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December, 1916



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H. C. MENKEL, M. D.
Contributing Editor
S. A. WELLMAN
Managing Editor



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"BLESSED ARE THE PURE IN HEART"

GENERAL ARTICLES

The Prevention of Disease

BY ALBERT R. SATTERLEE, M. D.

An enterprise, in order to be successful, must be administered in harmony with certain well-defined principles. Every successful factory is directed in accordance with the latest and best suggestions that science has to offer, careful study being given to economy of production and the elimination of waste. Should not as much care and attention be given to the working of the intricate human machine? Public education and popular literature have accomplished something in this direction, but there is still an inordinate amount of disease and premature death, the result of ignorance and carelessness. Dr. Satterlee's paper calls attention to environmental conditions and personal customs which have an influence on the health and efficiency of the individual.

Sanitation of the Home



In selecting a building site, it is important to ascertain whether or not the ground soil has sufficient sand or gravel in its constituency to permit free drainage of the surface water. In non-porous soils provision should be made for artificial drainage of the surface water that might enter the basement. Fruit and vegetables that are stored in the cellar should be kept as dry and as cold as possible. Frequent airing will prevent mold and premature decay [cellar floors should be of cement]. The floors of dwelling houses should be of hard wood, close fitting and well surfaced. The walls should be decorated by painting instead of papering. Windows should be arranged on opposite sides of the house to facilitate the removal of smoke and dust, and to promote rapid cooling in summer.

Outside the house, broad verandas below and sleeping porches above are desirable for health. Trees should not be allowed to overshadow the house. The roof of the house and the adjacent grounds should be dry, clean, and open to the sunlight.

Personal Hygiene

If there is no systematic removal of garbage, waste from the kitchen should be burned or buried at once. Old rags, floor

sweepings, discarded bedding or furniture, should not be left to produce disease.

Boiling water should be poured over all dishes after they are washed. Delicate dishes may be washed in water to which ammonia or lye has been added. The kitchen sink should be treated frequently with these preparations. The hands may be protected with domestic rubber gloves that may be had at a trifling cost.

In cases of sickness the patient should not use the dishes in common with the family.

Cats and dogs not infrequently transmit disease. Sick children often fondle their pets. These animals may visit the neighbours, and thus transmit disease. When, by a sudden attack of diphtheria, scarlet fever, or measles, a child is stricken, there should be an absolute riddance of cats and dogs. Some people question whether it is not better to dispense with such pets altogether.

Personal Habits

As careful attention should be given to the body as is given to the home. Many of the common diseases originate in filth, that is, in uncleanly personal habits. Because of the increased sources of infection, it is necessary to use far greater precaution than was required of our ancestors.

The bath should be adapted to the occupation and the personal requirements of the individual. In hot weather the daily cool

bath is a wonderful restorer, and insures against disease. In cold weather the free use of drinking water, together with the occasional hot bath, will assist elimination and promote the circulation of the blood. Most people are benefitted by one or two hot baths a week. If the duration of the bath is not more than fifteen or twenty minutes it will not be found weakening. A cool sponge bath to conclude, or a shower or spray when convenient, will prevent taking cold, and add to the benefits derived. Those of early years as well as the aged should avoid much cold water. In debilitated conditions the oil rub after the bath will be found of special benefit.

Upon retiring at night the clothing should be changed entirely. Too much bedclothing is unhealthful. Light wool blankets are preferable to comforts, and should be well aired each day. Fresh air should circulate in the bedroom during the night. The regular use of the toothbrush and a solution for cleansing the mouth is also essential.

A wise precaution against disease is found in cultivating the drink-hunger, not for strong drink but for water. Keep the body craving plenty of fluid for the use of the excretory organs.

Food materials should be carefully selected. Their preparation should not be assigned to the uneducated or the slothful. Cereals should be thoroughly cooked. The fireless cooker is a great saver of time, and secures thorough cooking.

Avoid the hearty evening meal. For most people two meals a day are sufficient. This allows the liver opportunity to act as an excretory organ as well as a digestive organ. This precaution will improve the circulation of the blood, heat regulation, and skin activity.

Many eat too hurriedly. The stomach is not able to masticate food swallowed prematurely. The result is an irritated stomach, an overworked liver, and auto-intoxication, or perhaps surgical emergencies. Cultivate an appetite for simple foods, using few varieties

at each meal, and avoiding condiments, tea, and coffee, and other so-called relishes. The free use of flesh foods, including canned and preserved meat, is doubtless a contributory cause of such ailments as constipation, appendicitis, ptomain poisoning, and perhaps cancer. Mineral oils are assisting to antidote some of the ill effects of constipation. Castor oil occasionally, and in some cases olive oil, will be found beneficial.

Many are overfed and underworked, and would be benefitted by a regime allotting them more exercise and a smaller allowance of food.

Precautions

If the eyes are bloodshot, the skin dry, and the lips scaly, there should be no delay in treatment. A brisk purge followed by a hot bath, together with some hot drink, such as lemonade, will often prevent several days of sickness. It is well to omit a meal, and to eat very lightly for a day or two.

Do not neglect medical counsel, nor substitute therefor the advice of the druggist or the drugless "healer." Private advice volunteered by a neighbor or street vender of drugs would better be neglected. Frequently a serious condition exists, and the services of a skilled diagnostician are required. Some by following unskilled advice and neglecting early treatment have been rendered incurable, with resulting deformities, paralysis, or the loss of special-sense organs.

Another pernicious practice, and one which contributes largely to chronic disease, is the habit of taking powerful medicines for trivial ailments. Quinine, strychnine, opium, codeine, heroine, and some of the various coal-tar products are prepared in a manner to deceive the public. The damaging effects upon the blood-making organs, the weakness and inefficiency of the blood cells, and the deranging effects upon the glands of internal secretion, are not at once observed. But degeneracy follows the indiscriminate use of these drugs, and the nervous system becomes effectually paralyzed. It is far better to

consult, even though infrequently, a careful physician.

Baby should sleep in its own little bed, and perhaps in its own room, and in the daytime it should sleep out of doors. This will prevent colds, bronchial pneumonia, and other serious ailments. Wrap the child well

improved. The increased use of the lungs increases their power of resistance to such diseases as pneumonia and tuberculosis. Increased activity of the diaphragm during deep breathing massages the liver, the stomach, and the spleen, and thus increases digestive activity.

A Statement of Health Principles

- ¶ 1. The control of appetites and passions; self-control instead of self-indulgence.
- ¶ 2. The use of wholesome and nourishing foods, containing the necessary food elements in proper proportion.
- ¶ 3. Abstinence from the use of alcohol and tobacco, tea and coffee, flesh meats, rich and highly seasoned foods, irritating spices and condiments.
- ¶ 4. The limited use of sugar and pastry foods.
- ¶ 5. Simplicity in variety and amount, and in the scientific combination and preparation of foods.
- ¶ 6. Proper clothing of the body as relates to warmth, protection, simplicity, and modesty, avoiding constrictions and improperly adjusted weights.
- ¶ 7. Sufficient and appropriate exercise, especially for those whose work is sedentary.
- ¶ 8. Abstinence from the use of poisonous drugs, above all, avoiding the patent medicine habit; and an intelligent application of the principles of rational treatment, as represented in the proper use of water, air, food, electricity, massage, and other natural physiological stimuli and therapeutics.
- ¶ 9. Strict cleanliness of person and premises.
- ¶ 10. Proper and sufficient hours of sleep and relaxation.
- ¶ 11. Proper and sufficient ventilation of churches, schools, dwelling houses, and especially sleeping rooms.
- ¶ 12. Activity in the warfare against flies, mosquitoes, and all other disease-producing and disease-carrying insects.

