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VOL. VI NO. 8

Contents, August, 1915

A TODDY GATHERER OF SOUTH INDIA.

General Articles

Prevention of Enteric

By A. B. Olsen, M. D., D. P. H.

Typhoid or enteric fever is an acute inflammation of the small bowel and neighbouring glands which is caused by a specific germ, the *bacillus typhosus*. The word "typhoid" is derived from two Greek words. The suffix "oid" is from the Greek *eidos*, form, signifying that typhoid is like or resembles or has the form of typhus, a still more grave and fatal disease. Typhus is derived from the Greek, *typhos*, stupor, one of the characteristic and grave symptoms of typhus fever. Originally the two diseases typhus and typhoid were confounded and usually regarded as one disorder. Enteric also comes from the Greek *enteron*, bowel, so that enteric fever simply means bowel or intestinal fever.

Characteristics of Typhoid.

Typhoid fever has been in past years one of the more common of acute infectious diseases and has accounted for hundreds of thousands if not millions of lives. The death rate is usually high and is given by some as 18 or even 20 per cent. The average death rate is probably lower and not more that 10 or 12 per cent, but the rate varies in different epidemics, some of which are mild and others more malignant.

Complications of various kinds are of common occurrence in typhoid fever and add to the mortality as well as delay recovery. The convalescent period in typhoid fever is sometimes the most critical stage and always requires the best of nursing and medical care. Relapses are not at all infrequent and one often hears of a patient who is apparently making a good recovery, who suffers a backset, and perhaps dies in the course of a few hours or days.

Incomplete Recovery.

Although many people appear to make a fair or good recovery, it is nevertheless true that a large number of the victims who survive typhoid never acquire a full degree of health, strength, and vitality but remain invalids or semi-invalids permanently. Some weakness of one kind or another, and often associated with the digestive canal, is left behind. When a soldier is taken with typhoid it means a permanent loss to the army even though an apparent recovery takes place. Those who recover from typhoid fever often retain the germ infection for weeks, months, and even years and become what are known as "typhoid carriers." In other words, such a person, even though in apparent health, continues a source of infection and becomes a danger to his associates, relatives, and friends. The germs may be excreted in the motion or in the urine, and the greatest possible precautions as regards cleanliness are necessary in order to prevent the infection of others.

Causes.

Some persons are more susceptible to the typhoid bacillus than others and this increased individual susceptibility may be either hereditary or acquired. Age is an important consideration, for typhoid is far more common in youth and early adult life than in later periods. Like consumption the young man and the young woman under thirty are the favourite victims. As a consequence, soldiers, the vast majority of whom are from

eighteen to thirty years of age, are especially susceptible to attack.

Fatigue, nerve strain, and muscular strain must also be regarded as predisposing causes of typhoid. Anyone in a state of fatigue has less resistive powers against the invasion of disease and particularly of enteric fever, and therefore more readily falls a prey to the bacillus. There seems little doubt but that those who are fit physically and enjoy robust good health are able to digest or otherwise destroy the germs of the fever and so escape infection.

But the direct and specific cause of typhoid fever is the germ, without which there would be no fever. We have long known the characteristics of this micro-organism and it seems scarcely necessary to point out that typhoid is pre-eminently a filth disease and due one way or another to imperfect sanitation and want of strict cleanliness. Drinking water is a common source of infection and when the public water supply has once been contaminated there is every chance of the fever being distributed far and wide throughout the neighbourhood. In such cases the obvious remedy is to boil the water, a simple step to take, but one that is altogether too often neglected.

Flies and Typhoid.

It is interesting to note that the typhoid season corresponds very closely with the fly season and that the height of the typhoid fever curve comes in early autumn, usually in September or October. This is undoubtedly more than a mere coincidence and we now know as a matter of fact that flies play a most important role in the distribution of typhoid germs. We shall not succeed in eliminating typhoid fever without first getting rid of the flies which may be truly regarded as a more serious menace to our health than any other insect. When a fly has once visited the dining room or larder and sampled the milk and other food articles, they are all contaminated with germs some of which may be capable, of transmitting disease. The filthy habits of the domestic fly beggar description and ought to be sufficiently well known now to put each and all on their guard.

Medical Cleanliness Essential

To escape typhoid it is necessary to adopt the most stringent methods of personal hygiene and cleanliness. It is not only necessary to have all foods and drinks rigidly clean and free from suspicion, but it is equally necessary to maintain a high degree of personal cleanliness. No one should think of handling food without first cleansing the hands thoroughly and no one should go to the table without first cleansing both hands and face. The germs of disease are omnipresent and contamination of the hands may take place at any time. The old Jewish law forbidding anyone to eat with unwashen hands is a sound hygienic regulation and one that should be strictly followed by all who wish to maintain good health. It is also a good practice to rinse the mouth with some mild disinfectant such as one per cent Izal before taking food or at least once a day. The teeth should of course be kept clean and free from decay and disease.

Articles Liable to Infection.

Oysters are known to be liable to typhoid infection and have often been the means of spreading the fever. They should, in our opinion, be prohibited as an article of diet, if for no other reason. As a matter of fact their food value is small at best. Mussels, winkles, cockles, and similar shell fish fall into the same category as oysters and have all of them been guilty at one time or another of distributing typhoid. It seems that it must require a perverted appetite to eat shell fish of any kind.

Another source of possible infection is watercress. If the water in which the cress grows becomes contaminated there is always danger of infection and such beds should be abandoned permanently. Those who are responsible for growing watercress ought to take great care to see that the water supply is pure and clean and absolutely free from any chance of contamination.

Up to the Limit

A SHORT time ago a young man at a Y. M. C. A. camp went in swimming. He dived off the wharf into the water and sank at once without a struggle. His companions had him ashore in no time, but he was dead. He had not drowned, his heart had simply stopped beating. A week or two later another young lad in a village just a few miles away, died in practically the same manner. Neither of these were drowning accidents. The young fellows had weak hearts. When the sudden strain came, the shock was too much.

A while ago a young man fell out of a chair. He picked himself up with difficulty, and noticed that something was wrong with his arm. The doctor said it was broken. The injury was "set," and recovery came. But a little later the man stepped in a ditch and broke his ankle. The doctor said his bones were brittle. They would not stand any extra strain. Fortunately most of us have good hearts and elastic bones, but there is a point where even the strong heart and the healthy bone gives way.

Don't Go Beyond Your Limit

The same is true of the nerves, though nerves are much harder to see and examine and understand than bone and muscle. If you have taxed your nerves to the limit, something will happen which is equivalent to the break or the sprain in a bone or muscle. The natural advice which would follow a knowledge of these facts is be sure and not go beyond your limit, but this is not very practical advice, because few of us know exactly what our limit is. It is seldom, however, that we go to the limit in any of these things, or anywhere near the limit without warning of some kind. In other words, there is some condition of pain, or nervousness, or indigestion, or ill health before the collapse comes. If such warnings were taken as danger signals, and every man would go to a good physician or somebody competent to tell him what these danger signals mean, thousands and thousands of useful lives would be prolonged in comparative health and comfort. In normal individuals there is plenty of margin to endure all ordinary strain.

Dr. Kellogg says: "Most of the important organs of the body are in pairs, and each pair is more than capable of doing all the work ordinarily required of the two. This is true, for example, of the lungs, the kidneys, the adrenal glands, and the thyroid glands,

The same principle applies to organs which are not in pairs, as the heart, the liver, and the skin—the last-named organ presents a most excellent example of a wide margin of safety. The ordinary activity of the skin, resulting in what is known as the insensible perspiration, produces from an ounce to an ounce and a half of sweat per hour. When highly stimulated by heat and exercise, the amount of perspiration may be increased to thirty or forty times this amount, or forty to fifty ounces.

Extra Heart Work

The work of the heart during violent muscular action, when the muscles require six to ten times as much blood as is ordinarily required, is enormously increased, and in young and healthy subjects without the slightest injury to the body. In some of the organs of internal secretion the margin of safety amounts to ten or fifteen times the ordinary need. The eliminative power of the kidneys is far beyond that usually required. For example, a man of average size living upon a natural diet normally eliminates through the kidneys about one quart of excretion daily. By copious water drinking this amount may be readily increased to four or five quarts; and in cases of disease, as, for example, diabetes insipidus, the enormous quantity of fifteen or twenty quarts of liquid may be passed daily through the kidneys, and this continued for many years without apparent injury.

A Part of a Kidney

Certainly nothing could be more unwise than the useless curtailment of one's vital

safety margin. This question is one which frequently comes to the surgeon for decision; as, for example, in severe affections of the kidneys. A kidney may become so diseased that its removal becomes necessary. A healthy man could get along very well with one kidney; even two-thirds of a kidney will perform all the kidney work ordinarily demanded. The writer recalls a case in which the removal of a kidney was found necessary, and in twenty-four hours the only kidney which remained was found to be doing more work and better work than both kidneys were doing before the operation. But the vital question which interests the surgeon who is about to remove a kidney is this: What is the condition of the other kidney? More than one patient has lost his life after this operation because the one kidney left was unable to do the work required of it. Nowadays the surgeon employs means to inform himself of the state of each kidney before the operation.

