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October 1915

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WASHINGTON, D. C.



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HEALTH AND TEMPERANCE

October, 1915

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A GERMAN TRENCH KITCHEN

In their underground homes, the soldiers on both sides have many conveniences and even luxuries. The two men shown in the picture seem to be enjoying life to the full.

Continuing LIFE AND HEALTH

G. H. HEALD, M. D., Editor

L. A. HANSEN, Associate Editor

WORTH KNOWING

Treatment of Pneumonia.—Dr. E. C. Fleischner, of San Francisco, in the *March Archives of Pediatrics*, asserts that ice is as valuable in treating pneumonia in older children as in treating adults. "With the exception," he says, "of the occasional application of light mustard pastes as an aid to the failing heart, all poultices are of paramount danger." He condemns the use of expectorant mixtures in early pneumonia, for there is nothing to expectorate, and the medicines only disturb digestion and take away the appetite.

Treatment of Boils.—Unna says that boils are caused by pus germs developing around the hair roots, and that incision of the boil spreads the germs into healthy tissue. He advises the following: Shave the hair in the neighborhood; note accurately the direction of the hair follicle, destroy the invading germs by puncturing in the right direction with a hot metal point. Healing is prompt, no dressing is required, the scar is extremely small, and there is no spread of the infection. The writer finds that a toothpick dipped into pure carbolic acid, with the excess wiped off, may be used instead of the hot point, with the same result and with less pain.

Treatment of Gastric and Duodenal Ulcer.—Sippey, of Chicago, gives in the *Journal A. M. A.*, May 15, his treatment of ulcer, which consists essentially in preventing excess of hydrochloric acid in the stomach. He keeps patients in bed three or four weeks, and furnishes hourly three ounces of a mixture of equal parts of milk and cream from 7 A. M. to 7 P. M. After two or three days, soft-boiled eggs and well-cooked cereals are gradually added, until at the end of ten days the patient receives approximately the following nourishment: three ounces of milk-and-cream mixture hourly. In addition, three soft-boiled eggs, one at a time, and nine ounces of a cereal, three ounces at a feeding, may be given each day. He then uses soups, purées, and other soft foods, but makes the basis of the diet milk, eggs, cream, cereals, and vegetable purées. The acidity is more easily controlled by feeding every hour and giving alkalis to neutralize the acid midway between the feedings. Any one interested in the treatment should read the original article for details.

Solid Iodine for Dressings.—Tissot has devised a dry preparation of iodine which can be used immediately by the soldier at the front for the dressing of wounds. The iodine is rubbed up with kaolin, and in this triturated form it is harmless to the tissues. The kaolin moreover acts as an absorbent dressing. The preparation is made by dissolving two and one-half drams of iodine in ether, and triturating this solution with ten ounces of desiccated and sterilized kaolin. The ether of course evaporates, leaving a dry powder. The mixture seems to keep indefinitely. It has been suggested that the kaolin might be replaced by powdered cinchona.

Epsom Salts in Lockjaw.—Magnesium sulphate has a marked effect in controlling the paroxysms of tetanus. Two methods of administration are advised by Meltzer in a *Berlin medical weekly*,—the intraspinal and the subcutaneous. For intraspinal injection a 25-per-cent solution is used, 1 c. c. being injected for each ten kilograms of body weight. This dose will give complete relief from the convulsions for from twelve to twenty-eight hours. The dose should be repeated before the effect wears off; but after the first dose, it should be given subcutaneously, the dose being three times as large as the intraspinal dose, and may be repeated as often as four times a day.

Sitting Posture in Pneumonia.—A Swiss physician has used to advantage the method of having pneumonia patients sit up for four to six hours daily after the initial prostration and before the onset of delirium. He uses it particularly in young subjects and alcoholics in whom the nervous symptoms are pronounced, or in whom the heart symptoms are a matter of concern. He reports that the temperature, pulse rate, and respiration rate are lowered, the blood pressure is increased, and there is a general sense of well-being. Other physicians have had a similar experience with the method. Patients feel better while they are sitting up, the respiration is easier, and there is less perspiration. The sitting posture seems to relieve the pulmonary circulation and the right heart by throwing a large proportion of blood to the lower extremities. It is really a "bleeding" into the limbs.

(See also page 488)

GOING TO THE HOSPITAL

Eva J. DeMarsh

This article is published as submitted. The reader will bear in mind, however, that while hospitals meet splendidly a great need, they lack the personal and homelike features of a well-conducted sanitarium.

The unit of the hospital is the ward, though private rooms are furnished for those who can afford them; and one who occupies one of the beds becomes "patient number 60753," or "the patient in bed 26 of ward G South."

Hospitals are usually well equipped for the making of diagnosis and the treatment of patients, even to a post-mortem table; and there is a full medical staff of house physicians, visiting physicians, surgeons, and internes, and a small army of nurses in all grades of training, in addition, perhaps, to one or more classes of medical students who may be able to guess at a diagnosis overlooked by the physicians.

In the sanitarium, in addition to the scientific equipment, there is an atmosphere of home, and the patient feels, almost at once, that he is among personal friends, whose interest in him is fraternal rather than professional.



N the first place, do not go unless it is absolutely necessary; secondly, do not dread it; thirdly, do not come away too soon.

Hospitals were created to meet the needs of those whose home facilities are limited, or who do not care to make of their homes temporary hospitals. Most

of them are clean, well-kept, and supplied with apparatus, etc., for dealing with almost any situation; some are fitted to handle extraordinary cases. Many persons who are not familiar with them and their ways look upon hospitals with horror. True, there are, necessarily, features about them which do not appeal



Photo by International News Service, New York

IMPROVISED

A peasant's hut turned into a temporary hospital for the German wounded. Every German soldier is skilled in first-aid work, and the men often bandage each other.

to the nervous or fastidious, yet unless one is a ward patient, he sees little of such things.

The ward, however, has its advantages. There one experiences less loneliness, and, as a rule, food and service are good, while the price is much less than for a private room and one's own nurse. Nevertheless, it is not a good place for those whose recovery depends on quiet and freedom from strain on heart and nerves. All kinds of people, with all sorts of diseases, must receive attention there; and of course one not only is compelled to listen to the aches and pains and groans of his fellow sufferers, but many sights and smells do not appeal to the fastidious. Still, there is more or less of companionship and interest, when one is able to enjoy it, and not every pocketbook can meet the strain of private room and attendance. For an operation, the hospital is much better than your own home.

Everything is close at hand, and every phase of your preparation and after-treatment may be given prompt inspection.