—S. D. A. MEDICAL CONVENTION, MADISON, WIS., U. S. A.



in its cab, and place it in a safe, sheltered location. Even in cold weather this may be done with profit; and if ordinary precautions are used, the child will not suffer from exposure.

Health Suggestions

The lung capacity may be greatly increased by careful thought and action. The lower lobes of the lungs, especially, require plenty of exercise. The intake of air at each inspiration may be increased from fivefold to tenfold. As a result of deep breathing, the blood becomes purer, and the heart action is

Interaction of Mind and Body

The mind has a greater effect upon the bodily health than is generally supposed; a morbid mind creates disease. An inactive mind lowers physical powers. Strong wills preside over strong bodies. If there is a fixed high purpose in life, and a resolute devotion to that purpose crowds the day with useful labor, the result will tend to increased health, renewed vigor, and enhanced efficiency. Mental exercise is quite as beneficial as physical exercise. Mental problems should not be considered beyond the scope of the

individual of mature years. Even in advanced years the mind may yet be productive.

As the mind controls the body functions, so the condition of the body reacts upon the mind. A gloomy mind is often the result of

indigestion and autointoxication. Recreation is a wholesome stimulant for the brain, and its effects are reflected on every organ. A well-balanced nervous system in a healthy body circulating pure blood will enable the mind to do a superior grade of work.

Treatment of Epilepsy

BY S. GROVER BURNETT, A.M., M.D.,

The following abbreviation of a paper which appeared in the *Medical Fortnightly*, April 15, 1916, may be accepted as authoritative, as Dr. Burnett is the attending alienist and neurologist to Grandview Sanitarium for mental and nervous diseases. His paper is the result of twenty-five years' experience in the treatment of epileptics.

I CONTEND that many epileptics are made free from attacks for years, if not for all time, by carefully studied and properly applied treatment; that epileptics are mentally oriented, clearer headed, and happy and useful citizens if free of the attacks; that with the attacks their usefulness is limited, and they are morbidly oppressed; that with the attacks continuing, the post-epileptic, benumbed mentality tends to become fixed; that the untreated attacks tend to increased severity, to increased frequency, and to serious mental deterioration, meaning epileptic insanity or dementia or both.

It is not possible in private practice to keep all cases under treatment routine long enough for results, neither can all cases be traced over a sufficient period to make the records of value. While this can be done in asylum practice, the average epileptic sent to the asylum is so mentally deteriorated that he is committed for safe keeping rather than for any therapeutic aid. Therefore this paper excludes those epileptics needing incarceration and safety supervision, and includes only the many idiopathic cases, including baby spasms,—called worm spasms,—teething spasms, convulsions in children, youths, and adults. All baby spasms are the convulsive buds that mature later into fixed epileptic seizures. They should be systematically treated from the first, and

many babes might be saved from an adult life of habit convulsions. All these idiopathic can be much better treated in the free open air and wholesomeness of the average rural or semirural American home than in any public institution, offering little else than incarcerated supervision, and only intended for those having passed into the impossible and irredeemable class. . . .

The attacks cannot be controlled until the patient or the parents or both are educated up to the full understanding that a routine method of medication established must be carried out with clock-like regularity, and that no habit indiscretions are permissible, and that living habits must be as laid down in each case. Often the attacks are absent for months, and then return as a result of carelessness. . . .

Auxiliaries to Treatment

First, all irritating causes should be removed. They encourage the convulsive tendency, but do not cause convulsions, primarily; therefore tea, coffee, alcohol, and tobacco should be prohibited as direct irritants, or as disturbers of the vascular tone to cause nerve unbalance. A lithemic state should be corrected by the usual remedies and diet. Reflex irritations are to be considered, but the physician should not do fool things. . . . It's the little, seemingly insignificant error of refraction that constantly bombards the un-

stable brain cell with irritating and nagging impulses until an explosion results. The failure to carefully refract the *little* error is an incompetency peculiar to many oculists; but this irritation removed, like irritations of the nose, ear, throat, gastrointestinal tract, and sexual organs, including sexual indiscretions, does not cure epilepsy.

The cause of epilepsy is a disease of the angular cells of the second layer of the brain cortex. This diseased cell is no longer able to inhibit the action at all times of the motor cortex cell, the function of which is to store up and discharge energy. Through this weakened control, like the horse with an irresponsible driver, under conditions of overstrain or irritated tension the cell chemistry is unbalanced, and a discharge of energy takes place — a fit.

The treatment of epilepsy means subduing all irritation to these fit habit cells until gradually they gain self-control, and until the inhibiting cells over them have sufficiently recovered their interior chemical status to hold them firmly from misbehaving, like the strong, firm handed driver over the fractious horse.

Physical Care

Second, care for all the emunctories gently, granduallly; use no forceful, radical measures. All nervous conditions are weakened and irritated by them, therefore nature resents them, is insulted by them. Purgation irritation, like constipation, may induce an attack. Regulate the bowels gently. One half to a tablespoonful of liquid petrolatum at night and morning, if necessary, helps much in constipation tendencies. Water is the epileptic's friend. Drink plenty of water one hour away from the meal, but not much at the meal to slop the stomach. A glass of *plain* hot water one hour before meals washes the stomach mucosa in delicate digestions, and leaves it pink and clean for the meal. Water also increases vasomotor tone and equalizes the circulation. On rising, the patient standing with feet in comfortably hot

water, [may be given] a sharp spat of cold water, or [may be] self-whipped with a cold wet towel and a brisk rub. Less vigorous persons [should] dress to the waist, [and have] feet warm, a towel around the waist, [and] a cold spat and a brisk rub. Vigorous persons should have pleasant physical exertion until perspiring, two or three times a week, followed by a cold sponge and rub down. Less vigorous persons can use the hotbox sweat, but not to the extent of feeling weak or depressed afterward. Better still is the four to seven minutes in the electric light bath,—using sixty to seventy sixteen-candle carbon lamps for the heat, light, and chemical rays,—perspiring freely, followed by a cool sponge and brisk rub. This invigorates the metabolic and katabolic process wonderfully, raises the temperature, and never leaves a depressing subnormal temperature in delicate people, as high-degree moist heat baths frequently do.

Mental Care

Third, the limitation epilepsy places on every activity—social, business, or pleasure ambitions of the individual—is almost suicidally depressing. For this reason some pleasurable interests should be woven into the daily mental occupation. The nerve status is greatly toned and balanced by a mind employed in a passively pleasant way. Mind employment of the stressed and strained and disinteresting type is nerve racking. Enforced idleness is most regrettable. Unfortunately children must be taken from school because of the stressed nature and taxation of the training. This is especially true of the young, precocious *petit mal* child often seen. In all, careful educational training, practical and full of interest, is necessary to keep the nervous system quieted and evenly balanced.

The rest of this article deals with the administration of bromide, which the author believes in, and which, he says, is often followed by bad results because physicians do not know how to give bromide.