In a person with a weak body or one organ weak or diseased, a small margin such as a short run to catch a tram car, a light cold, a small intestinal autointoxication in eating, the loss of one night's sleep, one more cup of coffee, one more cigar, one more bottle of wine, or another glass of beer, an extra draft upon the bodily mechanism, may be sufficient to snap the brittle thread of life and end all.

Tobacco Collapse

Thousands of men and women have so small a margin of safety that they would be terror-stricken if it could be graphically portrayed to them. These are the people who suddenly collapse, who are reported to die of heart failure. A tobacco user comforts himself with the idea that when he finds tobacco is hurting him he will quit its use. He says to one who condemns the use of tobacco on principle because it is a poison, "Tobacco doubtless injures some people, but it doesn't hurt me. I am not such a fool as to injure my body. When I find tobacco is hurting me, I will give it up." This sounds very well, seems philosophic and reasonable, but as a matter of fact it is a most dangerous sort of sophistry. A tobacco user never finds out that tobacco is hurting him until his margin of safety is used up. He is like a man whose life depends upon a limited store of food, and who has no means of knowing how much he has left, his food being doled out to him day by day as he needs it."—*The Health Home.*

Public Health and Alcohol

State Health Commissioner of Indiana, (U. S. A.)

BY J. N HURTY, M. D.

THE most important business before the business men to day is the business of the public health. And, further, if the business men do not very soon grasp this truth and act upon it, then our business men are not real business men, but business children. This is said of business men because they are in the saddle, and they virtually govern and run things; and they are doing a poor job. This is attested by our overhigh taxes, the failure of municipal government, the rottenness of legislatures, the noncontrol of venery, the omnipresence and awful destruction of syphilis, the prevalence of preventable diseases, the prevalence and non-reduction of crime, the prevalence and non-reduction of insanity, poverty and feeble-mindedness, the increase of defectiveness and delinquency, and the increasing consumption of alcohol as a beverage with its endless chain of abominations.

All of these evils, and more are upon us, not because we cannot remove and prevent them, but because we will not. The business men, who are our leaders and governors, are continually trying to improve and increase business, succeeding only partially, because they do not recognize that business,

like all other fundamentally good things of human life, depends on the moral and intellectual health of individuals. A community, a state, an empire, depends upon its healthy men and women, absolutely, for its morals, strength, and character. The blind, the halt, the sick, the diseased, the drug *habitues*, and the other defectives, have no part in the prosperity and happiness of a nation. They are a source of expense and weakness. They are a burden. They must be supported, and, practically, they are useless, deleterious and unnecessary.

Public Health Essential To National Welfare.

Assuming these statements to be true, then it follows—if a nation desires success, and is to be successful—its business men must look to it that its government closely follows the laws, so far as they are known, of national well being. After governmental organization the first absolutely necessary condition is the care of the public health; for without health, mental and physical efficiency with honesty, cannot exist. "The care of the public health is the first duty of the statesman," said the practical Disraeli.

Alcohol a Public Health Obstruction.

The public health is paramount. Do little or nothing to advance it, and the nation fails. Among the huge obstructions to health and efficiency, yes, to life, liberty and the pursuit of happiness, is alcohol. Because of its wide use, it has become the most awful of all the drugs which have fastened upon mankind. There is no health in alcohol. On the contrary, it is an agent of physical and moral ill-health.

Where squalor, immorality, bestiality and poverty exist, there alcohol and other drugs have sway. Insanity and crime trail after alcohol, and, in its wake come ill-health and disease. A high authority says: "Twenty-five per cent of insanity is due to syphilis; ten per cent is due to accident; forty per cent is hereditary, and twenty five per cent is due to alcohol." Whether or not these figures are accurate does not here greatly matter, for certain it is that alcohol is potent in the causation of insanity. It is also potent in the causation of crime, in the causation of poverty and feeble mindedness. Alcoholism brings sickness, and sickness induces alcoholism.

Alcohol, as a beverage, not only opposes personal health, but also the public physical and moral health, and also the public economic health. Every saloon is a public drug hop, not second in evil to the opium resort.

The Responsibility of the Medical Profession.

Now, what is the duty and the work of medical science in regard to alcohol? More than two hundred and sixty years ago the great philosopher, Descartes, said: "If ever the human race is raised to its highest practicable level, intellectually, morally and physically, the science of medicine will perform the service." Descartes was not a physician, but scholars agree that his was the most original mind of this latter age, and that more than any other thinker he has moulded and directed modern scientific and speculative thought. Accepting this dictum, I ask again: What is the duty and work of medical science in regard to alcohol? From our premise, if it is accepted, that alcohol be absolutely condemned as a beverage, and used sparingly, even reluctantly as a medicine, it is plain that the doctor, as the representative of medical science, has a fearful, duty to perform.

Let the doctor, then, be up and doing. Let every doctor lift where he stands. Let him not dare to shirk his duty. If alcohol is not killed by science of medicine, it will continue its destructive course, for there is no other Hercules to dispatch it.

After considering the teachings of medicine in regard to alcohol, and doubtless considering their own observations, the high military authorities of all the great nations now at war have forbidden the drinking of alcoholic liquors by their soldiers, declaring that this is done in the interest of health and efficiency.

It has been auggested by the editor of a great magazine that possibly now the raging European War is, in some degree, a war against intemperance. "After all," he argues, "our development is directed by a force or forces not ultimately under our control and higher and away from our desires and efforts." How wonderful, how passing strange it would be, if the perspective of time should disclose that a war has resulted in making man more obedient to the law of his well being; of bringing him into closer harmony with his environment!

My life experiences have forced upon me the convictions I have expressed. Alcohol is truly a greater enemy to mankind than any other drug, and we suffer incalculably from its poison, not because we cannot get from under it, but because we will not. However, I would be a rank pessimist and unworthy if I did not believe sufficiently in mankind to strongly hope that the time is not far distant when we shall know the unreason of alcohol and then put it away.

Health Hints

BY DAVID PAULSON, M. D.

PREFERENCE should always be given to solid, substantial foods that require thorough mastication. When monkeys are fed exclusively on soft foods, they are likely to develop pyorrhea, or infection of the gums. Thorough mastication not only excites the flow of saliva and the gastric juice, but it also stimulates the intestinal movements.

Eating between meals disturbs the rhythm of digestion, encourages the activity of the germs, and thus favours auto-intoxication.

Dr. L. Duncan Bulkley, the noted New York skin and cancer specialist, secures most phenomenal results in inflammatory skin disorders by prescribing an exclusive bread and rice dietary for five consecutive days. Lettuce, parsley, cooked spinach, and other varieties of greens, cooked carrots, and similar foods, by their bulk stimulate the activity of the intestines, and their rich contents of mineral salts are beneficial for the blood. So it can be truthfully said that such foods clean the alimentary canal and the blood at the same time. Fruits both raw and cooked serve the same purpose

If we want to enjoy simple, natural health we must return to the simpler foods of uncivilised people. The free use of wholemeal biscuits and bread is a step in the right direction.

Such fierce spices and condiments as mustard, pepper, Worcestershire sauce, etc., cause spasm of the pylorus, delaying the emptying of the food from the stomach, and have a tendency to produce nervous spasm at different points in the alimentary canal, thus promoting stagnation of its contents and at the same time encouraging hyper-acidity and intestinal catarrh.

God has put a flavour into every food, just as He has put fragrance into every flower: and no food is in any way improved by adding to it stinging, burning, blistering, irritating substances.

Only a small amount of poison can be generated during the first twenty-four hours after the food is eaten; and that is the normal time for the food remnants to traverse the entire length of the alimentary canal. But among civilised people it more often requires forty-eight and sometimes even seventy-two hours or longer.

Such people have already discovered that they feel better after taking salts and various cathartics. But that is only substituting artificial dysentery for an abnormal stagnation. The ordinary laxatives increase the spasm of the lower bowel, irritate the mucous memberane, promote mucous colitis, and thus actually increase the absorption of toxins.

Provided there are no adhesions or other conditions requiring surgical interference, it is nearly always possible, by using a larger amount of food possessing bulk, and eating

more liberally of fruit, to secure a normal bowel movement in the morning. For those who are not in the best of health, it is highly advantageous to take a small enema before bedtime. Securing two bowel movements daily in the majority of cases increases physical efficiency and a sense of well-being from fifty to a hundred per cent in a few months' time.

Dr. Lane, the brilliant English surgeon, was the first man to suggest liquid paraffin as a substitute for medical laxatives. Being a mineral oil, it is neither digested nor absorbed, and it cannot decompose in the alimentary canal. As it is merely a lubricant, it does not create the laxative habit.

Of all the different medical laxatives, senna and castor oil, the old-fashioned remedies of our forefathers, are perhaps the simplest and the least harmful. Metchnikoff, the eminent French scientist, developed the Bulgarian bacilli idea with the view of helping to disinfect the colon. In many instances these are undoubtedly advantageous. In other cases they appear to render no benefit.