Having ascertained that you must go, do not spend days in crying and dreading the ordeal. Save your strength; you will need it later. The hard part of an operation is not the operation itself; of that you know nothing through sensory experience. It is the ensuing pain and fever that will tax your endurance and try your patience. If you know long enough beforehand, build with that in view. Do not try to fight against conditions, neither uselessly repine: other people have suffered before you; and the more quietly you submit and obey orders, the sooner will relief come.

Calls from one's friends are pleasant, but do not have too many of them, nor let them be too prolonged, even should nurse and matron permit it. For the



Photo by International News Service, New York

HOSPITALS

Scene in front of a Serbian hospital, which is so full of patients that a number have to be accommodated in the grounds around the building.

patient who enjoys a private room there is greater liberty in this respect than in the ward, and it may be abused.

To have one's friends relieve the nurse is pleasant and beneficial, provided always those friends are well-poised, pleasant, and discreet. Nervous, fussy, over-anxious people about one who is weak and helpless are trying and a hindrance to recovery. That is the reason why the hospital is preferable to home nursing. Sick people need sympathy, but not too much of it.

Just as soon as you begin to be yourself again, you will want to go home. Do not be in too great a hurry. Undue haste may prove false economy, in that it brings about a relapse or produces complications which may annoy one for a long time, or even necessitate a second operation. As a rule, too, we are not half so fit as we imagine. Away from the daily routine and ever-present attention of nurses and physicians, one is likely to become sharply aware of this. On the other hand, do not fall under the obsession that you cannot get along by yourself at all when your strength begins to return.

Going to the hospital is not a pleasure, nor is it a bugaboo. If you must go, do so promptly, and waste no time in useless

fears. Consider that there is always a certain amount of danger even in the most trivial operation requiring an anesthetic, and, if you are able, provide for contingencies, but be brave. The sooner the operation is performed, the more speedily will you be on the road to recovery or past wishing for it. Prolonged suffering, nervous dread, and tears diminish the vitality that is needed to assist nature back to her own.

One does not require much in the way of clothing. Hospitals have their own supplies; and towels, handkerchiefs, nightdresses, a kimono or lounging robe, with possibly slippers or bed socks, are all that are necessary, aside from a few simple toilet accessories. Everything should be tagged or marked with your name, not initials. Of course, in case of an accident or in an emergency when no friend is near, one must take what he can get. He will not suffer for lack of anything, in any event.

Take the situation calmly, do not resist the anesthetic, make up your mind you are coming through all right, and half the battle is won. If the case is one of disease only, remember you are in the physicians' and nurses' hands, so just lie back and let them do for you, and in the years to come you will be thankful.



BRIDGE IN ROCK CREEK PARK, DISTRICT OF COLUMBIA

A SCHOOL OF THE BY AND BY

James Frederick Rogers, M. D.

When one has pondered long over unfortunate conditions, and has perhaps allowed his imagination to picture better things, his picture may eventually take the form of a dream. Dr. Rogers assures us that this is no pipe dream; it is not the product of a mind fevered by a narcotic, but the expression of a hope; and it is hope for better things that nerves workers to do their utmost to mitigate the evils of the present. Perhaps close study of the picture given us by Dr. Rogers will enable us to appreciate more clearly some of the deficiencies of our present school methods. One would imagine, however, that with one generation of schools like the one pictured, the future parents would be so well trained that this load of elementary instruction in health would be lifted from the schools.



THE school visited was a two-story affair marked by good taste in architecture. It did not seem very different externally from many buildings of twentieth-century time. It was pointed out to me, however, that the planning and placing of the structure gave better advantages in lighting and ventilating than had previously been secured. It was located on elevated ground, with no factories near, and no other sources of air pollution or of noise. Much of the horrible rattle and bang had been abolished by sundry inventions, and this of course added to the quietness of the surroundings. I was struck especially with the large size of the playground. There was evidence that it was much used, and my heart leaped at the memory of prisoner's base, black man, and two-eyed kitten, on a rural playground of the latter nineteenth century, before educational efforts had become so strenuously localized upon the brain.

No precious space for play was occupied by lawn or by flower beds, but every window had a mammoth window box, where plants representative of many lands, and useful for practical work in biology and geography, were being gardened.

Upon entering the building, I was struck with the absolute cleanliness of everything, including the air; for in the room I entered there was none of that horrid, indescribable odor which had so often discouraged my respiratory apparatus. Evidently there was perfect ventilation, something I had never known in the hundreds of school buildings I had

visited. I saw at a glance one reason why this was the case; for in no room did I find more than twenty pupils, although the rooms were as large as those I had been used to seeing. The healthy, alert, fresh-looking teacher smiled in a polite but inquiring manner when I asked about this change, and replied:—

"I am not used to having Rip Van Winkles for visitors; but since you pretend to be one, I am glad to carry out the play and give you the information desired. As I have read history, public schools began with small classes of pupils, but gradually the classes were allowed to become larger and larger on the principle of economy. It was considered a matter of course by boards of education that were notoriously ignorant of practical school affairs, that a teacher could teach forty or fifty children as well as twenty, and the matter of ventilation of the rooms was considered of slight importance. The only wonder now is that in their ignorance and false ideas of economy they did not put a hundred children in the room instead of fifty. At the beginning of the twentieth century there was some awakening on the part of a few to this condition of affairs. In constructing new buildings, every effort was made to arrange heating and ventilating plants that would be adequate, but although much ingenuity was shown, they were practically all failures; for even where they furnished sufficient air, which was seldom the case, the air was almost sure to be either too hot or too dry. As a matter of desperation some schools took the sides of the rooms out, and even tents were used for school purposes.

This was, for normal children, a return to barbarism, and to an Eskimo existence for a part of the year, in which each child must turn much of his energies for mental work into the production of heat for his own body. It was a strange plan, but it set people thinking; for even under such primitive conditions the children did surprisingly well in their mental work, especially with the abundant feeding they usually received in such schools. The physiological boiler could generate steam under such conditions, and the steam was capable of doing something.

"It has been found that pupils work best at a room temperature somewhere between 64° and 68° F.; and by keeping the temperature of the air between these points, and by reducing the number of pupils in a room to fifteen or twenty, we find that the providing of pure air can be managed perfectly and with ease.

"Another thing that has added much to successful ventilation and to cleanli-

ness of the whole building is that we have schools for janitors nowadays, and no janitor can secure a position until he has passed a rigid course, not only in theory but in practice, in all matters of sanitation. As a consequence the janitor is now looked upon as an important and highly trained person."

"But was it not an expense to reduce the number of pupils in the room?" I asked.

"Apparently, yes; but really, no. We make more than twice as rapid progress with twenty pupils as our great ancestors did with fifty pupils, partly on account of our better ventilation, but largely for pedagogical reasons and because the teachers are not overfatigued. In fact, I do not see how a teacher did anything worth while with so many. She must have been worn to frazzles, and a teacher in that condition cannot teach much.