What Seven Men Said--a Temperance Tribute

A GROUP of men casually came together at a dinner party the other evening, and one happened to look over the table, which the women had just left, and commented on the little alcohol that had been consumed. And here is what these men said. The first was a business man of large interests: "I wouldn't think of voting for state prohibition, but let national prohibition come up and it will have my vote in a minute. Drinking has become an economic issue, and I am willing to give up my whisky and soda for the good of the many." The second was a large employer of men, some eighteen thousand: "I am ready for national prohibition; up to this time it has seemed a far-away ideal to me; now I see it as a pure efficiency measure." The third was a clear-seeing Irishman: "Alcohol has been the curse of my people. I have stopped taking it, after forty years of occasional drinking, and my vote is ready for national prohibition." "Go ahead," said the fourth man,

a railroad official of high standing: "I am ready for it personally, and so are all the officials of our road." A physician was the fifth: "Medicine can do without it; science is against it; the old idea of alcohol as a food is exploded. I am all ready with my vote for national prohibition." It was a clubman who spoke next: "When I see drinking among the caddies at our club, and our caddy-master silly with it, I am ready to give up my cocktail and vote against the whole business." And, last of all, was a wholesale dealer in liquor who had started the talk, and who finished with this significant statement: "You're right; we are seeing the handwriting on the wall. I said at a meeting of our wholesale liquor dealers the other evening that we didn't have five years of life ahead of us. Strange as it may seem to you, I would vote for national prohibition. It's for the best all around." Not a dissenting voice!—*Ladies' Home Journal*.

The Kidneys and Their Boss

A Fable

BY J. N. HURTY, M. D.

Dr. Hurty's little fable, which first appeared in the *Bulletin of the Indiana State Board of Health*, is an example of how much more effectively a fable or a story, even if improbable, may force home an unpalatable truth than a plain bit of sermonizing. Dr. Hurty is one of our most efficient health officers, who has spared no pains to make his office one of the greatest value in the prevention of disease and the prolongation of life.

ONE time two kidneys, which had been working like dray horses for years, suddenly slowed up. Kidney number one said, "I just can't absorb these enormous quantities of salt and saltpeter the blood is loaded with nowadays, and I notice you, too, are growing weak."

"Yes," said number two, "the man we are working for is a regular glutton on ham and bacon, and since Dr. Wiley forbade borax as a meat preservative, the salt and saltpeter

have been increased, and that's what makes us so tired. Yesterday the saltpeter was so strong it tore one of my tubules, and it bled horribly. The boss was awfully scared and went to see a doctor. The doctor never said a word about letting up on the ham with its embalming chemicals, but gave a prescription which I heard the old man say cost thirty-five cents. It was acetate of potash and infusion of digitalis, and when it struck me I trembled like a leaf."

"I too felt the blow of that infernal stuff when it came along," said number one. "I already had a good jag of salt and saltpeter, and was trying my best to pass them on when the acetate and digitalis hit me. I grew dizzy, and just to let a little light into the boss's mind, I sent a pain impulse to the brain."

"So did I," said number two. "Didn't help much, though, because he sent down a dose of morphine to quiet the pain. When the blood brought the cussed stuff, I could see the white corpuscles were staggering and were very weak-like. One of them said, 'I feel like I had been hit with a club. I couldn't whip a sick typhoid germ if it were to come along, and if it were a husky one—good-bye me.'"

"Good-bye for the boss, too," said kidney number one.

The two poor, overworked kidneys again conscientiously took up their functions, but it was no use; they just could not catch up.

The blood now began to kick. "I have carried this load of salt and saltpeter around the course three times now, and a new lot came into the stomach about ten minutes ago, and also a lot of catsup with vinegar and spices. If you don't take this old charge from me, as is your duty, I can't relieve the stomach."

"Let the stomach go hang," said the kidneys. "If it hasn't sense enough to throw up the infernal stuff, let it suffer."

"What can it do?" said the blood. "The creosote which got into the ham when it was smoked has paralyzed the poor thing."

So the kidneys said, "We'll just send a joint wire up to headquarters and see if the old fool boss won't let up a bit with his gormandizing."

The boss had to go to bed, and again sent for the doctor. "I have an awful pain in my kidneys," said the boss.

"My kidney pills will cure it," said the doctor; and he administered the pills.

When they dropped into the stomach, the old, tired thing said, "Heavens and earth, what's this?" Nevertheless, it bent to the job, and when the hard sugar coating was dissolved and the buchu, juniper oil, and more saltpeter dropped out, it called down the tube to the kidneys what was coming.

The poor things groaned and said, "How long, how long?"

Before the stuff in the first dose of pills reached the kidneys, another dose dropped into the stomach. "Here comes some more," yelled the stomach down the tube, and the dizzy, staggering kidneys agreed they had reached the end of their string, and Bright's disease was inevitable. They just couldn't help it, and the trouble began.

Gradually the boss wasted away in great pain, and died. He never did know why his kidneys gave out, and why he had Bright's disease.

MORAL: Eat constipating, irritant spices, eat embalmed meat, eat inordinately of salt; *eat, eat, eat* for pleasure; but don't be cranky and eat expecting to live in strength and happiness.



EDITORIAL

Railway Sanitation

THERE is no means more productive of mischief in the spread of disease than travel on the railway. This is especially true in India when we take into consideration that the sanitary conditions on the railway are far from what they ought to be, and when we also recollect the great number of people who are constantly passing back and forth. Who has stood in amazement and looked at train after train with every third and inter compartment packed to its limit and not asked himself the questions, "Where does this mass of humanity come from? For what object is there so much travel? Where does the money come from for such a luxury?"

Travel by rail in India being so extensive, the subject of railway sanitation is worthy of deep thought, and in this enlightened 20th century the improvement ought to be commensurate with the advance of the times. We get the promise of a better milk supply, better and more roomily planned towns that the scourge, malaria, will be less, but where is the mention that some day we may hope to see better sanitary conditions on the railways. On this subject there is silence. In bringing about better conditions of railway travel two lines of opposition may be brought forward by some. One is, the loss financially; and the other is, that anything is good enough for the native. Purely from a financial standpoint, sanitation is brought about by an organization which makes for efficiency—which is a valuable financial asset. Apart from the finances we ought to be interested enough in seeing that portion of the world with which we are most intimately connected take its place alongside the other parts of the globe. Even though there might be a slight loss financially, still this

would not be the first time that finances were sacrificed for progress and a better standard of existence. As to the idea of anything being good enough for the native; it not being open for comment, suffice it to say here, we are our brother's keeper and any existing lack or deficiency ought in part to be attributed to administration.

One of the most common evils in connection with travel by rail is overcrowding. It is becoming so prevalent and noticeable that the lay press is taking the matter up in its columns. We scarcely need concrete examples on this question of overcrowding. It is a common event, and not necessarily at the time of a mela, to see a train leaving the station with a dozen clinging on to the outside, struggling, pushing, fighting, trying to gain entrance to a compartment already packed full. In these compartments often the conditions are quite comparable to the famous Black Hole at Calcutta; about the only difference being in the supply of fresh air. Since the spread of disease is in direct proportion to the density of population one can readily see what the result is when people are massed together so that the expired air of one becomes the inspired air of another. These conditions furnish a most favourable soil for the production of disease.

More often than not, bathroom accommodations are excessively dirty, so much so that they are not capable of description. The stench coming from some of the third class compartments is such that it is not confined to the guilty compartment alone but reaches even to the second and first class compartments whose occupants are annoyed by the odour coming from two or three cars distant. Here again ignorance is not an excuse for any such conditions, as every

country has its poor and ignorant for which travelling facilities are provided. On the Continent the facilities provided for this class of people are as clean as for the better class. The great trouble is, first, the lack of an organization that will cover these evils; then, second, the lack of the stamina behind the organization to put it into effect.

In those cars lighted by gas often so much gas is allowed to escape into the compartment that it is almost unbearable. Although perhaps no one has suffered with acute asphyxia in this way yet without doubt it is a most unhealthy surrounding in which one is compelled to spend the night. Of course lighting by electricity overcomes the evil, and we are glad to see this method of lighting coming more and more in vogue. The carbon monoxide absorbed into the blood from illuminating gas is very harmful and far-reaching in its results. Sufficiently diluted and inhaled over long periods of time, is results in a kind of chronic poisoning.