Many persons are suffering intestinal stagnation simply because they have prolapsed abdominal organs, which produce kinks or strain of the intestine. Such can often be wonderfully benefited by wearing for a time properly adjusted abdominal supporters, and at the same time taking such simple exercise for strengthening the abdominal muscles as lying down and carefully raising the heels six inches to a foot from the floor and lowering them again, then raising the head and shoulders a few inches, repeating half a dozen or a dozen times once or twice a day. These exercises should be taken cautiously at first, until the muscles are accustomed to the exertion.

Above all things, our vast army of sedentary people need more outdoor exercise. While we cannot reverse modern conditions, we may introduce into our daily life more normal conditions.

Many who are suffering from auto-intoxication can secure amazing improvement by adopting a sane, sensible plan of living. Others will need a careful physical examination and intelligent advice by some competent, conscientious physician.

Corsets Old and New

By James Frederick Rogers. M. D.

The members of the medical profession and the lay teachers of health have decried the use of corsets from their very entry into the fashionable world. Yet if one looks into the pages of any medical journal of the last few years, he will see advertisements of these very same pieces of apparel, and will even find articles by physicians recommending their use as of benefit to the wearer.

Does this invasion or admission of the corsetier with his wares into the very inner sanctum of the medical world indicate that the profession has discovered that it has made a mistake all these years in preaching against stays, and been at last persuaded that it was in error in its notions, and that the women were right? So it would seem. But there are corsets and corsets, and as a matter of fact the antagonism of the physician to the use of the ordinary corset is stronger to-day than ever before. The corsets advertised and prescribed by the physician for his patients, are of special design, and are often for the purpose of helping to repair the damage done by the previous use of the ordinary corset. Corsets have been used by Dame Fashion for more than one end, but it remained for the physician to invent one to remedy the disastrous results produced by those of Dame Fashion's contriving. It was a case of fire fight fire, in which the physician had no choice of weapons.

The use of the corset has at least antiquity in its favour, for it dates from very early

times. Strange to say, a corset of some sort was a part of the apparel of the early Grecian ladies, and, if we can trust their portraits, they drew its lacings as tightly as any woman of more modern times ever dared.

The fair damsels of the Middle Ages wore stays, and the good and courteous knight accepted the lady of the waspish waist without remonstrance—possibly because there was no other kind to accept.

The fashion seemed to appeal to the poets, or at least they found their bread buttered by tuning their harps to the mode. Dunbar, referring to a company of damsel, sings, "Their middles were as small as wands." Even those of humbler origin must have adopted the fashion; for we read in Chaucer of how the waist of the carpenter's wife was as "gentyll and small as a weasel,"

There were prosy folk, however, who were not pleased with these "whalebone prisons." Bulwer, writing in 1653, speaks of "another foolish affectation there is in young virgins, though grown big enough to be wiser; but they are led blindfold by a custom to a fashion pernicious beyond imagination, who, thinking a slender waist a great beauty, strive all they can by straitlacing themseves to attain unto a wandlike smallness of waist, never thinking themselves fine enough till they can span the waist. By which deadly artifice, while they ignorantly effect an august or narrow breast, and to that end by strong compulsion shut up their waists in a whalebone prison, they open a door to consumption."

A writer of 1731 makes this ambiguous remark: "Even this female armour is changing mode continually and favours or distresses the enemy continually according to the humour of the wearer."

As the last-quoted critic remarks, the corset has changed greatly in some respects from age to age. For a time it was used to accentuate the bust, and at another to minimize this feature. It has usually compressed the waist, though the degree of constriction has varied greatly. Just at present it has travelled low down and exerts its pressure over the hips and lower abdomen, the least harmful position in which such constriction could possibly be used. Unfortunately, judging from past vagaries of fashion, the corset which allows an ample waist will not long remain in style, and even at present it is not generally adopted.

The body has a wonderful way of accommodating itself to circumstances, even adverse circumstances; and for this reason tight lacing of the waist has not produced the disastrous effects which would naturally be expected from so abnormal a condition. This does not mean, however, that the effects are not bad. Because the person does not die an early death is no sign that a deformity is not a bad thing, or that she might not have lived longer and have been in better health.

Ordinary corsets produce deformity, there is no question about that, and in fact this is what the tight lacer is aiming at. But the deformity of the lines of the body is accompanied by internal deformity of a more serious nature. In order to carry on the functions of the body we must have a certain amount of liver substance, a certain capacity of stomach and of intestine. The pressure of the corset comes especially on the liver, the stomach, and the intestines. These cannot shrink in size without diminishing the total activity of the body; so the next best thing is for them to shift their position and find room elsewhere. Usually the only room possible is lower down in the abdomen, and they make the best of a bad matter by moving into this region.

Those who have examined the bodies of tight-lacing women at autopsy have long noted deformities of the liver brought about from this cause, but only recently have the more disastrous effect upon the stomach and intestines been discovered. These organs are held in place normally by strong fibrous bands; but by the continual pressure of the waist constriction, these bands become stretched,

and the organs slowly descend toward the pelvis. They are forced out of shape and have their openings misplaced, and in their new positions they cannot, for mechanical reasons alone, do their work so well as they did before, while the effect on the nervous system of their dragging downward from their relaxed bands is also disastrous. With the deformity of the constricted waist always goes the second and compensatory deformity of an enlarged and protruding abdomen, because these organs have been pushed downward to a new location. The deformity is added to by the fact that on account of the pressure upon the waist, the fat that would have naturally accumulated at the waist line is deposited farther down, in the abdomen, and especially about the hips.

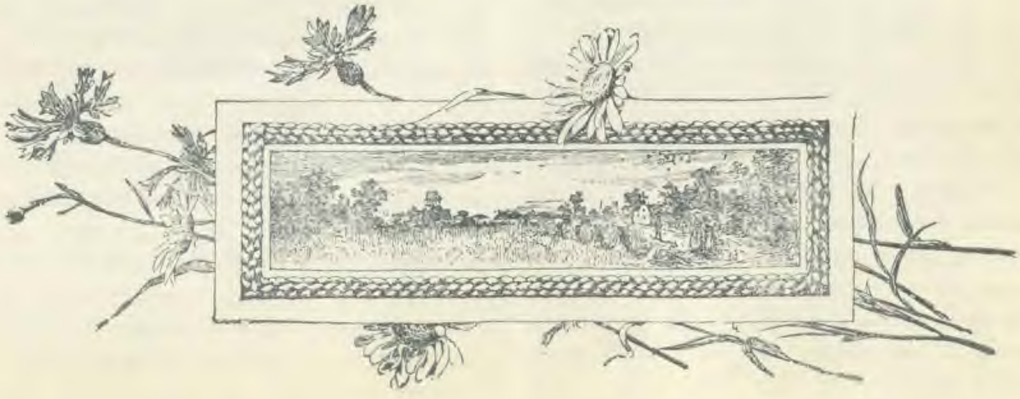
One other bad effect of the corset is that it takes the place of the muscles of the back and abdomen which form the natural support, and these become weak and flabby, allowing more abdominal deformity and more displaced accumulation of fat, and fail to sustain the abdominal contents.

The best cure for the bad effects of the corset is prevention. In fact, this is the only cure for drooping organs and abnormal deposits of fat. However, the damage being done, as a means of reducing the deformity and of lifting and holding the displaced organs more nearly in their normal position, physicians have recently invented the use of the elastic abdominal belt, or of corsets so shaped that they afford strong pressure on the lower part of the abdomen and little at the waist line. The corset itself holds up the falling organs, thus relieving to some extent the digestive troubles and the abnormal fatigue and other symptoms from which these patients suffer.

Once in a while an individual is born without the proper suspending ligaments for the abdominal organs. For these an artificial support of this kind is about the only help, save that of strengthening the abdominal muscles. These cases are rare, so that the use of the corset as an abdominal support is often the result of the previous use of the ordinary corset.

For the normal person there is no good use for corsets. The clothes can as well be hung from the shoulders, as they were before corsets were invented. Young women would better be dressed as are the children of Sir Fredrick Treves, so that they can at any time kick as high as their heads, if they like.

If the corset is worn at all, it should be made to come down over the hips, and its constricting effect should begin far down, at the pelvis and the very lowest part of the abdomen, and decrease from there to the waist line. Natures's corset of strong elastic muscles is best in every respect, not only for health, but for the production of good looks



Alcohol, Narcotics, and Crime

EDWARD WALLACE LEE, M. D., IN LIFE AND HEALTH.

In October, 1914, Dr. Lee read a paper before the Medical Association of the Greater City of New York, on "Physical Defects a Factor in the Cause of Crime," which was afterwards published in the *New York Medical Journal* of December 26. It was not a temperance lecture, but a scientific paper, presented by a physician to a company of discriminating physicians.—Ed.

The abuse of drugs enters largely into the cause of crime, and there is no strong argument against the crusade that is being made to wipe out the pernicious drug habit. But certainly it does seem somewhat inconsistent to make such an emphatic war on drugs while alcohol is being dispensed *ad libitum*. The control should be more equally divided. As a factor in the cause of crime I think that the proportion of drugs to alcohol is not more than two per cent.