"Returning to the subject of pure air," she continued, "one reason why the air



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AMBULANCES,

The only available means of bringing in typhus patients for treatment in certain parts of Serbia. With no springs on the carts, and with roads little better than trails, the sufferings of the patients must have been greatly increased.

of our rooms is so pure is because no child is allowed in school with carious teeth, which will befoul any air, nor does any child now have catarrh or foul breath from any cause. Besides, the skin and the clothing of the children are clean. Both teachers and pupils, by long experience with pure air, have become so sensitive to vitiated air that they notice any pollution, and we have the source of the trouble looked into at once by the janitor, physician, or dentist in charge."

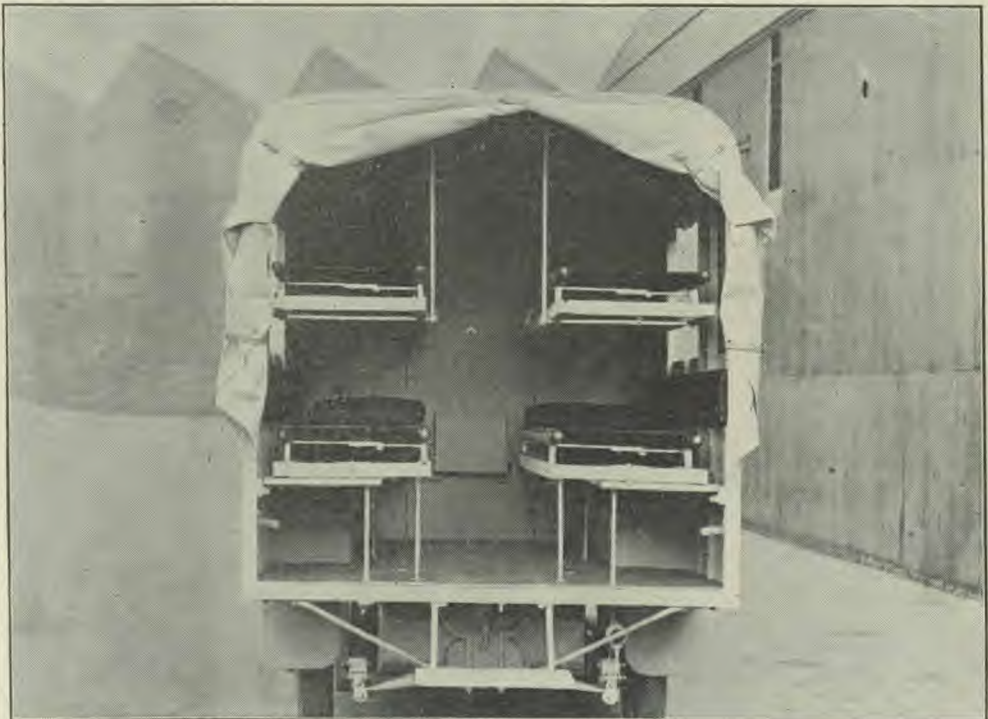
"You do not mean," I exclaimed, "that you have a physician to actually treat the children?"

"Oh, yes, for all ordinary functional ailments," was the answer. "The old method of examining school children and sending a note to the parent, asking if something could not be done, was too often a waste of time and money. It was argued, of course, that the treating

of the body of the child savored of paternalism; but the reply was: 'But all education must be paternalism. Why be paternal regarding the intellectual development of the child and not as to his physical unfolding?'

"We, of course, put the matter of health first in education, and parents have come to take a lively interest in the physical welfare of their children. This is largely due to their own enlightenment brought about by generations of education in such matters.

"We have better methods of teaching hygiene, and the children now come to look upon sickness as something as much to be ashamed of as failure to recite in any branch of study. For them a real recitation in hygiene is not merely to know a few facts about the body, but to be as well as possible. They are led to turn what they learn into good habits.



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OLD AND NEW

A modern motor ambulance planned for the care as well as the safety of the wounded. With the best care that modern medical science affords, a much larger proportion of the wounded recover than was possible with cruder methods.

"Our lessons in physiology and hygiene are carried on in a manner very different from formerly," she continued. "They are now considered of first importance, and I believe they were not at that time in the world's history. We make little of the knowledge of how many bones there are (in fact, I myself do not know), or of the structure of the villi, and that sort of thing; but we make it our special object to have our pupils understand that health means the harmonious working of the body, that they should know when the bodily machine is out of kilter, and should learn to appreciate what disturbs its harmonious working and to prevent such disasters in future. It is of little value for an engineer to know all the parts of his engine or to be able to give their names if he cannot detect a loose bolt or a leaking valve."

"I do not quite comprehend you." I

said. "There was no mention of such things in the physiology of my day."

"The difference," she replied, "is simply that we have brought to light, or emphasized, the existence of the old instinctive guide which keeps the wild animal, with all he has to contend with, in perfect health, and which belongs as much to man as to a fox or a bear. Aided by our knowledge of science, it has become an even more sensitive and sure guide for man than for the other animals. We aim to impress the child, if this has not already been done at home, first, that there is such a thing as the feeling of health — of best condition for enjoying work and play; second, that there is a cause somewhere for every ache and pain, for all weakness and lapse from health; and if anything goes wrong, we help him to find where the trouble is, so that he may not make the blunder



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PROVIDING AGAINST INJURY AND

One of the types of mask used as a protection against the suffocating and asphyxiating gases used in trench warfare.

again. We prefer to offer this kind of sympathy rather than the old-fashioned sort which consisted in weeping with him and making nothing of the sin which brought about the affliction. Of course," she continued, "this teaching does not apply to infectious diseases; but since we in society have become so cleanly, such diseases have largely become a thing of the past, and most ailments are due to parental or individual ignorance or indiscretions.

"I have used the word disease, but I should explain that our health teaching has to do rather with slight indispositions—the feeling that we are not quite up to par. If these little lapses from normal are looked into, there is no need of any more serious derangements. The child early learns to know when he is not at his best, and without continually thinking about himself either, for we promptly discourage anything of that sort.

