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ART. I. *On the Sick Headache.* BY JAMES MEASE, M. D.

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 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, and 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 of indulgencies during the intervals of suffering, to giving it up, or to submitting to the steady discipline requisite to a cure.

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 symptom 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 descrip-

tion, none is so proper as rhubarb, of which twenty, thirty, or thirty-five 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, or water in which chocolate-nutshells have been boiled, 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 once or twice on the bowels, the dose of rhu-

barb and calomel before mentioned, 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 off 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 watry 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 effect 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 columbo, 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 the invalid, must be

* Carbonas Ferri Præcipitatus, Pharmacop. Edin.

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 been originally 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 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.

Diet.

It has been long remarked, that "every man is his own

* 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. One was a lady who had severely suffered with the sick headache for thirty years. She took three drops three times a day, for nine months, without any unpleasant effects, and was apparently cured. After omitting the medicine for three months, the complaint returned: the use of the solution for three weeks more, perfectly cured her.

The other was a boy, aged eleven years, who suffered almost daily from a headache that succeeded a supposed affection of the liver. Five drops, three times a day, cured him. In other cases he has also used the solution with good effects.

† 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.

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. Indeed, 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.

1. 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 admissible 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 the 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 will venture to assert, that every meal in which it is taken, will detract some

* 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.

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 raised bread aside altogether, and to substitute ship-bread or crackers, or rice boiled dry. Where the teeth have failed, biscuit may be soaked in cold water, half an hour before they are wanted. 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, should be taken advantage of whenever occasion will permit. Our markets annually furnish, in the proper seasons, abundance of venison, which, of all meats, is the most proper for those persons afflicted with a weak stomach, or sick headache. Game of all kinds, and rabbits, afford an ample supply of tender food. Beef is an article upon which we can subsist 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. Beeve's 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,

* 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.

several instances occurred in Boston, of serious indisposition from inattention to this admonition. The pheasant (of Pennsylvania,*) 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 to 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 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,

* Called Partridge in New York, and the eastern states. *Tetrao Umbellus* or *Tympanistes*.—See the N. York Med. Repos., vol. i. 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. D. Hogan, No. 349, High Street, Philadelphia.

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 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, or labours to do the hard duty thus imposed. It may succeed after a time, though every such exertion tends infallibly to increase 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.*

* Wonderful cures have been effected by simplicity of diet. The father of Professor Cooper was cured, in London, of an asthma, to which he had long been 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 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.

There are few articles upon which we can live so long, 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 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 the rice must 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 imperfect 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 masticated, 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 is 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 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 stale bread fresh toasted, or on toasted 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 it is subjected to, is 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. 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 excite attacks of chronic rheumatism and gout.

It will be observed that I have said nothing about *deserts*. 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 is equally innocent, and may be taken to the extent of a glass with safety. A plain apple-pye, 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. It is death to a stomach subject to the derangement of nerves producing sick headache. The invalid is, however, better without any desert. Granting that the articles may be 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 mixture of food. If any argument be necessary to urge the adoption of this simple diet, and to reconcile the sick 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, a small portion of some of the articles of animal food before mentioned may be substituted, with the addition of sound bottled claret diluted with water, if the acid of this wine should not disagree with the stomach. I have known a long continued and severe headache cured in a gentleman upon his arrival in France, who took claret instead of coffee for breakfast. In the evening a cup of souchong may be taken with safety; but it would be better to omit it, and take a few oysters or a soft boiled egg or two, an hour at least before bedtime. 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 people 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 celebrated 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 sick headache 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 effects of distilled water in various chronic complaints, as cancer, gout, obstinate cutaneous eruptions, &c.‡ Dr. Adair§ 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

* Med. Trans. Lond. Vol. I.

† Reports on Regimen in Chronic Diseases, p. 289, London. 1815.

‡ Essay on Constitutional Diseases.

§ Medical Cautions, p. 236.

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 drunk, and as these are now made in this city 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; the sensibility of the organs of taste 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, is to take 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. 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 the aerated water cannot be procured.

The water of Ball-town is highly proper for this complaint. That of the Congress Spring, at Saratoga, is also excellent. A bottle may be taken in a day.*

* This water may be procured at various apothecary shops in Philadelphia, in a state of perfect activity.

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 invalids, from drinking British malt liquors, 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 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 commonly are enough at a time. Where this cannot be procured, rhubarb may be substituted, and, to prevent its 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 constipation comes on. Where acidity prevails in the stomach, half a drachm to a drachm of calcined magnesia may be taken in

* 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.

† Mr. Accum has recently 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.

milk. A more agreeable mode of taking magnesia is dissolved in water by means of carbonic acid gas, 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 the enervating feather bed were laid aside, and mattresses of hair, cotton, or wool, substituted. Of the articles enumerated, hair is best. 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 winter 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 bodily 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 prescribed, by being improperly used, or by inattention to other directions. The exercise must be in the open air. 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 others, 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 exer-

cise 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, or botany of the country, &c. &c. To this must be added gentle frictions on the side, and region of the stomach, and bowels, with the flesh-brush or flannel, for a few minutes every morning before rising. The benefit of this remedy though slow, is certain.