The vicious drug takers are to be found mostly in our cities; in rural districts one seldom finds a vicious drug taker, the habitues in rural districts being generally the victims of physicians who have used morphine and cocaine indiscriminately to quiet pain and relieve suffering, without having the interest or knowledge to diagnose properly and treat scientifically.

I believe it has been absolutely proved that alcohol is not a food. Taken internally, it is nothing but a narcotic. The recent order issued by our Secretary of the Navy regarding alcohol should place him as one of the greatest benefactors of the human race. The great European war lords, realizing its harmful effects, have forbidden its use in their armies. Biological investigation demonstrates the fact that it has a definite degenerative effect on the cell and germ life. The most typical and commonest enample of blastophthoria, meaning deterioration of the germ, is that of alcoholic degeneration which the spermatozoa of alcoholics suffer, like the other tissues, from its toxic action on the protoplasm. The result of the intoxication of the germs may be that the children resulting from the conjugation become idiots, epileptics, dwarfs, and feebleminded. A man who is an imbecile or epileptic as a result of the insobriety of his father, preserves the tendency to transmit his mental weakness or his epilepsy to his descendents, even if he himself abstains completely from alcoholic drinks; thus proving, as I believe, that it is not the craving for alcohol that is inherited, but a degenerate physical condition due to blastophthoria, which causes degeneration and deterioration of mental and physical stamina.

Drink makes men and women not only gross and sensual, but also negligent, imprudent, and irreflective. The rum shop takes

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Experience shows that, almost quicker than any other physical agency, alcohol breaks down a man's power of self-control. But the physical evils of intemperance, great as they are, are light compared with the moral injury it produces. It is not simply that vices and crimes almost inevitably follow the loss of rational self-control, which is the invariable accompaniment of intoxication; manhood is lowered and finally lost by the sensual tyranny of appetite. The drunken man has given up the reins to a fool or a fiend, and he is driven fast to a base or utterly foolish end.—O. S. MARDEN, IN "THE MAKING OF A MAN."

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many from their homes, while drink directly diminishes population. Other things being equal, it is found that the nations which abstain from alcohol, or those which are moderate consumers, are more prolific than those addicted to drink.

We find the economic feature of the first order, to which the majority of economists are blind, to be the short-sighted policy of rating the alcohol industry as a source of wealth and welfare of nations. What an amount of labour, human power, and valuable land is employed in producing this mischievous substance which, although useful in pharmacy and other industries, neither nourishes nor strengthens, but deteriorates the organism and leads to degneration of the race.

Fifty Doctors Against Alcohol

IN 1911, in connection with the annual meeting of the British Medical Association, fifty medical men gave addresses in Birmingham and the surrounding district, on alcohol and the human body.

The following compilation of the leading thought expressed in these fifty addresses, is particularly valuable as a condensed statement of what is recognized and supported by the very best evidence up to the present day:—

That alcohol does not quench but awakens thirst.

That alcohol is of no value when work is to be done.

That alcohol diminishes the quality and total output of manual work of all kinds.

That alcohol causes great deterioration of the quality of intellectual work.

That alcohol blunts perception and feeling, impairs moral sense, and impedes intellectual processes.

That alcohol, when taken by children, checks growth and development, both mentally and bodily.

That alcohol weakens the power of self-control, thus leading to immorality and crime, proverty and misery.

That alcohol has a narcotic poisonous action, and must be classed with chloroform and ether.

That alcohol predisposes both directly and indirectly to infectious fevers.

That alcohol is now known to be one of the most important factors in rendering patients more susceptible to the attacks of the tubercle bacillus, and so to tuberculosis.

That in pneumonia and typhoid fever alcohol does more harm than good.

That alcohol hastens the end in a fatal illness, but prolongs the duration of the illness in those cases in which the patient recovers.

That alcohol predisposes to heat stroke in hot weather.

That alcohol causes rapid loss of heat in cold weather.

That alcohol causes degeneration of the heart and blood vessels.

That alcohol is one of the great predisposing causes of heart failure and cerebral hemorrhage.

That alcohol often causes neuritis, or inflammation of the nerves.

That alcohol is one of the great causes of degeneration, or too rapid aging of the tissues of the body.

That those who take no alcohol can perfrom more work, possess greater powers of endurance, have less sickness, and recover more quickly than nonabstainers, while they are unaffected by any of those diseases specially caused by alcohol.

That the great amount of drinking of alcoholic liquors among the working classes is one of the greatest evils of the day, destroying more than anything else the health, happiness, and welfare of those classes.

That the universal abstinence from alcoholic liquors as beverages would contribute greatly to the health, prosperity, morality, and happiness of the human race.

That the general adoption of abstinence from all intoxicatiug beverages is the most natural, surest, simplest, and quickest method of removing the evils which result from their use, and is the first great step toward the solution of many of the most difficult social problems by which we are confronted.—*Medical Temperance Review.*

Editorial

Housing; Its Relation to Disease in India

Among the many questions in the prevention of disease that are receiving the attention of reforming bodies is that of housing. When we consider the large percentage of time that is spent in the home, it is readily discernable that it is an important factor for or against the transmission of disease. A family that is indifferent in regard to the cleanliness of its home surroundings, quite willing to be ignorant regarding the laws governing its being in that home will add nothing to the prosperity of the human race. A nation, the majority of whose units are made up of such families will be a backward nation. The president of a great nation was born in a log cabin, but the conditions within and without that cabin were the best possible. Poverty is but a small factor in this subject as the poorest can be clean and live in accordance with the laws of sanitation and hygiene even though it be in the most humble of dwellings.

We are accustomed to look upon the nations of the Orient as an example of all that is malignant in bad housing conditions, but, although it is not the rule, yet in large cities of the Occident we find conditions far from what they should be. These conditions in our large cities are receiving attention and many a dirty, cluttered back alley is being converted into a flower garden and developing conditions that make respectable dwelling place.

In the consideration of housing conditions in India the country may conveniently be divided into sections, viz. the villages,smaller towns, and the cities. The living conditions in each of these vary widely. In the villages and small towns most of the houses are made of mud. They are huddled too closely together, are too few in number, and are meanly built, having neither ventilation nor light. The village site is often lower than the ground surrounding the village, and cultivation is carried on right up to the living quarters. Then, to add to this picture of squalor the stock is allowed to mingle freely with the dwellers in the village. All of these conditions, operating naturally, bring about results anything but sanitary in nature.

In our cities we meet much the same conditions of over crowding, only somewhat worse, as here the inhabitants live two, three, and four tiers deep. The houses, although built of brick, are located on some narrow alley three or four feet wide. This, with the high buildings shuts out most of the light and ventilation and makes it extremely hot in the hot season. Here again the rooms built in these tenement houses are small, without adequate light and ventilation. Often one of these small rooms is occupied by a half dozen tenants.

Bad housing conditions make themselves felt by the spread, directly and indirectly, of the infections contagions diseases among which the most common are Tuberculosis, Typhoid Fever, Dysentery, Plague, Smallpox and Cholera. These are diseases that are spread by means of germs. The more closely people are huddled together, the more directly is the contagion spread. This is especially so in those diseases that break out in a virulent, epidemic form. The larger the number of people who are brought in contact with the one who is ill, the greater the danger from the contagion. This must necessarily be the case because of the direct social intercourse that becomes necessary in these closely packed living quarters.

The villagers have already learned the meaning of this to some extent, as when an epidemic of Plague comes along they scatter

to the fields in improvised places of shelter. The more thickly people are living together, the greater the number of victims claimed by a disease in a given time, and the harder to stamp out the disease. Indirectly, bad housing tends to spread these infectious diseases by first lowering the vital resistance, thus throwing the body open to attacks from any one of them.

One of these diseases mentioned opens a special line of thought in relation to bad conditions of housing in our towns and cities. This is Tuberculosis, the great white Plague. Although it is only recently that a special commission has been appointed to investigate this important subject, and although statistics on the subject are lacking; there is a strong, growing feeling among the medical authorities of India that Tuberculosis is exacting no small toll yearly and that the disease is steadily on the increase. Whatever may be the outcome of this special investigation, it is quite safe to predict that bad housing conditions, to which may be added the purdah system, is a strong factor in the spread of Tuberculosis in India.

Four main factors have been advanced as a cause of the spread of Tuberculosis, viz. heredity, germ carriers, Bovine Tuberculosis and direct contact. The platform upon which the first one of these, heredity, was based has been crumbling away for some time until now it has completely failed. The second, the carriers of the germ, includes dust, flies, etc. The question of dust, as a carrier of the Tuberculosis germ has received considerable attention with the result that it is considered a very small factor. This would especially be the case in India where the the sun exerts the influence that it does. The question of the flies has a more tenable basis. We might conclude from this that there is some chance at least of the second being a factor in the spread of this disease. Number three, the relation between Bovine Tuberculosis and Human Tuberculosis, has long been a subject for controversy, but the 135th "International Congress of Tuberculosis" summoned enough courage to adopt in the form of a resolution that there were in all probability cases of Tuberculosis spread from the cow. Allowing this to be the case, to a nation that eats as little meat and always boils her milk before using, as India does, the cow is a minor factor in the spread of the great White Plague. We now come to the fourth cause, the one on which we will have to throw the greater responsibility for the spread of this disease in India, direct contact. This includes those customs which we follow in maintaining social intercourse. This again brings us to the subject of housing. Over-crowding in ill lighted and ill-ventilated quarters and the purdah system, which causes confinement in such quarters, make the very best conditions for the spread of this disease.