Then again, on those hot days after one has stood the mixture of perspiration, dust, and soot for several hours, he turns his attention toward the bathroom, only to find that the tank had never been filled, or, if once filled, was allowed to run out through a faulty open tap. After a dozen or more stops possibly the guard is summoned and water provided. But more often, rather than tackle the stupendous task of darning the guard, the traveller consigns himself to his fate and having settled down, makes the best of it for the rest of the journey. While an episode of this kind does not materially shorten a man's span of life, yet it shows a lack of efficiency that the condition exists.

There are a number of filthy habits that are allowed to be practiced on the trains in India. They are far from being clean and uplifting. Some are diametrically opposed to the maintenance of health, as well as a great factor in the spread of disease. Spitting, while not only a nasty, filthy habit, is instrumental in carrying disease from one to another. This is especially true of tuberculosis.

Expectoration ejected by a tubercular patient on the floor of a compartment may harbour the tubercular bacillus for days as it is excluded from the rays of the sun and thus becomes a source of infection to those who enter the compartment later. Many other diseases may be transmitted in the same way. This is a source of disease the origin of which is oftentimes considered mysterious.

The amount of rubbish that is allowed to accumulate in some of the compartments is almost unbelievable. Chewed sugar cane, fruit peels, discarded food, and clothing mixed up with an overturned surahi of water is a common sight. Compartments remain in this condition for hundreds of miles of the journey.

Then there is the tobacco question. Since tobacco has become part and parcel of the misery of mankind, it would be useless to prohibit the use of the filthy weed on the train, but the arrangements ought to be such that that man or woman to whom tobacco using is a filthy practice ought not to be compelled to put up with its nastiness for miles at a stretch. It is a pernicious practice for a man to seat himself on the same car seat with a lady into whose face he complacently puffs clouds of smoke. The same man, were he to be confined in a compartment with a hookka and its various odours, would keep the air blue with violent outbursts of anger. Why should he ask others to put up with a nuisance, another form of which he himself will not tolerate? It is inconsistent. The writer recollects a trip to Delhi in which one man was particularly conspicuous in always leaving the compartment to enjoy his cigar. He did not care to impose his nuisance upon another. The man's name and address was worthy of a place in one's diary.

Another thing that can make a compartment about as filthy as anything is the use of pan. Pan expectoration all over the floor, finger marks of lime streaked all over the wall is anything but clean.

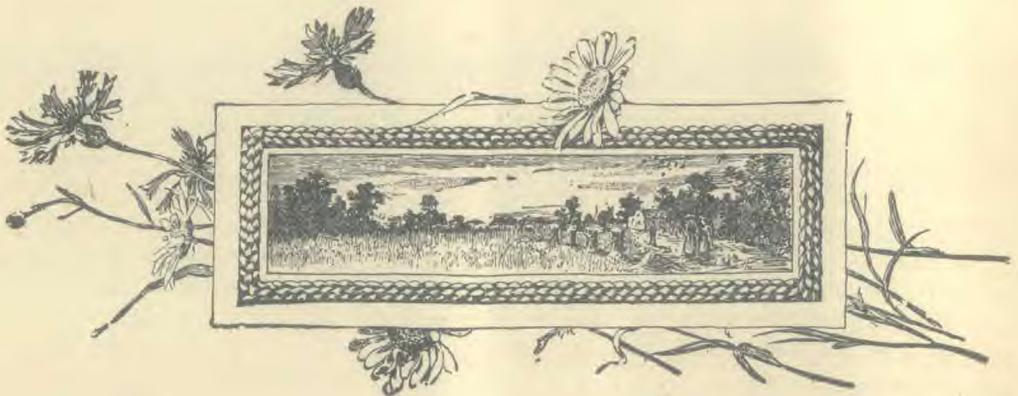
Now the question arises, how can these evils be overcome. It is mainly a matter of coach construction and organization. What

is the benefit of a notice on spitting and tobacco using when there is no one around to see that the demands of the notice are put into effect. There is no attention paid as to what takes place inside the compartments. The manner in which the coaches are arranged makes it difficult or even impossible to know what is going on within the compartments. The one in charge of the train is always outside, lost in the flood of humanity that is swaying back and forth. Why is it that so many people are robbed on the train? Why is it that so many women are assaulted and even murdered? Why is it that one fears to let the name of even one station escape his glance lest he finds himself a few hundred miles beyond his destination? All because there is no one who knows what is going on in the compartments. A train constructed on the corridor style in which the man in charge of the train can make frequent visits from one end of the train to the other even while the train is in motion would do away with many of these evils. Then there would be no opportunity for one to make himself obnoxious to his fellow travellers by the use of tobacco in forbidden places or by littering up the coach with excess luggage, rubbish and refuse, or any other act of impropriety. If any passenger knew that the violation of certain principles would not be tolerated and that in case of infraction he

would be liable to find himself a foot passenger some hundreds of miles from his destination, it would make him considerably more careful about becoming a nuisance to his fellow travellers.

The coach divided into small compartments, as is the custom in India, is an especially favourable condition for heat stroke in the hot season. Although this is a theory not accepted by the majority in India yet the future is bound to reveal that heat stroke is dependent more upon humidity and the lack of circulation of the air than upon actinic rays. This being the cause, the long, open corridor coach entirely free from partitions will help avoid episodes like that which occurred in Sindh the last season when many were overcome by heat and many lives were lost. The long, open coach provides the best circulation of air. There being a door in each end of the coach causes a current of air from one end of the coach to the other due to the motion of the train. We are not aware that railway companies take into consultation a sanitary engineer in the construction of their coaches, at least the arrangements do not indicate it.

Let us hope that an interest in the betterment of conditions on the railroad may be stimulated, with the result that sanitation on the railways in India will help place it beside the other civilized nations of the world.



MOTHER AND CHILD

The Blessed Lesson of Obedience

BY HELEN DODS, R. N.

The wiseacre who made caustic criticism of the fact that many of the instructions for the rearing of children are given by *misses*, was evidently not aware that some of these same "misses" are much better qualified, through training and practice, to instruct in the rearing of children than are most mothers. The following, from an article by Miss Dods, which appeared in *The Nurse* (Jamestown, N. Y.), June, 1916, will convince the reader that Miss Dods knows whereof she speaks.



ALL know that the woman who thinks herself best qualified to give advice to mothers is the one who has no children of her own; but while I seem to stand convicted, I do really plead "not guilty," for scattered here and there about the country are any number of children whom I call "mine own." Many of these children I mothered for weeks and months at a time. In this way I not only had experience with the young babies, but was able also to watch their later development.

I found that the children who had been trained early to regular habits were much more obedient than the children who had not such training. In short, obedience seemed second nature to them. To go to bed unquestioningly and to eat regularly were matter-of-course observances, and the mother who had been wise enough and unselfish enough to work for the good of her child found that all lessons in obedience came more naturally and easily with the trained child.

I use the words "wise" and "unselfish" advisedly. It is easier not to train a baby to regular habits than to do so, that is, for the majority of people. For most mothers it is easier to take up a baby every time he cries, to rock him and carry him, and all the rest, and it is an unselfish woman who thinks of the good of her child rather than her own inclination and pleasure.

Babies are little animals, and the more they develop like little animals the better for them.

Do you suppose you can keep your baby from laughing when the time comes for him to laugh? He may not laugh so soon as Mrs. So-and-so's baby, who was talked to incessantly and chucked under the chin; but some day your baby, all by himself, will laugh simply from the joy of living, or maybe because he discovers some side-splitting thing, like a fleck of sunshine on the wall or a bit of color or a waving curtain. That is natural development. Do you think you can keep your baby from sitting up when his spine gets strong enough? Give him freedom of dress and plenty of room to kick and roll, and some day he will sit up, without having his spine in a curve and his head wabbling about in a helpless fashion.