"But you will want to know more about our methods. Every child on en-

tering school has all correctable physical defects adjusted, is placed for a time under ideal surroundings (though of Spartan simplicity), and is given food most suitable for him and at proper intervals. He has abundant opportunity for exercise, and is made to keep a clean mouth and skin, and to know when he is properly clothed and protected from the weather. After this practical schooling, we have little trouble in impressing him with what it means to be at his best physically. Having had a taste of health, he appreciates our teaching as to the instinctive feelings of falling below par which come with a night spent in a closed room, from eating unsuitable food, from uncleanness, and the like. If a child has a headache or feels ill in any other way, he knows there is a reason for it, that he himself is probably to blame; and if he cannot figure out wherein he has slipped up, the class and teacher help him to work out the problem, which brings into play, of course, our theoretical knowledge of physiology



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PROVIDING FOR THE INJURED

An industry of growing proportions. A shop in Germany where artificial limbs are manufactured for the use of soldiers crippled at the front.

and hygiene; the theory is applied to a purpose.

"Of course this would count for little had not the parents by their schooling and experience been made appreciative of all this. Instead now of coddling a youngster because he has the stomach ache or a headache, they give him no sympathy unless they themselves are to blame in the matter. He is aware also that his schoolmates look upon ill health of the preventable kind as something to be ashamed of, and he is only too anxious to be at his best.

"About 1875, I believe, one of the great educators of the time, Alexander Bain, remarked, 'Men do not take the matter of health seriously.' You see, we do take this matter seriously, although we do not do half the amount of talking and fussing over it that was done in the time of Professor Bain.

"We have in the director of hygiene of the school a consultant in health for

both teachers and pupils, and we take the more obscure problems to him, although we are now so sensitive to any deviation from the normal activity of the body and have ferreted out causes so often, that we know well how to detect and correct most of our faults. You can imagine the vast amount of money saved to the individual and the community by this sort of health training, besides the help it is toward mental and moral education."

"I see that you have a fine playground," I remarked.

"Yes," was the reply, "and we make great use of it. I have read that at the beginning of the twentieth century children had forgotten how to play, or at any rate did not play when they had the opportunity. As all healthy animals play instinctively, this only shows in what wretched physical condition those human cubs must have been. We have no such trouble nowadays. I do not see how chil-



Photo by International News Service, New York

TRENCH LIFE IN THE

Underground huts in a Belgian trench. The bulkheads afford protection against bullets, but they are not a sufficient protection against shrapnel. These houses afford a protection not only against the overhead missiles but also against the weather.

dren of that sort could be taught much in school."

"Do you do much with athletics?" I ventured timidly.

"I was just reading in an old history," she replied, "how, in a large city of a century ago, an athletic coach was hired by the board of education for fifty boys, to train them in football and basket ball. All those fifty boys were husky fellows whose whole energy was directed into their muscles to the neglect of their mental machinery; but a thousand dollars was paid by the city for their training, while not a cent was spent in any way for the physical welfare of the nineteen hundred and fifty other high school pupils, nor for the seventy-five thousand grammar school children of the city. This is a most inexplicable statement!"

I blushed and looked away.

"Athletics do not run our schools," she continued. "We all play games, even adults; and our better players make up what might be called the school team, though it receives no especial encouragement or attention, and needs none."

Just here there burst into the room a group of children whom it was a delight to behold, and who were a sufficient evidence of the excellence of the methods with which I had just been made acquainted. "Well," I said to myself, "we prophesied this sort of thing, even if we never knew it to come to pass in twentieth-century time, and I shall go back to my work as medical inspector of schools with less discouragement over decayed teeth, bad breath, round shoulders, and lack of vitality, knowing that such labor is leading slowly to something much better."



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WEST AND EAST

The Austrians have made a dummy trench in the river in order to mislead as to the location of the real trench and embankment.

THE INJURY HAZARD

Charles Theo. Cutting, M. D.

THREE great fundamental elements causing industrial injuries are alcohol, carelessness, and disease.

Alcohol is a causative factor in the accident ratio, but not necessarily because of intoxication. Alcohol, even in small quantities but continuously taken, undermines the brain and nervous system, and dulls the finer senses of sight and hearing, upon which very often personal safety depends. Where the work demands tactile exactness, tremors of various sorts frequently mean loss of fingers or perhaps of the entire hand. Regardless of whether we are dealing with "social drinkers" or with those who drink to excess, the liability of accident is largely increased.

Statistics show us that married men are less careless than unmarried men, probably because of family obligations and an inherent sense of responsibility. Married men are more thoughtful and painstaking in their occupational technique, and far more particular in their personal hygiene. The dire consequences to their families in the event of a long or permanent disability, from either accident or disease, are always before them. Married men spend their leisure more profitably than do those who are single, and in all respects tend to lead a more orderly life; consequently they are far less likely to disease. They are not so ready to burn the midnight oil. They take more rest, which directly affects their accident hazard.

The mechanical action of dust in certain occupations gives rise to many respiratory diseases. This is noticed among millers, bakers, grinders, etc., but the

danger of such diseases is vastly greater if the organs and tissues have lost their normal tone and natural power of resistance by the consumption of alcohol or by careless and improper living. The same can be said of various occupational poisonings, and of parasitic and infectious diseases, which rarely occur if the general health is good.

In placing the responsibility for occupational disease, a certain consideration should be given the habits and mode of life while away from the industry. The moral and physical standing of those seeking employment where a known occupational hazard exists will from this time on be a matter of concern to those chargeable with occupational injuries. Possibly there is a deeper meaning to workmen's compensation than some of us have admitted. To relieve the State of the support of the crippled, the human wrecks, and the aged is one thing, but to strike at the root of the matter by means of prevention methods, which must always include education and training, if success is to be hoped for, is of much more importance to the wage earner, to the industry, and to posterity. Physical, mental, and moral selection of employees, plus education and training, has already raised the health and moral standing of many communities surrounding some of the large industries in our country.

This lesson is beautifully demonstrated at the exposition by the National Cash Register Company, the Ford Company, and others. These exhibits are a forcible object lesson to those of us in California who are dealing with industrial and economic problems.



SCHOOL of HEALTH

DIET, DRESS, GENERAL HYGIENE,
HOME TREATMENT, NURSING, ETC.

THE USE AND ABUSE OF CATHARTICS

Dr. Israel Bram

Much has been written on this subject, and yet not so much as to prevent the continuance of this abuse by the laity. An article under the above title, which appeared in the (St. Louis) *Medical Review*, is worth while abbreviating for our readers.

THIS is a term ["cathartic fiend"], which I deem fit to apply to people to whom cathartics are just as indispensable as morphine, alcohol, and cocaine are to their respective habitués. The cathartic fiend is found among almost any class who live sedentary lives, eat immoderately and irregularly of too specialized foods, and who are ignorant of the necessity of draining the bowels. Like all drug fiends, the dose of the cathartic in most instances must be constantly increased to keep pace with the deterioration of the bowel mucosa and the normal reflex which becomes obtunded by degrees. Sooner or later the time arrives when the poor mortal has tried out all available drugs, even to maximum dosage, to inspire his worn-out bowels, which have been whipped out of commission and may be compared to a lifeless hose pipe. In this plight he seeks the doctor for ethical, scientific treatment.