There are so many obstacles that loom up, that at first thought they would appear to form an impassible barrier against the improvement of housing conditions in India, that one makes suggestions along this line with great timidity. To tell a man that his house should be larger with windows and ventilators, that it should be located some distance away from his neighbour's house, and that he should keep his cattle out of his compound, when he and his forefathers have lived this way for centuries, yes, ages, and since such changes bring about additional expense, and he does not see the necessity, would appear absurd. A man accosted in this way about such changes under existing circumstances might not go quite far enough to think that you had just emerged from a lunatic asylum, but his ideas of life are so vastly different from yours that he has to allow a great deal for you, while you are pitying him from the bottom of your heart. Yet, if one became dicouraged and dropped the matter here, centuries would pass by, and we would not be any farther ahead than we are to day. This is an instance in which the constant dropping of the water wears away the stone. It is a great encouragement in touring among the villages

to see now and then man in a village who has acquired knowledge enough to build himself a house along fairly sanitary lines, and around which there is a nicely cultivated garden and fruit-bearing trees. These instances are the outcome of the constant dropping of the water for the last century or two. The same good work of education is bound to bring about multiplied instances of such progress.

To allow each man in a village more room necessarily means that the village sites will have to be extended. This with the immense population of India will upset to some extent the economic conditions of the country. But a careful and judicious tilling of the land already under cultivation will more than make up for the extra land that it would take to extend the village and city sites. This means that the wear and tear of the land must be kept up by crop rotation, plowing under of nitrogenous plants, and the use of land dressing. Low, marshy wastes must be throughly drained, and high arid tracts must be fertilized, irrigated, and converted into cultivated tracts. If the land were yielding to its limit, the amount of land needed for the extension of villages and cities would be made up for many times over. In the history of the past it has always been revealed that the adoption of the principles of sanitation and hygiene by a nation increased its efficiency in every line.

Another one says the people could not afford to extend their houses and make changes necessery to bring about such reform. Ragged dirty pugarees, kurtas, and dhoties do not mean beggars. There is many a man in a village that has enough rupees buried beneath his miserable mud hut to build a dwelling good enough for anybody. If this very day those who have sufficient means to bring about these reforms could be made to see the necessity, we could be a long way toward the solution of this great problem. This start would so increase the prosperity of the country that many of those now unable to make these changes would be able to in the near future.

In our cities the same plan can be profitably carried out that is being inaugurated in England. Of late we have heard a great deal about the "Garden City movement." Many a rubbish-laden back alley has been converted into a garden of roses in English towns. It is far more essential to the population of a city to have, where they spend most of their time, clean sanitary quarters, than to have a large maidan which they visit once or twice a week or a month. If only one plan can be followed, far better a small maidan around each home than one large maidan in the city. The reconstructors of the cities in Belgium, which country has for months been the battle ground of three nations, are planning on the adoption of the garden city idea in raising up the cities that have fallen in ruins in the recent war.

Why not garden cities in India? It would do away with the ubiquitous tenement house, or flat that carries with it all that is vile in litter, rubbish, filth, lack of light, and poor ventilation and crowding. These changes would go a long way toward coping with the great White Plague.

Mother and Child

Catch Up Your Lost Sleep

TEMPORARY loss of sleep is sometimes unavoidable. Baby may be sick. The day's work may not end just as you have planned it. Emergencies often arise which cut into one's rest, but doing without sleep is like trying to run a waggon on three wheels or a bicycle on one. They don't run well. They were never intended to run that way. But when you have lost sleep, plan to make it up.

The way some people act about sleep you would think it was mankind's greatest enemy. The less they get of it, the happier they are (for a while), and feel that they are beating nature at her own game when they can keep going without sleep for sometime and not collapse, and often boast about how fit they feel on a narrow margin of sleep.

The North Carolina *Health Bulletin* says:—

"Instead of resorting to drugs when that wearing feeling beings to steal over one, make a firm stand against them. Substitute the sleep habit for the drug habit.

"For tired, nervous women, one day a week in bed will do wonders, and save time and money. It is important for high-strung women to learn how to be calm.

"When a woman begins to get cross over trifles, and the slightest disagreement makes her feel like jumping up and down, then she must not go and get a cup of tea or medicine, but start in for a series of rests. Give herself the rest cure, and she will not have to go away from home to do it.

"Sleep more; that reposeful manner that is so refreshing to see depends on abundant sleep. Adults need seven and one half to eight and one-half hours sleep daily. You can't do your best work on less. It is a mistake to try it."—*Selected.*

Training the Appetite of Children

The Results of Improper Feeding—Suggestions About Proper Nourishing

BY LAURETTA KRESS M. D.

IMPROPER feeding is the most active cause of infantile disease. A great deal of suffering and many premature deaths result from digestive derangements.

How many puny children, with shrunken, wasted frames, would quickly become happy, healthy, and well-nourished, if fed according to their requirements! There is rarely any lack of food, for mothers are only too willing to provide for their little ones. It is for want of food *which they can digest* and assimilate that so many suffer.

Regularity of Feeding

The pernicious habit of cramming something into the child's mouth every time it is opened, is responsible for endless mischief. Regularity is a necessity in infant feeding, and the frequency of the meals must be determined by the physical condition of the child.

Few children cry from hunger. Pain resulting from overfeeding is a much more likely cause; and a little warm water internally, or a warm application to the stomach externally, will usually give speedy relief. Whatever is done, more food must not be crowded into the stomach merely to hush the child's voice. Many a voice has been forever hushed in this way.

Natural Nourishment

The best food for babies is undoubtedly mothers' milk. Whenever possible, infants

should be nursed for ten or twelve months. Children who have inherited good constitutions do not require more than five meals—four in the daytime, and one at night—in each twenty-four hours, except during the first two months of infant life. Between the fourth and the eighth month, the interval should be prolonged to five hours; and at the end of the first year, only three meals a day need be provided, the child being allowed to sleep soundly all night.

To break a child of night nursing, a little warm water may be administered in the bottle in place of the customary milk. The baby will drink freely and then drop off to sleep again.

Feeble or premature children must be fed rather more frequently than those of sounder constitutions, and they require extra care.

Comforters Condemned

Never allow an infant to sleep at the breast or with a feeding bottle in its mouth. Let it stop eating as soon as its hunger is appeased. Science rightly condemns the baby "comforters," so commonly employed, because they cause a waste of saliva, and tend to cause posterior nasal growths. Nor is it advisable to give sugar teats or sweets to soothe a crying child. Some mothers administer sugar and water the first few days of life, but this is often responsible for disturbances. Herb teas are unnecessary and often harmful. Plain water is by far the best drink for young children.

Artificial Nourishment

When the mother is unable to suckle her child, so that artificial feeding becomes a necessity, cow's mik, properly sterilized and diluted, is the best substitute. Since it is difficult to keep the nipples and tubes of feeding bottles clean and free from germs, it is much better to teach the baby to eat from a spoon. Although more of the mother's time is taken up by this method, the results justify its expenditure.

At the third or fourth month, zwieback (twice baked bread) finely grated or powdered, or pulverized granose flakes, may be added to the milk. Both of these products are much more easily digested than the majority of so called "infant foods." The addition of something of this character prevents the formation of curds.

The present is an age of commercial fraud. Notwithstanding the stringent laws against food adulteration, this nefarious practice is on the increase. During the summer months, milk is very subject to the addition of flavouring matter and preservatives. Hand fed infants, dependent as they are upon milk and milk preparations for subsistence, are the chief sufferers. Milk unpasteurized is quite unsafe, and should never be used.

The Weaning Process

The proper time for weaning is from the tenth to the twelfth month, the change of diet being made gradually. When the child reaches the age of nine months, commence to substitute occasionally simple soups, crushed granose or zwiebaok, and ripe or stewed fruits, for the regular meal. Adopting this plan, when the infant is twelve months old, nursing may altogether cease.

Very gradually additional articles may be introduced into the daily bill of fare; but meats, cheese, coarse vegetables, tea, coffee, condiments, spices, pastry, rich puddings, and all other substances difficult of digestion, must be studiously avoided.

Value of Ripe Fruit

Nearly all children crave fruit, and this is perfectly natural. Ripe fruit and all kinds of fruit juices may be provided abundantly, for they are well adapted to the digestive organs of the young. When fruits are eaten milk should be temporarily discarded. The scraped pulp of raw apples or pears, ripe peaches, and in fact any of the semitropical fruit products, may be eaten at the regular mealtime, for the fruit furnishes just the material needed for the plump little bodies so characteristic of early childhood.