I should like you to feel that I speak from no inconsiderable experience with children, as well as from a rather unusual opportunity of observing them and their parents in their own homes.

In some of these children of mine I feel the greatest pride; others are a disappointment to me. But it is manifestly unfair for me to feel either pride or disappointment in the children themselves. It is the parents of the well-behaved children of whom I should be proud, and the fathers and mothers of the ill-behaved on whom my disappointment should be vented—not the children themselves.

Several years ago it was my privilege to travel with four children who had been well brought up by very wise parents. In the course of our journeyings we met a little woman whose one small child was a nuisance and an annoyance to all on shipboard, and a source of much irritation generally. One day that mother came to me, and laying her hand appealingly on my arm, said, "How do you make your children so nice?"

The mother of "my children," as the little woman called them, and I had often talked this matter over, so my answer was ready. We believed it was because from the day of their birth they had been taught the blessed lesson of obedience. The woman looked at me vaguely, as though she did not quite understand the language I spoke, and then said, in a tone of despair, "I suppose I ought to begin to teach Janie to mind me, but I had not thought her old enough." Poor woman! she had lost as many years as Janie was old. Poor Janie! she was badly behaved only because she had not been taught otherwise; and if her father and mother at that late date were to take her training in hand, it meant a reconstruction period such as parent and child need never have encountered had they had the proper understanding of each other from the very beginning.

Earnest Abbott, in his little book, "On the Training of Parents," says that the well-behaved child is not a natural-born angel; he is well behaved because he has been well taught. Neither is the child who misbehaves, a natural fiend; he too is the result of his home training. That may sound very hopeless to those who have tried and tried and yet failed. But remember this: if you have failed, it is not because your child is impossible or unteachable, as so many parents claim. Of course your child loves you,—that goes without saying,—but have you taught him to mix with love that ingredient, respect, which is just as necessary to his happiness and yours?

The time to lay the foundation for all sorts

of good habits—and not the least of these, obedience—is very early in a child's life; in fact, from the very first day of life.

Of course, in starting from birth we do not reach the child through any responsive understanding on his part. We form habits to which he responds unconsciously until they become a fixed part of his life.

To begin with, in order to give the baby every advantage, we must look to his digestion. With a child intelligently fed, properly nourished, and wisely let alone, you have the matter quite in your own hands. He will respond readily to regular feeding hours, to systematic sleeping hours, and to just as systematic waking hours.

It is a most important matter, then, this question of proper food and proper feeding. Proper food, improperly administered, may work as much havoc as improper food properly administered. Unquestionably, more children have had their digestions and their dispositions ruined through improper feeding than any of us realize; and right here let me say that much evil may be done during the first three days of a child's life. It was never intended that babies should be dosed during these first three days before the mother's milk comes in abundance. I have a strong belief in the beauty and perfection of creation. I cannot believe any mistake has been made in a work of such marvelous completeness. Therefore, if the Creator had intended babies to be fed on catnip tea, anise-seed tea, molasses, or even crackers soaked in sweetened whisky and water, those concoctions would have been put in the mother's breast. There is an all-wise provision in that delayed food, for both the mother and the child. The baby should be fed nothing except the little he gets at rare intervals from the breast, and a little warm water as a placebo if necessary.

Nearly all very young babies are fed too frequently. In my obstetric cases, from the beginning, or rather from the third day, the babies were fed once every three hours dur-

ing the day, and once in four hours at night, and this at a time when, as now, nearly all formulas advised feeding a young baby once in two hours.

The plan of feeding a baby once in four hours day and night was tried out at various times, but I always went back to my three-hour schedule as being more satisfactory. The babies gain as well, or better, than when fed more often. They form habits of long hours of sleep, and the mother obtains needed rest. They have no colic, because practically all possibility of colic is precluded by not adding fuel to the fire, that is, putting food into a stomach which still holds undigested food.

All babies should have, from the very first, a regular bedtime hour, and that hour should be not later than six o'clock. At two months the average baby should sleep all night with only one feeding between six at night and six in the morning. If you have a child who, from earliest infancy, has known no other way than to be put to bed at six o'clock, you have formed a habit of incalculable benefit to the child as well as to the mother, for every mother has a right to the rest and freedom of the evening hours. I know of nothing more comfortable than the feeling of relaxation which comes after a baby, with such well-formed habits of sleep that you have perfect confidence in his uninterrupted slumber, has been safely and happily tucked in bed. Mothers and grandmothers have said to me that they did not believe that mothers who did not rock their babies to sleep could really love them. As I have never rocked babies to sleep I cannot say what the sensations may be; but no warmer feeling can be imagined than I have always felt for the babies who go happily and unconcernedly to sleep, in a dark room, with never a thought of doing anything else

As a matter of fact, my babies were rarely handled except when being fed or bathed. Twice a day, at the morning bath and at bedtime, they had what I called legitimate

handling. Those times were never hurried over; the babies were massaged to their heart's content—and how they loved it! They were so rested and soothed by this treatment that most of the other hours were spent in sleep.

The morning baths are regular institutions in the lives of all babies, but I wonder how many mothers know what a splendid investment it is to give the baby a full hour of her time, or as nearly that as she can manage, at bedtime.

Begin by taking all the clothes off the baby. Give a sponge bath as necessary, and sponge the spine for from five to ten minutes at first in tepid, and then in cool water until it makes the spine feel cold to the touch. This seems to quiet a nervous child, and is also a preventive of colds. If the baby is normal in weight, you will not need to rub with oil; just put enough talcum powder on your hands to prevent friction on the baby's tender skin. I have yet to find the baby that does not love this sponging and rubbing. After you have done all this without hurry or excitement, put on fresh, loose clothing, feed the baby well, and put him to bed in a dark, cool room with plenty of fresh air. Be sure his feet are warm and his head uncovered.

All through the earlier months of his life, then, the training of a child to obedience may be made a very simple matter. It is when a child begins to creep and toddle that new difficulties arise. When a child begins to develop naughty ways, which are yet attractive because he seems still such a baby, many mothers seem to get hopelessly lost.

If you laugh at or condone or ignore actions at this period, which later on you consider naughty, how can you expect a child to understand and respect you? It is all so unfair to the child! This is a period replete with opportunities for teaching important lessons. Self-control and self-reliance may be taught by ignoring or making little of their numerous bumps. If a child

is at all seriously hurt, learn to be calm yourself. Do not add to the child's fright by getting excited. Nothing will quiet a child so quickly as to feel the quiet of an older person.

Just as soon as a child is old enough to pull books and ornaments from bookshelves and tables, he is old enough to be taught not to do it. It may mean, just at first, much time spent in quiet, patient instruction, but you will not fail if you persist. In that lesson, as in the hundred and one others which

come up, you must always believe in your own ability to succeed. Never give up in those first lessons, for that is all there is of the battle, if you choose to call it that. And all this does not mean the breaking of a child's will or anything approaching it; but it does mean the guiding of a child's will, which is a very different matter. There will be very few, if any, tantrums or issues if from the very first the child recognizes that he must respect and obey the rules laid down for him.