The passions of the mind must be kept under with great 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. Every source of domestic irritation should if possible, be avoided.

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 bringing on diseases, is evident from a variety of facts; and the freedom from their attack that is obtained by a change of air, and removal of residence, is no less indisputable. In the case of acute fevers, of the low kind, this is very perceptible.* In the instance of chronic complaints, the effect

* In the war of the American revolution, the sick soldiers, ill with the

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; 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 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.

In the sick headache a striking effect of the change of air occurred in a gentleman 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 be-

typhus fever, were removed from the hospital into an orchard 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.

came much less frequent, and his general health improved.*

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 should 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. A headache almost invariably ensues, with the loss of that refreshing sensation arising from the sound repose of the preceding night.

A thick cotton night-cap, or flannel cap, lined with muslin, should be constantly worn at night, in cool 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-soled shoes, which are now made with great neatness, and by wearing warm stockings. Worsted or flannel socks should also be worn at night when going to bed. They should be pulled off in the course of the night, when the warmth of the body has become equally diffused.

No invalid should sleep with a fire in the chamber: for the change of temperature that takes place in the course of the night, from the fire going out, disposes the system to catarrh, and every such indisposition retards the cure of the disease. This remark does not apply to Canada, where the severity of the cold in winter renders the preservation of an uniform temperature, in the whole house, an object of unceasing attention. The proper practice is, to have a fire kindled, early in the morning, in a sheet-iron stove, which heats quickly, or to go into an adjoining room, where there is a fire, to dress by.

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

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 which would tend to perpetuate the disease.

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 peculiar 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, authorizes a belief, that the practice would prove a powerful auxiliary to the system before recommended for the cure of the sick headache.

Treatment of an attack of the Complaint.

If the disease announce its approach, which it sometimes does, by certain premonitory 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. This direction also applies, even if the disease be found to exist on awaking. 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 natural* or artificial seltzer water; or, if those waters are not to be procured, the magnesia or alkalis may be dissolved in new milk or gum-arabic water: to both, the addition of orgeat,† syrup of sugar, or of ginger, will render the draught more agreeable.

Bile is to be removed by an emetic of ipecacuanha, as

* This can be often purchased of merchants in the Amsterdam trade.

† This pleasant syrup may be procured at any of the French confectioners in Philadelphia.

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 teaspoonful of compound spirit of lavender, without sugar or syrup, and sleep encouraged by retiring to bed in a dark room. If, on awaking, the headache 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 insure 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, especially if a cup of clear, strong coffee be taken without sugar or cream.

In this way relief of 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 by the use of the medicines, diet, and regimen recommended, its cure may be effected.



ART. II. *An account of an Epidemic Fever which has prevailed in certain parts of Virginia for the last eight years.* By JNO. L. MILLER, M. D. of Brunswick, Va.

THROUGH the medium of your Journal, I take the liberty to present to the public, some account of an epidemic, which has been the scourge of this, and other parts of Virginia, for the last eight years. No disease, perhaps, ever attracted more of the attention of the medical men among us, or on which at one time a greater contrariety of opinion existed, in relation both to its pathology and treatment. The only point indeed, on which we at all agreed, was as to the intractability of its nature, and the vast degree of mortality it produced. It proved in the commencement,

when less perfectly understood, totally unmanageable, or, at least, so much so, that it is computed nearly four fifths perished of all who were attacked.

The disease presented two very different aspects. The inflammatory form is the one which I shall first describe, and next proceed to notice the typhoid, a shape which it also assumed.

In 1814, it first appeared epidemically, though cases of it were met with a year or two previously. It has been designated, according to the views entertained of it by practitioners—some calling it peripneumonia typhoides, and others bilious inflammatory pleurisy. That it exhibited each of these characters in different positions, seems sufficiently probable. But whatever it might have been elsewhere, it was undoubtedly in the section of the country to which my observations were confined, a disease of high action, or in other words, an inflammatory bilious pleurisy. Why it should have put on two distinct characters in different parts of the country, and in parts almost in the same neighbourhood, I feel myself at a loss to determine. Yet such is the fact. When it first broke out in the winter of 1814 and 15, it was generally ushered in with a chill, which in a few hours, and sometimes in a shorter time, was succeeded by pains very acute in some parts of the thorax. The head, too, was frequently affected with severe pain, the throat with soreness and swelling, in many cases, both internally and externally, sometimes so sudden as to suffocate the patient in a few hours, or before the nearest medical assistance could be procured. There was also delirium, which not unfrequently became highly distressing. The pulse was generally strong and remarkably hard and tense, through the whole course of an attack, though in other instances, it was slow and depressed, the skin dry and hot, the tongue foul, parched, &c. I often observed in those cases in which the thorax was much affected, that the throat escaped, and conversely. Thus I have seen the disease fall with its whole force on the throat, producing considerable tumefaction of the tonsils, and parotid glands. The cases