Why It Pays To Lie Down

YOU go to bed tired; you wake up rested —that is the proof that you need sleep—heaps of it. And the younger you are the more you need. The baby sleeps, or should sleep, almost all the time. A very young child needs a great deal of sleep. As we get older the need of sleep is less and less; until at last we fall into that last, long sleep, "from which no traveller returns."

Some time ago I was talking about this to a bright young fellow. He said, "I get along with very little sleep." I stood up beside him and asked him to count my pulse. He did so. "Seventy-four," he said, after a minute. Then I lay down on a couch and, after a few minutes, asked him to count the the pulse again. "Sixty six," he announced with some surprise. "That is just the point," I said. "When you are lying down your heart is saving itself at the rate of about eight beats a minute, nearly five hundred an hour, about twelve thousand a day. When you are lying down and asleep the saving is still greater."—*Dr. Latson.*

How Mother Brought the Babies Home

THE evening whistle of a small suburban town blew sharply, and all the mothers of a certain resident street began calling their little ones in from play to to their suppers.

There followed the usual scene of protests, tears, ond open rebellion, with mothers scolding, threatening, and in some cases bodily dragging their struggling offsprings home by main force.

In the midst of this scene of infantile weeping and wailing and gnashing of teeth, appeared a young mother, gentle of face and quiet of manner. In one hand she carried a child's harness of jingling bells, in the other a toy whip.

She approached a group of small children making mud pies' and singling out her own—a boy and a girl of five and three—she deftly strapped the jingling harness over the boy's arms, placed the reins in the hands of the tiny girl, and with a merry "Gee up horsies!" and a playful snapping and flourishing of the toy whip, this wise young mother gaily pranced her babies home.—*Selected.*

Are Desserts Superfluous?

BY GEORGE E. CORNFORTH

THAT depends. If the meal is complete without the dessert, then, of course, the dessert is superfluous. But if the meal is so planned that the dessert is a necessary part of a well balanced menu harmonizing with and supplying food constituents lacking in the rest of the meal, then the dessert is not superfluous. Care should be taken in the selection of the dessert that it may not be out of harmony with the rest of the meal. A fruit desert should not be added to a dinner of coarse vegetables, because fruit and vegetables do not digest well together; neither should it be a heavy, rich dessert when the rest of the meal consists of rich, nourishing food; nor should a dessert lacking in nourishment, though pleasing to the taste, be served with a meal of the less nutritious foods.

In this article I shall consider fruit desserts and gelatine desserts.

Fruit desserts include such desserts as pressed fruit pudding, brown Betty, fruit whips, and other fruit mixtures. Here are some simple fruit desserts:—

Fruit Mold

3 cups raspberry, strawberry, blackberry, or cherry juice
Sufficient sugar to sweeten to taste
¼ level teaspoon salt
½ cup wheat meal or cream of wheat

Heat the fruit juice to boiling in the inner cup of a double boiler placed directly over the stove. Whip in the meal, stir till the juice is thickened, and then set into the outer cup of the double boiler, which contains boiling water, and continue cooking for one hour. Then pour into molds wet with cold water, and cool.

When thoroughly chilled, turn from the molds, and serve with cream or whipped cream or—

Foamy Sauce

2 cups milk
¼ cup sugar
2 level tablespoons cornflour
A few grains salt
1 egg white

Stir the cornflour smooth with a little of the milk. Heat the remainder of the milk, with the sugar and the salt, to boiling in a double boiler, and stir in the cornstarch. Allow to cook a few minutes, then whip the hot sauce into the stiffly beaten egg white, and return the sauce to the double boiler long enough to cook the white of the egg, stirring constantly. This will cause the white to become incorporatedwith the sauce so that it will not rise to the top after the sauce cools.

Raisin and Nut Fluff

¾ pound raisins
½ cup walnuts
1 egg white
½ cup heavy cream
1 level tablespoon sugar
½ teaspoon vanilla

One method of preparation: Wash the raisins and let them soak in cold water for twelve hours. Drain off the water. Rub the raisins through a colander. Grind the nuts through a food chopper with the finest cutter. Mix the nuts with the raisin pulp. Beat the egg white very stiff and fold the raisin and nut mixture into it. Whip the cream, with the sugar and vanilla, and serve a spoonful of cream with each portion of the fluff. The water in which the raisins soaked makes a splendid drink, or it may be mixed with other fruit juices.

Another method of preparation: After washing the raisins grind them through a food chopper, using the finest cutter. Mix with them about one-half cup of cold water; the amount will vary according to the freshness of the raisins. Then mix the chopped nuts with the marmalade, and fold in the beaten egg white

Gelatine Desserts

We do not recommend the use of animal

gelatine, not only because it is an animal product, but because it is made from hoofs and horns, and, we are told by persons who ought to know, eyes, and other organs and parts of the animal which cannot be used for anything else.

A most satisfactory substitute for animal gelatine is agar, a seaweed that grows in the Japan Sea, also farther south along the eastern coast of Asia, and, to some extent, along the western coast of America. In Japan the raising of seaweeds for food is an important industry, some of the people leasing from the government portions of the seacoast where the water is shallow, and making it their business to plant, cultivate, and harvest these water plants. A large amount of agar-agar is exported from Japan each year. It is used in bacteriological laboratories for making cultures in which to grow germs.

Agar agar is really not gelatine, though the name vegetable gelatine has been given it because it can be used as a substitute for animal gelatine in making desserts. Agar-agar is cellulose and has no nutritive value. The nutritive value of desserts made with agar-agar is due to the sugar and fruit juice used in them. It might be stated here also that animal gelatine has slight nutritive value. The body does not use it in forming tissue.

Besides making a good substitute for animal gelatine, agar agar is valuable for the relief of constipation. To prepare it for use for this purpose, soak about one-half ounce of the agar-agar in about four quarts of hot, but not boiling, water for one half hour. Turn in a colander to drain off the water. Then put the agar-agar into a second quantity of hot water for fifteen minutes. Drain, and soak the third time. Then drain well. This successive soaking in hot water and draining is to remove the spongy smell and taste which the agar-agar has.

As a help in the relief of constipation a sauce dish of this soaked agar-agar should be eaten at each meal, with little attempt to masticate it. Cream, or cream and sugar, may be eaten with it to add some palatablity to the dish. The gelatine itself not being digested and having absorbed considerable water, helps to retain moisture in the contents of the digestive tract, and cellulose of any kind in the food eaten stimulates the digestive tract to pass food along.

Used as gelatine, one ounce of agar-agar solidifies three quarts of liquid, while one ounce of animal gelatine solidifies two quarters of liquid. Vegetable gelatine costs less per ounce than animal gelatine, therefore it is more economical to use.

To use as gelatine, the agar-agar should be prepared by soaking and draining as was prescribed for preparing it for eating.

Apricots in Jelly

1¼ cups dried apricots
1 cup sugar
1 tablespoon lemon juice
¼ level teaspoon salt
¼ oz. Vegetable gelatine
1 cup water in which to dissolve the gelatine

Wash the apricots, and let them soak in three cups of cold water overnight. In the morning stew them till tender in the water in which they soaked, which should require only about ten minutes' cooking. Drain off the juice and measure it. There should be two cups. Add water, if necessary, to make that amount. Put the apricots back into the juice; add the sugar and lemon juice and salt. After preparing the gelatine by soaking and draining, boil it in one cup of water till it dissolves, then strain it into the apricots. Put into molds wet with cold water. When cold unmold and serve with whipped cream.

Orange Snow Pudding

2 tablespoons lemon juice (juice of one large lemon)
½ cup orange juice
1 cup sugar
¼ oz. vegetable gelatine
⅔ cup water in which to dissolve the getatine
3 egg whites.
¼ teaspoon salt

Prepare the gelatine by soaking and draining three times. After draining the last time, boil it in the two-thirds cup of water till dissolved. Strain it into the lemon juice, orange juice, sugar, and salt, which have been mixed together. Cool till nearly ready to set, then beat it into the stiffly beaten egg whites, and

(*Concluded on page* 244.)

Diseases and Their Treatment

First-Aid Methods for Every-day Use

By Minne Genevieve Morse

Broken Bones and Dislocations

Broken bones and dislocations, like poisoning, are not emergencies which are not apt to come before the amateur surgeon very often, and there is not much that can be done for them by unskilled hands. Much meddling with them is likely to result in further harm, and the principal necessity is to keep the patient quiet until a surgeon can see him. There is usually little difficulty in recognising either a broken bone or a dislocation, though sometimes the two forms of injury may occur together, and certain types of fracture are not easy to detect, even by an expert, without the X ray. However, in the usual fracture there is an unnatural mobility at the site of the injury, while in a dislocation there is alteration in the shape of a joint. If the patient need not be moved before the doctor comes, he should be disturbed as little as possible; injuries of this sort, unless complicated by wounds that communicate with the air, do not suffer from not being attended immediately, but will be none the worse, if kept quiet, for a wait of several hours for the surgeon's arrival. If there is a compound fracture, in which there is an open wound as well as an internal injury, a temporary dressing should be applied, disturbing the patient as little as possible. If, however, the patient must be transported from the scene of the accident, measures must be taken to prevent the doing of further damage by the handling of the injured part. If the case is one of a broken arm or leg, the limb should be drawn as straight as possible, and splints of some sort, which are easily improvised from pieces of board, canes, or umbrellas, rulers, golf or hockey sticks, or something else near at hand, should be well padded with whatever soft material may be available, and placed on either side of the injured part, then bound on firmly but not too tightly. The splints should go well above and below the fracture. Where ribs are broken, a towel or other wide bandage should be fastened closely about the upper part of the body, the arm on the affected side being laid across the chest beneath the bandage. In fractures of the lower arm or hand, or of the collar bone, the injured part should be supported by means of some sort of improvised sling. In the case of broken collar bone, a pad of some soft material placed in the armpit will help to counteract the tendency of the shoulder to fall downward. Dislocations should also, in cases where the patient must be moved before the doctor's arrival, be supported as comfortably as possible by means of slings and pads.