HEALTHFUL COOKERY

Rice and Dextrinized Cereals

BY GEORGE E. CORNFORTH



THE ordinary white rice is sadly deficient in cellulose and mineral elements, though its total nutritive value, due to its protein, fat, and carbohydrates, is only slightly less than that of other cereals, contrary to prevalent opinion. It would hardly be safe to prescribe rice for an obese patient, as I once heard of a physician doing, under the impression that rice contains scarcely any nourishment. Rice is nutritious, easily digested, and a fattening food. But in the preparation of white rice the outer coating of bran and mineral elements is scoured off, then the rice is coated with glucose and talc. This puts a gloss on the rice, and also keeps weevils out of it; but it robs the rice of important food elements. The so-called "unpolished rice" is no more nutritious than ordinary polished rice. It simply does not have the coating of glucose and talc. Rice that has not had the outer coating scoured off is called "natural brown" rice. It contains all the nutritive constituents of the rice. The cooked natural brown rice feels in the

mouth, while it is being chewed, somewhat like cooked whole wheat. The hull is noticeable.

Boiled Rice

- ½ cup rice
- 6 cups boiling water
- 2 teaspoons salt

Put the rice into a small saucepan. Pour hot water over the rice, and whip it with a batter whip. Pour off the water. Pour on more hot water, whip again, and pour off the water. Repeat the process till the rice is thoroughly clean, and the water that is poured off is clear. Have the six cups of water salted and actively boiling over the fire. Stir the washed rice into it. Keep the rice actively boiling for twenty minutes, stirring occasionally so as not to allow the rice to stick to the bottom of the kettle. Then turn the rice into a colander to drain off the water. Hold the colander containing the rice under the cold water faucet, and run a large quantity of cold water through the rice till all the stickiness is washed from the kernels, so that they remain separate and distinct. Then, after the rice is thoroughly drained, put it into a double boiler to dry and reheat. Do not stir the rice while it is reheating, and in dishing it out handle it very carefully so as not to break

the kernels or cause them to stick together. Serve with cream or fruit sauce.

This is a wasteful method of cooking rice, if the water is thrown away, but it is very difficult to cook rice any other way and have the kernels separate. The water in which the rice has been boiled may be used in making soup, and thus the nourishment it contains is saved.

Natural brown rice requires longer to cook than white rice. It should boil twenty-five or thirty minutes, or till the kernels are tender.

Plain Steamed Rice

- 1/2 cup rice
- 1 1/2 cups boiling water
- 1/2 teaspoon salt

Wash the rice as directed in the preceding recipe. Then put the rice, boiling water, and salt into the inner cup of the double boiler. Set the inner cup into the outer cup of the double boiler, which contains boiling water, and cook one hour. Serve with cream or fruit sauce.

Creamed Rice

- 1/2 cup rice
- 1 cup boiling water
- 1 cup milk
- 1 teaspoon salt

Put the washed rice, boiling water, milk, and salt into the inner cup of the double boiler. Set it into the outer cup, which contains boiling water, and cook one hour. Serve with cream or fruit sauce.

Creamy Rice

- 1/4 cup rice
- 1/2 cup cream
- 1 1/2 cups milk
- 1 teaspoon salt

Milk alone may be used or a larger proportion of cream may be used.

Put the washed rice, cream, milk, and salt into the inner cup of a double boiler. Set it in the outer cup, and cook two or three hours, or till a creamy mass is produced. This really does not need cream as a dressing. It may be served as a vegetable without dressing. It makes a very appetizing dish when served with one half of a canned peach on top of each helping, and some of the peach juice poured around it.

Rice and the coarser cereal preparations

are enjoyable served with a fruit sauce. Nuts may then be sprinkled over the sauce, making the ideal combination of fruits, grains, and nuts.

A fruit sauce that tastes especially good with cereals is—

Raspberry Sauce

Rub through a strainer fine enough to hold back the seeds, sufficient canned raspberries or fresh raspberry sauce, to make one cup.

- 1 cup raspberry pulp or juice
- 1 tablespoon cornstarch
- 1 tablespoon water

Heat the raspberry pulp to boiling. With a batter whip stir the cornstarch and water together, then stir it into the boiling juice. Allow it to cook gently for two minutes.

Rice, whole or cracked wheat, Scotch oatmeal, and pearl barley make palatable and nutritious dishes for either breakfast or dinner, several with gravy instead of cream. Cream sauce may be used, or one of the gravies to be used with macaroni, recipes for which will be given in another lesson.

Cream Sauce

- 1 cup milk, or part cream
- 2 tablespoons flour
- 1 1/2 tablespoons cold water
- 1/4 teaspoon salt

Heat the milk to boiling in a double boiler. Put the flour into a bowl, and with a batter whip, not a spoon, stir the flour smooth with the cold water. Then, using the batter whip, whip the flour mixture in a small stream into the hot milk. Allow to cook five minutes. Add the salt.

Unless one has a fireless cooker, those cereal preparations that require long cooking are more suitable to be used in the winter-time, when no extra fire would be necessary in order to cook them the required length of time.

Dextrinized Cereals

In the process of digestion starch is changed to a form of sugar. It is possible partially to accomplish this by cooking. When starch is browned, it is changed to a form of carbohydrate intermediate between starch and sugar. Cereal foods in which

this has been accomplished may be said to be partially predigested. The browning also gives a toasted taste to the cereal, which is palatable for a change. It is this change in the starch that gives the palatable flavour to the crust of bread.

Browned Rice

Pour one-half cup rice into a pie tin. Set it into the oven. Stir it occasionally until it reaches a light brown or straw colour. Then wash and cook this browned rice according to the directions for cooking plain steamed rice. Browned rice is not pasty and sticky after it is cooked, but is light and fluffy. Serve with cream or fruit sauce. Orange sauce blends nicely with browned rice.

Orange Sauce

- 1 cup water
- $\frac{1}{2}$ cup orange juice
- $\frac{1}{8}$ cup sugar
- 1 tablespoon cornstarch
- A few grains salt
- 1 egg yolk, if desired

Stir the cornstarch smooth with a little cold water. Heat the one cup of water to boiling, and stir into it the cornstarch mixture. Let it boil gently two minutes. Add the sugar and salt and the grated yellow rind of half an orange. Be careful to grate off only the very outside yellow part of the rind. If a richer sauce is desired, after thickening the water with the cornstarch stir a little of the sauce into the egg yolk and mix well, then stir the egg yolk into the sauce; then add the remaining ingredients.

Rolled oats may be toasted slightly before cooking, for a change from the plain cereal.

Zwieback

Lay slices of bread on a baking pan and put them into a moderate oven to dry out and brown lightly throughout the slices. Zwieback is the ideal toast—better than toast made by simply browning the outside of a slice of bread and leaving the inside of the slice like a slice of fresh bread. Another advantage that zwieback possesses over other cereal foods is that it compels mastication, which is necessary for the best digestion of cereal foods. And a change is produced in the starch by the browning, so that when zwieback is moistened with water or any other liquid, it does not become pasty.

Zwieback may be eaten plain, or spread with dairy butter, nut butter, jelly, or marmalade. Or it may be used in making toasts, such as the following:—

Cream Toast

Put a slice of zwieback into a cereal bowl. Pour over it one-half cup of hot cream, and serve at once.

Cream Gravy Toast

Dip a slice of zwieback into hot water to moisten it. Then pour over it one-half cup of the cream sauce previously given in this lesson for use with cereals.

Egg on Toast

Moisten a slice of zwieback in hot cream or hot water, and place a nicely poached egg on it.

Egg and Celery on Toast

Cut into dice sufficient tender stalks of celery to make one cup. Add this to the cream sauce. Moisten a slice of zwieback. Cover it with the creamed celery, and place a nicely poached egg on top.

Fruit Toast

Moisten a slice of zwieback in hot cream or hot water. Place it in a cereal dish, and pour over it one-half cup of the raspberry sauce given for cereals. Chopped nuts may be sprinkled over the top.

Blackberry sauce for toast may be made by following the recipe for raspberry sauce.