These cases often tax the physician as much as do the morphine habitués; and the treatment is not only physical, but educational as well, both for the mind of the patient and for his intestines.

The only means of treating the "costive patient" and the cathartic fiend is by the use of nature's methods of natural catharsis, which consist essentially in restoring to a healthy state the reflex nervous mechanism, though it may be necessary in certain exceedingly stubborn cases to resort to an occasional hydragogue cathartic.

When a patient under treatment has responded well under careful doses of laxative drugs, the latter should be gradually reduced and finally discontinued, and natural methods instituted.

The forming of a regular habit, or the draining of the bowels, is of paramount importance. Every morning, one hour before breakfast, the patient must retire to the lavatory and coax, if necessary, the activation of the nerve reflex. By and by nature will reward his efforts by establishing a regular, almost clockwork habit, which will remain with him as long as common sense will prevail and as long as there are no dietary or other indiscretions.

The draining of the bowels may be enhanced by the imbibition of a glassful of hot (or cold) water before retiring at night and on rising.

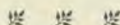
The diet should consist of substances which are natural cathartics when the bowel is reached, and which leave a sufficient residue in the intestines; for example, peas, beans, raw fruits (apples, pears, peaches, oranges), stewed prunes, onions, spinach, cauliflower, potatoes, and corn. Farinaceous substances, such as oatmeal, hominy, whole-wheat bread, corn or Graham bread, are also highly useful. Meats and fish should be used sparingly.

Drinks should consist mainly of plenty of pure water, cocoa, buttermilk, milk, orange juice, and unfermented grape juice.

The following should be interdicted:

tea, coffee, spirituous liquors, new bread, puddings of rice or sago, salted or preserved meats and fish, nuts, cheese, pastry, pineapple, strawberries, raspberries, and cranberries.

Sedentary habits should be overcome by calisthenic exercises in the open air, aiming to strengthen the abdominal muscles which act as accessory organs of the act of defecation.



TREATMENT OF HEART AFFECTIONS

Douglas Graham, M. D.

Graham, who is president of the Massachusetts Therapeutic Massage Association, has in the May issue of the *Interstate Medical Journal* an article on the relative value of massage, exercise, and baths in the treatment of affections of the heart, from which the following quotations are made. Massage is a treatment frequently prescribed and administered in well-regulated sanitariums.

PHYSICAL or external therapeutics in contradistinction to medical or internal remedies, have come much into favor in the treatment of disease of the heart in the past few years. These are massage, resistive movements, saline baths, and mountain climbing. Of these, massage is the most generally applicable. It can be used in cases so weak as to preclude the possibility of applying any of the others. In almost every conceivable form of weak and diseased heart, the writer has been called upon to do massage, and usually with marked relief and comfort. . . .

Massage of the chest over the region of the heart has a powerfully tonic and sedative effect on this organ, as either physicians or patients can prove by observing its effects in their own persons by means of Bowle's excellent stethoscope. Even a well but lazy heart will be found to beat much better and with a clearer accentuation after a few minutes of massage, reminding one very much of the effect of using the bellows on a fire that burns slowly. This is most marked in the flabby neurasthenics. . . .

General massage, carefully administered, is of great aid to the peripheral circulation, lessens the work of the heart,

tranquilizes the nervous system, and induces sleep in the worst kind of heart disease; and massage of the abdomen often works well as a diuretic and to relieve the stasis of the mesenteric veins and all the other abdominal veins.

Next to massage in its universality of application and under circumstances in which patients have been too weak to undergo saline baths or mountain climbing, come resisted movements. . . . Each resisted movement of extremity or trunk is slowly and completely executed, followed by a pause, after which the opposing movement alternates in the same way, while the physician or person who makes the resistance is ever watchful to avoid anything like fatigue, difficulty of respiration, or increased disturbance of heart; and should such arise, a longer pause is given. . . .

The immediate effect of the bath is not quite so marked as after the exercises, but it lasts longer, while the exercises can be used repeatedly on the same day and without regard to place. . . .

When such good results can be obtained from massage or resistive movements alone, it would seem almost superfluous to burden patients with baths besides, other than what may be necessary for cleanliness. . . .

HOME COOKING SCHOOL



A FEW SUGGESTIONS ON THE PREPARATION OF FOOD FOR THE SICK

George E. Cornforth

PERHAPS it is too obvious to need mentioning that the diet of the sick should consist of articles which will impose only a small tax on the digestive powers, but, at the same time, they should not be lacking in nourishment; and they should be made as appetizing and attractive as possible.

Beef teas, broths, and extracts have been accepted as standard articles of diet for feeding the sick, under the impression that they are concentrated nourishment in a very easily assimilated form. Perhaps the name *extract* is to blame for this mistaken idea, because it suggests that the extract contains all the nourishment of the meat, or at least the most important part of it, in a concentrated form. The fact is, however, that these preparations do not in any sense contain the nutritive properties of the meat. They contain the *flavoring matter* of the meat, and therefore, because they taste as if they contained the nourishment, they deceive the user into believing that they do. They are also the stimulating part of the meat, and therefore they cause one who partakes of them to *feel* stronger. Did you ever hear of anything else that makes a man feel stronger when he is not? The Bible says, "Wine is a mocker;" so is beef broth, or chicken broth for that matter; "and whosoever is deceived thereby is not wise."

A glass of apple juice contains several times more nourishment than does a glass of beef tea. Dr. Franklin White, of Harvard University, says: "I always feel that it is pathetic to see people buying beef extracts for invalid foods,

knowing, as I do, that they cost so much and contain so little of any value. Twenty-five cents' worth of beef juice will yield only six parts of food value to the body, while twenty-five cents' worth of eggs will yield seven hundred parts and twenty-five cents' worth of milk one thousand parts of real value to the system. It takes from fifteen to thirty glasses of beef juice to equal the food value to the body of one glass of good milk."

The fact is the meat fiber is the nourishing part of meat, and that cannot be dissolved in water by soaking or cooking. That which is dissolved is the substances which are the waste products of the life processes of the animal, which would have been eliminated by the excretory organs of the animal if it had lived. I often tell people that if they are going to eat meat at all, it would be well for them to make a good strong soup out of the meat and throw it away, and then eat the meat, which would be practically as nourishing as before the broth was made from it.