Sprains

Sprains are very common injuries. They may be slight, and require no treatment beyond a firm bandage or strapping with adhesive plaster, but violence sufficient to cause a severe twist of a joint is very likely to tear ligaments and muscles from their places, while many injuries supposed to be merely sprains have been proved by X-ray examinations to include fracture of some of the bones about the joint. All sprains except the most trivial should be shown to a doctor, and the injured limb should be kept as quiet as is practicable in the meantime.

In all kinds of injuries of much severity there is likely to be considerable prostration, technically known as "shocks." Children are often more frightened than hurt by slight

accidents, but shock is a condition of actually lowered vitality, and is shown by pallor, coldness, weakness, and a feeble heart action. The patient should be laid down, any constricting clothing should be loosened, heat should be applied to the body and the extremities, and spirits of ammonia or hot drinks may be administered.

Fainting

Fainting is of very common occurrence, and need usually cause no alarm; it results much more often from indigestion, fright, confinement in over-heated rooms, and other trivial causes, than from any serious condition. Laying the patient down flat and loosening the clothing is usually the only treatment needed, but if unconsciousness persists more than a few minutes heat may be applied to the body, smelling salts used, or the face sprinkled with water. When the patient can swallow, mild restoratives may be given. When an attack of faintness occurs in a public place or crowded room, where it is impracticable to lay the patient down, the best plan is to bend the head forward until it is almost between the knees; this, like the recumbent position, facilitates the return of the blood to the head.

Stunning

Stunning caused by a blow on the head or by falling from a height, may be of little consequence, the patient recovering in a short time; or, on the other hand, there may be serious concussion of the brain. When after this sort of accident the patient remains motionless and unconscious, with a cold skin and a weak pulse, he should be kept quiet in a recumbent position, with the head slightly raised until a physician can be summoned, with cold applied to the head and heat to the body; slight cases, however, usually need nothing more than to lie down quietly for a while, with a cold application to the head.

Foreign Bodies in the Eye

Foreign bodies in the eye cause much discomfort, and if the eye is rubbed with soiled hands considerable irritation may result, possibly even infection. When an insect or other object gets into the eye, the flow of tears which it causes may wash it out; if it does not, very often the foreign body may be seen in the corner of the eye or on the lashes, in which case it can be wiped off with the corner of a clean handkerchief. If it is under the upper lid, drawing the upper lid down over the lower one sometimes brings the intrusive object into sight. The rolling back of the upper lid over a pencil or other small smooth article requires some practice to enable a person to do it well, but when properly done, it is the surest way to accomplish the desired purpose. Washing out the eye will often extract an insect or dust particle very readily. When irritation persists after the removal of a foreign body, the eye may be bathed with boric acid; and this is not a bad routine measure for use after the extraction of anything from the eye.

Foreign Bodies in the Throat

Foreign bodies in the throat are oftener fish-bones than anything else; pins probably come next in the order of frequency, though small children with a habit of putting all kinds of things in their mouths may bring about such an emergency by means of any sort of small object. Coughing often dislodges such objects; so does a vigorous slap upon the back. If the obstructing article is not too far down in the throat, it may often be removed by the finger. Fish bones which cannot be extracted can, if not too firmly lodged, be pushed down into the stomach by swallowing large mouthfuls of bread; in the great majority of cases they will pass through the digestive canal without doing any damage. If, however, simple expedients do not succeed in removing a foreign body, a doctor should be summoned, as the throat may be severely injured by unskilled attempts to extract securely lodged objects, especially those with sharp edges, like bones or pins.

Frost-Bite

Frost-bite is a very common accident in the colder parts of the country. The affect-

ed parts, usually ears or cheeks, fingers or toes, become numb and unnaturally white. Rubbing gently with snow or cold water, so as gradually to restore the circulation, and keeping the patient away from the fire until recovery is complete, is the proper treatment.

In doing first aid work, amateurs should remember that to keep cool is essential to success; that it is better to attempt too little rather than too much; and that in a case of doubt it is far better to call a doctor unnecessarily than to take any risk of not having the patient properly cared for.

Dog-Bites and Cat-Bites

Dog-bites and cat-bites generally to an even less degree are dangerous and should receive the same treatment as that indicated for any ordinary wound, and a physician consulted as soon as possible.

In cases where the animal is mad, or very strongly suspected of being so, the following is the treatment advised by the latest American Red Cross First Aid pamphlet.

When the bite is located on the hand or arm, foot or leg apply a tourniquet, as described above, but without using the pad for pressure, as in the case of a bleeding artery. This must be done immediately, as it prevents the return of the poisoned blood through the system. If hot water is obtainable, the wound should be soaked in it, and in any case squeezed, "milked," or sucked. No danger attends the latter process unless there are cuts or scrapes in the mouth or lips. This is done to encourage bleeding. The wound is then burned with a red hot wire or strong ammonia or nitric acid (*as soon* as the bite has been cauterised remove the constricting band, always bearing in mind the grave danger of mortification from prolonged stoppage of the circulation), and dress like an ordinary wound. A doctor should be called as soon as possible, but efforts to obtain one should not be allowed to delay these measures, since *prompt* action is very urgent.

ALCOHOL AND ACCIDENTS

DR. T. D. CROTHERS has made a life study of inebriety, and he knows the effects of alcohol on the human subject about as well as any man. His life work, we might say, is the care and restoration of victims of narcotic habits. In a recent number of (London) *Medical Temperance Review*, in an article entitled "Defective Vision from Alcohol," he gives some facts which are well worth consideration. For instance:—

"An analysis of the causes of accidents on railroads and with motor cars brings out the startling fact that in over fifty per cent of these cases alcohol is the responsible cause. One authority traced two hundred accidents occurring with motor cars, a large part of which [were] attended with fatality, to the use of alcohol just before the accident. In most of these casses the drivers were not intoxicated, nor supposed to be under the influence of spirits.

"Many of these cases are illustrated in the following: the driver, supposed to be a temperate man, failed, after two glasses of spirits, to see the red lights of danger on the bridge, and plunged down into the stream below. Another driver, after taking a single glass of brandy, tried to cross the track before an approaching train, and was killed. In another accident a man, supposed to be temperate, complained of cold and took some whisky to relieve himself, and a half hour later he went around a curve at high speed and down an embankment. These are very common incidents, and can be duplicated in almost every section of the country."

"Recently the fact has come to notice that defective vision due specifically to alcohol is a far more frequent cause of carelessness and disaster than any other condition.

"This is seen in persons who are supposed to

be temperate, and who are not recognized as drinking men, or are even known to take spirits at long intervals. Men whose eyesight is supposed to be normal suddenly develop temporary defects from the use of spirits, and later these functional disturbances pass away.

"A railroad engineer who had been repeatedly examined and was found to have good sight, showed a surprising defect in not seeing the red lights of warning, and not heeding the danger signal that was against him. This occurred on several occasions in the course of a year. At other times he seemed normal and recognized the signals naturally. Inquiry was made, and it was found that on the return trip of a long journey he had taken spirits for weariness and fatigue, and for the next two hours his eyesight was seriously affected. His colour sense was destroyed or so dimmed as to be unrecognized. He stopped the train on several occasions, thinking an obstruction was before him. The inference was clear that alcohol had disturbed the sight, and that he was unable to recognize the signals for some little time and until the effects of the spirits wore off.

"In another case a tower man showed startling confusion in the movement of the switches and the display of signals. Several slight accidents happened. It was finally determined that he had taken a glass of spirits, although he was not a drinking man. Not infrequently gatemen and persons operating switches make mistakes which are traceable to some unknown conditions of mind and eyesight. Later it is found they had been drinking.

"Recently a gateman who had spent half an hour in a near-by saloon permitted a funeral procession to cross the track at the time for a fast express. One carriage load of people was destroyed. . . .

"The foreman of a bridge-construction company, after a dinner at which spirits were taken, neglected to use the ordinary precaution of fastening the rails to permit the safe crossing of a train. As a result a very serious accident followed, in which several cars were wrecked and one or two persons killed.