Pear sauce for toast may be made from either canned pears or stewed fresh pears. Cut the pears into thin slices. Measure the juice, heat it to boiling, and thicken it with cornstarch stirred smooth with a little cold water, using one tablespoon cornstarch for each cup of juice. Use a batter whip to stir the starch and cold water together, then whip the boiling juice with the batter whip while the cornstarch mixture is poured in a small stream into it. Put the sliced pears into the thickened juice, and allow the whole to remain over the stove long enough to heat the pears.

Peach sauce for toast is prepared in a similar way.

Apple toast, made by serving hot apple sauce over slices of zwieback moistened in hot cream or hot water, tastes especially good with chopped blanched almonds, chopped pecans, or chopped walnuts sprinkled over it. It is then called nut apple toast, or is named according to the nuts used, as almond apple toast.

DISEASES AND THEIR TREATMENT

The Nature, Causes, and Treatment of Constipation—No. 2

BY G. H. HEALD, M. D.

The first article of this series gave a brief description of the anatomy and functions of the digestive tract, and a discussion of the nature of constipation.

Constipation is so prevalent that many do not realize to what an extent it is a contributor to more serious and life-shortening maladies. Those who have trouble with the bowel functions should not neglect it, but should do all in their power to obtain permanent relief.

Organic Causes



HERE may be strictures of the bowel, adhesions, "kinks," and the like, requiring surgical interference; but most frequently constipation is functional in its nature, the result mainly of faulty habits of life.

The habitual use of food without sufficient residue is an important cause of constipation. Normally the menu should contain a considerable amount of indigestible matter to give bulk and to furnish the necessary physiological stimulation to the bowels. In some cases the exchange from white-flour bread to coarse whole-wheat or Graham bread is sufficient, without any other measures, to correct constipation. Other foods which leave insufficient residue are milk, eggs, meat, and white or polished rice. If the diet consists largely of such foods to the neglect of the coarser foods, such as the whole grains, including unpolished rice, the fruits, and the fibrous vegetables, the tendency will be to have irregular and delayed bowel action. There is an exception, how-

ever, in the more rare form of spastic constipation, in which coarse foods are injurious, as will be explained later.

Another cause of constipation is the failure to drink sufficient water. If an insufficiency of fluid is taken, the tendency is for the bowel contents to become abnormally dry.

The use of easily fermentable foods in some cases results in certain fermentations, with the formation of gas, which may be followed by delayed peristalsis, or constipation. In some cases fruit, instead of favouring a movement, ferments, with the formation of great quantities of gas, and consequent abdominal distress and delayed bowel movements.

A sedentary habit with neglect to exercise the voluntary muscles has an unfavourable effect on the involuntary muscles which control the movement of the intestinal contents. Moreover, the voluntary abdominal muscles, which aid in emptying the bowel, are involved in the general muscular weakness.

The use of corsets tends to constipation in at least two ways. It disarranges the abdominal organs, forcing the intestine down in such a way as to increase the folds or

"kinks." Anyone who has sprinkled a lawn knows what occurs when there is a kink in the hose. The flow stops. Imagine a more or less permanent kink in the bowel caused by the external pressure of a corset. Another way in which the corset interferes with the bowel function is in weakening the abdominal muscles.

Normally there is a time each day—usually after breakfast—when the bowel contents reach the last portion of the bowel, known as the pelvic portion, or rectum, and there is a desire for relief. Those who always heed this warning and immediately seek relief rarely experience the ill effects of constipation. They may suffer a temporary delay when on a diet deficient in coarse material, but the restoration of a right diet will remedy the matter. But the person who has continually neglected nature's call gradually finds that these calls come at greater intervals, and are feeble at best. It is then that a bad matter is likely to be made worse by the use of cathartic drugs. The bowel, having been made insensitive, is rendered still more insensitive by the artificial stimulation. The habitual use of enemas or suppositories results not much better than the use of cathartics. This is not to say that an enema, a suppository, or even a cathartic should never be used. As an emergency measure either may be productive of good, but as a routine measure all are capable of causing more harm than good.

Classes of Constipation

The common form of constipation is *atonic constipation*, characterized by inefficiency of the intestinal muscles, insensitiveness of the nerves, and more or less sagging of the intestines.

A rare form is *spastic constipation*, in which there is irritation and overaction of the muscles, especially the sphincter muscle. The symptoms are infrequency of movement, the stools being in the form of hardened masses which may not be larger in diameter than the little finger or a lead pencil. There

may be colic, considerable pain, and some blood.

Accompaniments of Constipation

The retention of the intestinal contents for long periods favours the multiplication of putrefactive germs and the consequent formation of bacterial poisons in greater quantity than the body can readily dispose of. The result is auto-intoxication, which may be manifested by foul breath, headache, want of appetite, drowsiness, loss of memory, inability to do mental work, and a host of other symptoms. Moreover, when the tissues are overwhelmed by intestinal poisons, they are less able to resist the inroads of infective germs; so one in this condition is more liable to be a victim of epidemic disease.

Stomach trouble, or indigestion, may accompany constipation, both as a cause and as a result.

Rupture is not infrequently a result of straining at stool. From the same cause there may result emphysema of the lungs, and even cerebral hemorrhage, or apoplexy.

Hemorrhoids, or piles, are liable to be present in persistent constipation.

There may be other rectal abnormalities, such as anal fissure, a condition in which the mucous lining of the orifice is ulcerated, as a result of the effort to empty the bowel of hardened contents. When there is a fissure, defecation is extremely painful, and the patient in his dread is liable to postpone matters, thus adding to his difficulty.

Prolapse or rolling out of the lower portion of the rectum is another very troublesome result of persistent constipation, and follows violent straining.

Fistula follows the breaking of a rectal abscess, which may have developed as a result of injury from the retention of hardened masses. These local conditions necessitate surgical aid by a competent specialist. Too often the supposed "specialist" is a quack in no way qualified to perform such work. A patient should not intrust himself to any one

but a conscientious regular physician who has a good reputation in his community.

Chronic constipation often alternates with attacks of diarrhoea. It would seem that the retained, fermenting mass finally sets up an irritation which causes excessive bowel action, to be followed by another period of constipation. Often during the period of diarrhoea, when the stools are fluid, there is more rapid absorption of poisons, and for the time the patient has severe symptoms of poisoning.

Treatment

The first important measure is to determine, if possible, the cause, and correct it. The usual causes of constipation are given in the preceding pages.

But a removal of the causes will not be sufficient to cure well-advanced cases, for the changes in the bowels and in their habits have formed a vicious circle which will perpetuate the evil unless active measures are taken to check it.

Some of the things which will tend to perpetuate constipation are:—

Insensitiveness of the bowel to its normal stimulation;

Insensitiveness of the rectum to the pressure of fecal matter;

Hypertrophy or overgrowth of the sphincter muscle;

Bagging or pouching of the lower bowel by the pressure of retained feces, so that it is no longer able to force the contents along.

The first measure in importance is the establishment of a habit of regularity. It can be done. Select a favourable time, say shortly after breakfast, and make it a daily practice to go to the toilet at the appointed time, whether you feel like it or not. Take time. Wait patiently. Do not attempt to hasten matters by violent straining. For some time, perhaps, there will be no results, but do not lose heart. Persist in keeping your appointment every morning without fail. Let nothing interfere with this. If there are piles, it may be better to select a time shortly after the evening meal.

Next, be sure that you are clothed properly. Any constriction about the abdomen tends to impede the intestinal functions and to retard recovery. No woman who continues to lace can hope for a complete cure of her trouble. (The next article will give directions for the treatment of constipation by diet and exercise).