The only redeeming feature of beef tea, the only reason why it is of any value in the diet of the sick, is the fact that it is stimulating to the digestive organs, and sometimes to the appetite of the patient,—strange that such a disgusting concoction should ever stimulate appetite,—and therefore may be the means of getting the patient to take something which is nourishing. But beef tea itself should never be depended on for nourishment. And it is well to remember that the taking of it introduces into the sys-

tem waste products which must be eliminated, and in that way it puts an extra burden upon the eliminative organs of the patient; while in sickness, especially, it should be the aim to put as little burden as possible on all the vital organs of the body.

There are on the market vegetable extracts put up in the same form as beef extracts, and bouillon cubes, which so closely resemble meat extracts in chemical composition and flavor as to deceive one if he does not know beforehand that he is eating a vegetable product; but they are free from the objections to beef extracts and broths, and make most excellent substitutes for them.

It is an interesting fact that fruit juices and *vegetable* broths are also stimulating to the digestive organs, and are an antidote for such waste products as are contained in beef tea, containing substances which help the body to throw off those wastes. And at the same time they contain real nourishment. The mineral elements contained in fruit juices and vegetable broths may be called "nature's medicines," for it is being found that it is a lack of these which allows the body to succumb to many illnesses. And, in addition, the nourishment contained in fruit juices is in a predigested form. While many man-made foods are falsely called "predigested," fruit juices are real predigested foods. Fruit juices also have germicidal properties. There are few, if any, disease germs that can live in pure lemon juice. Apple juice will destroy the germs of Asiatic cholera. Blueberry juice will destroy the germs of typhoid fever. Other valuable juices are orange juice, grape juice, and pineapple juice. All these facts make fruit juices the food par excellence for the sick.

The water in which almost any vegetable has been boiled, although commonly thought to be unfit for food and only fit to be thrown down the sink spout, makes a more wholesome broth than any kind of meat broth.

Hot buttered toast is another article

which is among the first to be thought of to offer to a sick person. But a hot, thick slice of bread with butter soaked into it, though many enjoy its taste, and the eating of it requires little effort, is not adapted to the stomach of a sick person; neither are jellies and many other dainties that are offered them. Instead of hot buttered toast, serve dainty thin slices of bread thoroughly dried, and toasted to a delicate brown throughout the slice; and fresh fruit or fruit juices may well replace the jelly. The toast may be dipped in hot cream, or even simply in hot water, if desired. Then a nice hot fruit sauce served over it makes an enjoyable fruit toast, which is wholesome and nutritious. I suppose the thing which causes such undesirable articles to be offered to the sick is a feeling of pity for them, and a desire to give them something which will taste a little better than the food they get when they are well. But we should think rather of giving them something that will really be easily digested and nutritious. At the same time the desires and tastes of the sick one should not be ignored. In fact, tact should be used in discovering the likes of the patient without asking him, and then effort should be made to suit the food to the patient's taste as far as is consistent with supplying wholesome food and that which is suited to his condition. Each meal should be as much of a surprise as possible in being more attractive and palatable than the patient expects. The patient should not be where the odor of the cooking food can reach him.

Hot foods should be *hot* when they reach the patient. To accomplish this the dishes in which they are served should be heated. Cold foods should be *cold*.

Gruels, when properly made, are easily digested and nutritious, but not when made by simply stirring some cereal into boiling water. The cereal from which gruel is made should be cooked in a double boiler as thoroughly as if it were to be eaten as a cereal. It should then be

thinned with hot milk or cream or water, strained, to be sure it contains no lumps, seasoned with salt, and served hot. A gruel should be of such consistency as to have a rich taste, not thick like gravy, nor thin and watery.

Scrupulous neatness and care are required in cooking and serving food to the sick. Some seemingly trivial, careless act may be sufficient to take away the little appetite a patient may have. The tray on which food is served should be covered with a clean white napkin, and the silverware should be bright. If there are in the home dainty china and pretty little glass dishes, here is the place to put them to good service. Anything which suggests heaviness is fatiguing to the sick. If possible, broth should be served in a thin, light cup, partly filled; milk and fruit juices in a thin, light glass; the bread should be thinly sliced, the toast should be thin and crisp, crackers freshly toasted, the fresh fruit cut and arranged in some new and unexpected way. A straw placed in an iced drink may make it more palatable. A sprig of leaves, a flower, a quotation from Scripture, or a pretty verse may bring pleasure. While the patient may be too sick to mention or apparently to

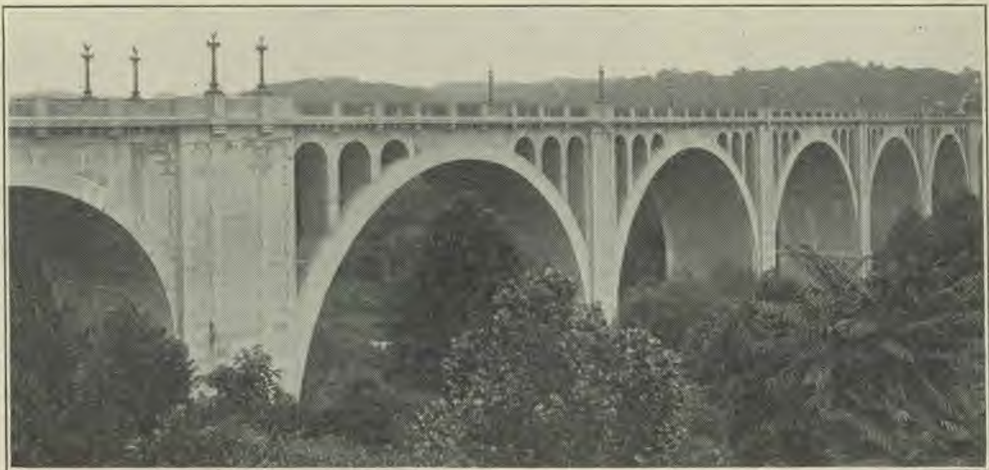
notice such little services, they will, no doubt, in almost every case bring a bit of brightness to him, and help to break the monotony of his long and weary day.

Specific Directions

Some foods that may be served to the sick are: Fruits and fruit juices; vegetable broths; legume broths; milk and milk preparations; malted milk; eggs prepared in various ways; gruels; toasts; fresh, crisp, tender lettuce; baked potato.

One of the most valuable of fruit juices, because always obtainable, is orange juice. It is palatable without the addition of sugar. Grape juice is good, but unless it is pressed from fresh grapes it requires the addition of sugar to make it palatable. Apple juice freshly pressed from clean, sound apples is valuable and palatable. Blueberry juice is an excellent drink. This may be the juice drained from canned blueberries, or it may be prepared by stewing fresh blueberries in scarcely enough water to cover them, draining in a jelly bag, and sweetening slightly. Lemonade made with two lemons to three cups of water, and sugar to sweeten slightly, makes a good drink.

The next issue will contain recipes for the preparation of foods for the sick.