"The railroad companies have a great variety of facts pointing to alcohol as an active cause, which are not made public, and, in fact, are concealed to a large extent. From the train dispatcher down to the gateman, the entire transportion service of the great trunk lines, the number of accidents due to spirits alone far exceeds that of any other one cause."

"In a more accurate study of the casualties, the failures of responsible persons are not traceable to excessive use of spirits, except in rare instances. The gate tender, the switchman, or the tower man may be apparently bewildered by spirits, but he is not permitted to continue his work in this condition. The peril of his mental condition is recognized.

"It is the man who is not intoxicated, who may have drunk only one or two glasses, and apparently seems in no way worse or different for his use of spirits [that is apt to cause a deplorable accident.] His sudden disabilities, entirely unforseen, are the direct cause of the casualty which follows. The spirits, even in small quantities, have covered up his real condition, and given him a false estimate of his ability and a certain recklessness of conduct that he was not aware of. . . .

"The engineer, suffering from a sense of fatigue and weariness, reasons that the disappearance of these symptoms from a glass of spirits is evidence of [the return of] his former alertness of mind and sense; and when the effects wear off and more spirits are taken, the delusion of strength becomes more and more fixed in his mind. . . .

"If the exact physiological effects of alcohol on the brain were recognized and known, there would be no spirits taken, and the accidents which follow would be diminished."

THE RESPONSIBILITY OF PARENTHOOD

No other event in the life of a man or a woman approaches in solemnity and awe the birth of a son or a daughter. . . . Here is a human being, endowed with the divine spark of life, which he has been instrumental in bringing into this world, a world of struggle, a cruel world, a world full of sin, a world where suffering is the rule and happiness the exception, a world full of temptation, where all manner of wickedness is rampant, and where any individual's escape from damnation is narrow indeed. The child is his, and it rests largely with him whether it is going to be made or marred.

If there be a hell, what punishment can approach in torment that of seeing the soul of one's own child ruined, which ruin has been brought on by one's own acts, either of commission or of omission? These thoughts should occupy the mind of any parent when his parenthood first begins, and his attitude should be that of humility and prayerfulness. . . .

Parents all assume that the presence of children, in all places and at all times, is a continual and unalloyed delight to all persons

(*Concluded on Page* 244)

NEWS NOTES

CANADIAN RECRUITS MUST BE VACCINATED.

THE order has been issued that all recruits must he revaccinated if it is thought necessary by the medical examiners. Those who refuse vaccination are to be rejected.

WAR METHOD OF REMOVINC FOREIGN BODIES.

IT has been found that foreign bodies, as pieces of bone, clothing, etc., can be removed from wounds by pouring in peroxide of hydrogen. The foaming of the peroxide forces the foreign matter out of the wound.

DEHYDRATED VEGETABLES.

The quartermaster general of the United States Army has been experimenting with dehydrated vegetables for use of the troops. These are not dessiccated or dried vegetables in the ordinary sense. The water is removed from the green fresh vegetables by a special process; and when they are soaked and cooked, they closely resemble the fresh vegetables in taste and quality. Among the vegetables that are dehydrated are beans, beets, carrots, corn, onions, potatoes, tomatoes, and turnips. As one pound of the dehydrated vegetables is the equivalent of from six to twelve pounds of green vegetables, they will be a decided advantage for use in the army. They ought to be valuable, also, for domestic use in regions where fresh vegetables are not raised.

DIPHTHERIA IMMUNES.

VARIOUS workers in this country and Europe have demonstrated that a very large proportion of persons—about 80 per cent of the newborn, between 50 per cent and sixty per cent of children, and 90 per cent of the adults—have sufficient diphtheria antitoxin in their blood to make them insusceptible to diphtheria infection. A taste has been perfected which indicates whether a person is so immonized; and in case of epidemic it is not necessary to innoculate all exposed persons, but only such as show by test that they are not immune. The test is similar in principle to the tuberculin test for tuberculosis, a local injection being made with a minute dose of properly prepared antitoxic serum. Positive reaction indicates that the person is susceptible to the disease. The reaction appears within twenty-four hours.

BAD MOUTH CONDITIONS.

DR. MCKISACK, in the *British Medical Journal* says that though a septic or diseased mouth may be tolerated for years, yet it is always a source of danger, and may cause disease in the stomach or intestines, or in more remote parts of the body; and bad mouth conditions may aid and increase the disease of other parts. We know that it is practically impossible to remedy digestive disturbances while the mouth remains in bad condition, which includes cavities in teeth, loose teeth, and diseased tonsils. Even though there are none of these conditions present, if the mouth is unclean from neglect it is a source of danger.

CAFFEINE AND THE EYE.

CASEY WOOD reports in the March *Ophthalmic Record* a case of polyneuritis following intoxication by coffee, in which amblyopia (failure of the eyesight) was one of the symptoms. Rest with abstinence from coffee, and the administration of strychnine, cured the trouble. Others have suggested that coffee may be the cause of blindness. Two other workers assert that tea drinking may produce similar symptoms, perhaps more frequently than coffee. Excessive coffee drinking has also resulted in colour blindness.

Herald of Health,

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REGISTERED. No. A. 457

WE are disappointed ourselves and are sure you will be that we are not able to give the fuller details of the "Temperance" Special in this number of HERALD OF HEALTH. The contents and illustrations are under consideration of the editorial staff and will be complete in time for inclusion in our next issue. If the supply of illustrations ordered come in time it is planned to have the "Special" ready for circulation not later than October 1st, ready for a winter's compaign in behalf of Temperance. We solicit the active co-operation of every lover of the Temperance Cause. With the King's sterling example before us, the cause of temperance in India should be urged with every legitimate means at our disposal. We owe that much to the rising generation as well as to ourselves.

"THE tiny chains of Habit are seldom heavy enough to be felt until they are too strong to be broken."

ARE DESSERTS SUPERFLUOUS?

(*Concluded from Page* 237)

continue to be beat till nearly ready to set again. Then quickly pour it into cups wet with cold water. When cold, unmold, and serve with a custard sauce in which the yolks of the eggs are used. This is so tender that in unmolding the desserts great care must be taken not to break them.

Custard Sauce

2 cups milk
¼ cup sugar
3 egg yolks
½ teaspoon vanilla
A few grains salt

Prepare according to directions for making boiled custard, taking great care not to cook too long.

THE RESPONSIBLITY OF PARENTHOOD

(*Concluded from Page* 241)

within sight and hearing, and that a noise or an uncouth or disgusting act is purged of all its unpleasant properties when committed by them. Woe to the unfortunate being who differs with them! . . .

Whenever a person remarks about some particularly offensive act on the part of some child, he is immediately withered with a look of "daggers" from the parent, and the following awful words are hissed between the clinched teeth and tightly drawn lips: "You were a child yourself once!" . . .

According to parents this sentence, quoted with the proper emphasis and accompanied by the appropriate gestures of scorn, provides a plenary justification for any acts of savagery or vandalism which their children may commit. . . .

Parents allow children to come into the world, employing much less intelligence and reason than if they were breeding Angora cats. They never stop to think whether they are fitted in any respect to rear and train children. In nine nundred and ninety-nine cases out of a thousand they do not want them; do not even know they are on the way until too late to stop their coming. . . .

No uninformed person would undertake to run a locomotive or navigate a ship, but almost every one has no hesitation whatever in assuming control over the development of a human mind, in comparison to which a locomotive is as simple as a washboard. The same vanity which moves people to feel that the world is in need of small editions of themselves allows them to assume that they are, all of them, expert child trainers. They all believe this. Here is how they go about it:—

They begin by selfish considerations of their *own* comfort, putting these ahead of everything else. It annoys them to hear the child cry, so they employ every means their ingenuity can devise to keep it quiet, completely disregarding whether the means they use are harmful to it or not. From their actions one would suppose that their thoughts ran something like this: Never mind what happens, if it will only stay quiet. If he wants to be picked up, pick him up; if he wants a piece of mince pie at the age of six months, give it to him; if he wants to be carried up and down the room all night, carry him. . . .

It is a fact that not one parent in a thousand is fitted, either physically, mentally, or morally to take full charge of a child between the ages of one and seven, for fourteen or more hours a day, month in and month out, without any let up.—*Philip Embury, M. D., in Critic and Guide.*

Heralds of the Morning

By A. O. Tait. A new edition of this popular work, enlarged and thoroughly up to date. It treats on the second coming of Christ, and the signs that the Scriptures tell us should precede that great event. It tells the meaning of the appalling loss of life by murder and suicide, and by fearful calamities on every hand, of the capital and labour troubles, strikes, fires, perplexity among the nations, socially and politically, and the significance of the great phenomena in nature as portrayed all about us. With all this, Christ is presented as the Friend of sinners, and His coming as the cheering hope of His children. It points out the place of refuge for those who would be shielded amid the perils of these last days, and how we may be saved from the great deceptions that Satan is multiplying in the earth. The light from the "sure word of prophecy" is turned on life's pathway, clearing up the obscurity and brightening it up amid the troubles and perplexities, even unto the dawning of the morning of the eternal day when strife shall cease. 419 pages.

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