Temperance Activities During the War

EVER on the alert to turn moments of public excitement to profitable account, the liquor dealers of the Empire have, since the commencement of hostilities, lost no opportunity of pushing the sale of intoxicants, irrespective of its disastrous effect upon the men engaged in labour upon which the success of the issue largely depends. So that they might have a free hand at this time they have urged that the temperance leaders should suspend operations during the currency of the war, so that the Government might not be harassed, but be left free to devote their whole thought to the prosecution of the war. In a word, they have desired a truce which would leave them free to conduct their business unrestrained by the public sentiment engendered by temperance

activities. . . . The very suggestion of such a truce was a crime against the nation and the brave men who, on the battlefields of Europe, are fighting for the honour of the Empire and the good of the world. We go further, and say that it could only come from those who are confederate against the best interests of the country and the honour of its citizens. The obligation of the moral forces of the nation to the soldiers in the field demands not suspended operations, *but increased activity in the campaign against the national enemy*, for while they are risking their lives in defence of the Empire, the liquor traders are pushing a business which is a perpetual menace to their loved ones at home.—*Reformer W. A.*

CURRENT COMMENT

A Statistical Study of Appendicitis

IN his paper read at the Rochester meeting of the American Public Health Association, Stoumann gives the results of a statistical analysis of mortality from appendicitis, from which he draws the following conclusions:—

"There is no evidence that the apparent increase of appendicitis mortality is caused by a greater frequency or virulence of the disease, whereas many facts indicate that this increase is simply caused by the shifting of deaths from other groups.

"Appendicitis is met with in all ages, from birth to extreme old age. It has its highest mortality in the age period of ten to fourteen years, but attains another high point in later life, for males in the sixties, for females in the seventies.

"No race or nationality is exempt from appendicitis; the mortality is about the same among Negroes as among white people. It is frequent also among the Japanese and Chinese.

"Appendicitis is much more frequent, especially in the younger ages, during the years of diarrhea epidemics. The annual fluctuations of appendicitis are closely connected with the prevalence of this disease.

"Appendicitis shows also a close connection with rheumatic fever.

"The mortality from appendicitis is, other things being equal, highest where mountains or long distances make transportation to hospitals difficult. This is most pronounced in middle life.

"Appendicitis is of about equal frequency in urban and rural communities. In cities it is more common in childhood and youth because of the higher frequency of diarrhea in cities; but on the other hand, the mortality is higher in rural districts during middle life because of the longer distances to hospitals.

"Appendicitis is most frequent in occupations with much sedentary work, probably because this favours constipation."

Unfortunately there is in all this no suggestion of why one person has an attack of appendicitis while another under apparently similar conditions escapes. Is appendicitis a sequel of pyorrhea or of infected tonsils? or is it favoured

by the presence of endamebas? or is a heavy meat diet a predisposing factor? Both constipation and diarrhea are mentioned as contributing factors, but in what way? The report, though enlightening, fails to tell us how to avoid appendicitis.

Nutritive Value of Whole-Grain Bread

IN the *New York Medical Journal* of August 26 is an excerpt from an article by F. Rohmann, which appeared in *Berliner Klinisch Wochenschrift*, Jan. 31, 1916. In that article it is stated that much of the protein of grain is contained in the layer immediately beneath the pericarp, and as grain is usually ground for whole-wheat flour, this protein, being inclosed in the aleurone cells, impermeable by the digestive juice, is lost and may be found undigested in the discharges.

"When, however, the grain is very finely ground so as to pulverize this hard outer layer, a much larger proportion of its protein content is made available. Bread made of such finely milled whole grain has a much higher nutritive value than ordinary bread, and provides so much additional protein that it very largely spares the more expensive protein foods, such as meat."

The outer layer, he continues, has been found to contain substances necessary for growth. Rohmann does not accept the "vitamine" theory, but believes that the virtue of the proteins in the outer layers consists in the fact that they are complete proteins, whereas the protein of the endosperm, from which fine flours is made, is wanting in certain essential protein constituents. "The use of such bread is therefore not only decidedly economical, but also provides a much more complete diet on the protein side." The *New York Medical Journal*, commenting editorially on this excerpt, says:—

"In view of the fact that ordinarily it is impossible to obtain freshly ground whole-wheat flour, it may be valuable to know that it is quite possible to obtain at small expense a practical household mill for grinding wheat.

"A small grinder in the kitchen may be used not only for supplying whole-wheat flour for the family, but also for cracking wheat, corn

barley, oats, rye, and other grains for use as breakfast cereals. These should be obtained from a seedsman rather than from a grocery or feed store, because in this way a high quality of clean grain is insured at small cost.

"Flour may be also ground from any of these grains. In this way persons who need to have the benefit of unadulterated natural cereal foods can supply themselves at minimum expense."

Toeing Out and Toeing In

WHETHER heard of corns, bunions, and painful flat feet among the aboriginal Indians or Negroes? They grow their own shoe leather, they toe in, their feet give them no trouble beyond an occasional stone bruise or abrasion. It is common sense to plant one's feet in the easiest position. The runner instinctively turns his toes either straight forward or a little inward to obtain the best purchase. The foot is like a three-legged stool, with the three points of support at the heel and at the balls of the great and little toe. Common sense teaches one that the center of that tripod is the most stable point. If you stand on the edge of the stool, it will tip. If one throws his toes outward, the weight of the body comes on the inner side of the foot; it everts and tends to flatten. Try it, barefoot, and see for yourself.

Because Louis the Fourteenth was short and had deformed feet, he toed out, put on two-inch heels, and set an example of a mincing gait that all Europe began to ape at once. It was found that the soldier balanced better during the manual of arms if he toed out. For these two inadequate reasons polite society painfully trains its children to imitate a dead and gone monarch who does not deserve such a memorial—or any memorial, for that matter.—*Editorial, Long Island Medical Journal, July 1916.*

Non-drug Methods

Perhaps medical school faculties will some day awaken to the value of other-than-drugs treatment methods. Then, when these are taught to their students by capable instructors, illiterates who exploit a "new school" in treatment will, like Othello, find their occupation gone. Medical faculties have until now been themselves to blame.—*The Medical World.*

THE attitude of the medical profession in India is said by *Abkari* to be overwhelmingly in favour of the cause of temperance.

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The drunkard's children—robbed of home comforts, education, and training, living in terror of him who should be their pride and protection, thrust into the world, bearing the brand of shame, often with the hereditary curse of the drunkard's thirst.

A Massachusetts gentleman paid, some time ago, \$100,000 for an "antique" Pallas shrine which he purchased in Italy. It turns out that the shrine is anything but antique, having been manufactured by cunning art dealers within the last fifty years, and coloured with coffee to give it an ancient appearance. Now the purchaser must pay another forty per cent in duty. Italy is evidently a home of the artful as well as of art.

An Accidental Discovery

Blotting paper was discovered purely by accident. Some ordinary paper was being made one day at a mill in Berkshire, England, when a careless workman forgot to put in the sizing material. The whole of the paper made was regarded as useless. The proprietor of the mill desired to write a note shortly afterward, and he took a piece of this waste paper, thinking it was good enough for the purpose. To his intense annoyance the ink spread all over the paper. Suddenly there flashed over his mind the thought that this paper would do instead of sand for drying ink, and he at once advertised his waste paper as "blotting."

There was such a big demand that the mill ceased to make ordinary paper, and was soon occupied in making blotting paper only, the use of which rapidly spread to all countries.

A great many good things have been found out by accident. The one who keeps his eyes open to see the significance and value of unusual things, is the one who makes useful discoveries. The one who thinks about his work is the one who makes valuable discoveries. — *The Expositor.*

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