CONNECTICUT AVENUE BRIDGE, WASHINGTON, D. C.

CHRISTIAN TEMPERANCE



THE SLAVES OF APPETITE

Mrs. E. G. White¹

THROUGH the use of stimulants, the whole system suffers. The nerves are unbalanced, the liver is morbid in its action, the quality and circulation of the blood are affected, and the skin becomes inactive and sallow. The mind, too, is injured. The immediate influence of these stimulants is to excite the brain to undue activity, only to leave it weaker and less capable of exertion. The aftereffect is prostration, not only mental and physical, but moral. As a result we see nervous men and women of unsound judgment and unbalanced mind. They often manifest a hasty, impatient, accusing spirit, viewing the faults of others as through a magnifying glass, and utterly unable to discern their own defects.

We are already suffering because of the wrong habits of our fathers, and yet how many take a course in every way worse than theirs! Opium, tea, coffee, tobacco, and liquor are rapidly extinguishing the spark of vitality still left in the race. Every year millions of gallons of intoxicating liquors are drunk, and millions of dollars are spent for tobacco. And the slaves of appetite, while constantly spending their earnings in sensual indulgence, rob their children of food and clothing and the advantages of education. There can never be a right state of society while these evils exist.

He who indulges in spirituous liquor voluntarily places to his lips the draft which debases below the level of the brute him who was made in the image of God. Reason is paralyzed, the intellect is benumbed, the animal passions

are excited, and then follow crimes of the most debasing character. How can the user of rum or tobacco give to God an undivided heart? It is impossible. Neither can he love his neighbor as himself. The darling indulgence engrosses all his affections. To gratify his craving for strong drink, he sells reason and self-control. He places to his lips that which stupefies the brain, paralyzes the intellect, and makes him a shame and a curse to his family, and a terror to all around him. If men would become temperate in all things, if they would touch not, taste not, handle not, tea, coffee, tobacco, wine, opium, and alcoholic drinks, reason would take the reins of government in her own hands, and hold the appetites and passions under control.

Through appetite, Satan controls the mind and the whole being. Thousands who might have lived, have passed into the grave, physical, mental, and moral wrecks, because they sacrificed all their powers to the indulgence of appetite. The necessity for the men of this generation to call to their aid the power of the will, strengthened by the grace of God, in order to withstand the temptations of Satan and resist the least indulgence of perverted appetite, is far greater than it was several generations ago. But the present generation have less power of self-control than had those who lived then. Those who indulged in these stimulants transmitted their depraved appetites and passions to their children, and greater moral power is now required to resist intemperance in all its forms. The only perfectly safe course is to stand firm, observing strict temperance in all things, and never venturing into the path of danger.

¹ Taken from the book "Christian Temperance and Bible Hygiene," now out of print.

I feel an intense interest that fathers and mothers should realize the solemn obligations that are resting upon them at this time. We are bringing up children who will be controlled by the power of Satan or by that of Christ. The only way in which any can be secure against the power of intemperance, is to abstain wholly from wine, beer, and strong drinks. We must teach our children that in order to be manly they must let these things alone. God has shown us what constitutes true manliness. It is he that overcomes who will be honored, and whose name will not be blotted out of the book of life.

God has made man in his own image, and he expects man to preserve unimpaired the powers that have been imparted to him for the Creator's service. Then should we not heed his admonitions, and seek to preserve every power in the best condition to serve him? The very best we can give to God is feeble enough.

Why is there so much misery in the world today? Is it because God loves to see his creatures suffer?—O, no! it is because men have become weakened by immoral practices. We mourn over Adam's transgression, and seem to think that our first parents showed great weakness in yielding to temptation; but if Adam's transgression were the only evil we had to meet, the condition of the world would be much better than it is. There has been a succession of falls since Adam's day.

Indulgence in spirituous liquors is causing great wretchedness in the world. Though liquor drinkers are told again and again that they are shortening their

lives, they still go on in transgression. Why not cease to break the laws of God? Why not seek to preserve themselves in a condition of health? This is what God requires of them. If Christians would bring all their appetites and passions under the control of enlightened conscience, feeling it a duty they owe to God and to their neighbor to obey the laws which govern life and health, they would have the blessing of physical and mental vigor; they would have moral power to engage in the warfare against Satan; and in the name of Him who conquered in their behalf, they might be more than conquerors on their own account.

It is not an easy matter to overcome the appetite for narcotics and stimulants. But in the name of Christ this great victory can be gained. His love for the fallen race was so great that he made an infinite sacrifice to reach them in their degradation, and through his divine power finally elevate them to his throne. But it rests with man whether Christ shall accomplish for him that which he is fully able to do. God cannot work against man's will to save him from Satan's artifices. Man must put forth his human power to resist and conquer at any cost; he must be a coworker with Christ. Then, through the victory that it is his privilege to gain by the all-powerful name of Jesus, he may become an heir of God, and a partaker with Christ of his glory.

No drunkard can inherit the kingdom of God; but the Lord has promised, "To him that overcometh will I grant to sit with me in my throne, even as I also overcame, and am set down with my Father in his throne."



The TEMPERANCE MOVEMENT

OUR ARCHENEMY

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

The liquor problem has been acute in England since the beginning of the war. Statesmen have perceived that the efficiency of the nation was being lessened in proportion to the alcohol consumed, and have done what they could to limit the sale of drink, particularly in the centers for the manufacture of munitions.

This article, prepared especially for distribution in connection with the temperance campaign in England, is a terse and forceful presentation of the subject, and will be read with profit both by those who already believe in temperance and by those who have not been convinced that a little drink now and then is an injury.

MANY fantastic claims and ridiculous statements are made regarding their supposed advantages by the producers and venders of alcoholic drinks, but none of these claims rest on a sound foundation. Alcohol is a poisonous drug, and its influence upon the body and its delicate structures is always that of a poison. Furthermore, as Dr. Seymour Taylor, F. R. C. P., has so tersely put it, "Alcohol is not a food." Alcohol destroys life, and is valuable for the purpose of hardening and preserving dead organs and tissues. For this very reason it has a distinctly hardening and shriveling effect on living tissue, thus encouraging and hastening the senile changes that bring old age and death. Again, alcohol is the direct cause of a goodly number of diseases, and a predisposing cause of many others. Its daily use, even in strict moderation, weakens the natural health-promoting forces of the body, and makes one more liable to the invasion of germs, as in the case of consumption, or to the development of certain constitutional diseases, such as gout.

