affects my eyes.

When an attack has fairly commenced, I know no remedy or palliative. I lie down, or rather sit up, propped with pillows, in bed, dark and quiet, abstaining from all food and drink of any kind; partly because every thing of the kind is loathsome, and because to eat or drink, or take medicine, would require bodily motion; and in a severe spell, the slightest motion or noise seems as if it would occasion instant bursting of the head. But fortunately, I have been long unused to such frightful attacks.

For two or three years I have been careless of Dr. M's advice; I felt too secure, and began not to think of it; not tor love of eating, for I wish heartily I could live without eating, and without shaving, both of which I always considered as troubles. From carelessness I began to eat apples, fruit pies of all kinds, and too many vegetables, and drank too much water; but I have begun to find the penalty of this last autumn and the present winter, and will return to Dr. M. without delay. When a boy, and for the greater part of my life, I ate little or no salt; and to this I ascribe much of the origin and continuance of my headache.