Alcohol and Digestion

Gross ignorance prevails among most people with regard to the effect of alcohol upon food and the digestive organs, and many sincerely believe that it may serve a helpful purpose in the process of nutrition. Careful investigation makes it clear that alcohol, in proportion to the quantity used, renders the food that is eaten more difficult of digestion, and thus prolongs the process and overtaxes the

organs. But this is by no means the only harmful influence of alcohol in the alimentary tract. Scientific investigation has also proved that alcohol hinders the action of the various digestive ferments, and so still further disturbs and retards the digestion of food. In spite of the fact that there is an increase of mucus, or phlegm, which is poured out from the walls of the stomach for the protection of the delicate lining membrane, the irritation of the alcohol poison causes congestion, and, in larger doses, inflammation of the gastric mucous membrane, leading to catarrh of the stomach and chronic dyspepsia.

The bowels, too, suffer from the irritating effects of the alcohol, and their normal action is more or less disturbed and interfered with.

Alcohol and the Blood

Alcohol does not undergo any form of digestion, but enters straight into the blood stream as alcohol, and circulates in the countless number of blood vessels throughout the body as alcohol, reaching the various organs, tissues, and remotest living cells in its natural form. The truth of these statements is verified by the speed with which alcohol reaches the lungs and the breath. It is true that nature recognizes alcohol as a poison, and as such seeks to eliminate it as rapidly as possible. A considerable proportion of the alcohol taken is speedily expired from the lungs in the breath, but a certain amount is also eliminated through the pores of the skin.

The effect of even small percentages

of alcohol upon the cellular elements of the blood, and especially the white blood cells, or, as Professor Metchnikoff has called them, "the soldiers of the body," is that of a paralyzing agent. Alcohol has a deadening effect upon these vital elements sufficient to interfere seriously with their normal functions. As long as alcohol circulates in the blood stream, it lowers the defensive forces of the blood, and thus opens the door to the invasion of disease, and especially infection.

The Liver and the Kidneys

No organs of the body suffer more from the hardening and shrinking effect of alcohol than the liver and kidneys. These vital organs in health are composed of a minimal amount of supporting fibrous tissue and a maximum amount of active glandular substance upon which their functions depend. Alcohol has the property of stimulating the growth of the fibrous structure at the expense of the active secreting gland, and in proportion to the increase of this fibrous substance the hardening process goes on. The result is a continual decrease in the vital parts of these organs, and as the organs harden and shrivel they contract, and the surface becomes roughened by the appearance of hard nodular masses. This alcoholic disturbance of the liver is technically known as sclerosis; but the popular name is "gin" or "hobnailed" liver. In the case of the kidney, an incurable disorder known as chronic nephritis, or Bright's disease, develops, the organ gradually shriveling and becoming less and less useful.

The Lungs

The hardening effect of alcohol upon the delicate structure of the lung tissue very soon causes a loss of that elasticity which is so necessary to an organ that is constantly expanding and contracting. Here again we have a steady lessening of the normal functions of the organ so that the breathing becomes more and more labored and imperfect. The increasing loss of elasticity means diminishing breathing power, and at the same

time the victim becomes more susceptible to bronchitis, pneumonia, tuberculosis, and other respiratory diseases.

The Heart

Most persons look upon the heart as the vital organ of the body, for it is literally the fountain of life. As we all know, the heart is a muscular force pump which drives the life-giving fluid through the arteries, capillaries, and veins, so that it reaches the remotest tissues and cells of the body. Perhaps the most characteristic change in the heart substance caused by the poison alcohol is a degenerating process by which the muscle cells are gradually changed into a useless fatty substance. It must be obvious to any one that as these muscle cells change into fat, they are no longer useful, and the heart substance is proportionately weakened, and becomes less and less fit to accomplish its daily task. Even the moderate consumer of alcoholic beverages is subject to this fatty degenerating process, and an alcoholic heart usually means a fatty and therefore a weak flabby heart.

The Arteries

The statement that "a man is as old as his arteries" is as true as it is familiar. The normal healthy artery is endowed with a wonderful amount of elasticity, so that it is easily capable of accommodating varying quantities of blood according to the requirements of the occasion. When the heart pumps a new supply of blood into the arteries, they immediately expand to receive the additional blood, and then quickly contract again in order to pass it on through the circulatory system. Here again we witness the hardening effects of alcohol, which cause an ever-increasing loss of elasticity. The arteries become hard and brittle, and in the case of strain are liable to break, and thus cause a hemorrhage, small or large. This condition of the arteries is known as arteriosclerosis; and if an artery bursts in the brain, the result is usually a stroke of apoplexy, causing more or less paralysis of one side of

the body. The escaping blood forms a clot, which so presses upon the nerve cells as to put them out of action, at least for a time, if not permanently. It is not necessary to say that apoplexy is one of the serious diseases, and it is uncommon for a person to survive a third stroke.

The Nerves

Almost everywhere and among almost all classes of society we note an increasing tendency to nervous disorders, such as hysteria, neurasthenia, mental depression, hypochondriasis, melancholia, not to mention various manias and other forms of insanity. This steady increase in nervous and mental disturbances is closely associated with the free or even moderate use of alcohol, and we have reason to believe that from twenty to twenty-five per cent or more of these cases can be traced to the use of alcohol in one form or another. The poisonous drug has a decidedly exciting and irritating effect upon the nerves which even in health are delicate and readily susceptible to mischief. The primary effect is to stimulate or excite, but the final result is enervation, depression, and debility. Alcohol is in reality more of a narcotic than a stimulant, although many fail to realize this; and it is the narcotic effect which persists, benumbing and even paralyzing the nerves to a certain degree.

Alcoholic neuritis, a very painful and oftentimes incurable disorder, is another disease traced solely to the use of alcohol.

The Brain and the Sensorium

But the effect of alcohol upon the brain is as injurious as upon other organs, if not more disastrous. No living tissue escapes the destructive influence of alcohol, and the brain is certainly not an exception to this rule. The higher and nobler controlling and balancing faculties of the mind are benumbed, quieted, and oftentimes put to sleep, while the lower, grosser animal propensities are set loose, excited, and stimulated. The unfortunate victim becomes more and more irresponsible in both speech and conduct.

The sense of responsibility diminishes or is even lost entirely, and there is to all intents and purposes a temporary attack of insanity. It can be truly said that as long as the man is under the control of the alcohol, he is not fully responsible for his actions, and it would only be a kindness to treat him as a lunatic, and protect him from injuring himself or prevent him from injuring others.

Alcohol Shortens Life

The chief sign of growing age is a gradual drying, shrinking, and hardening process which affects all the organs and tissues of the body. There is a steady increase of the dead fibrous structure or framework of the body, at the expense of the active, living, functioning tissues. These senile changes are the mark of age, and indicate that dissolution is gradually approaching. Now it is a fact that alcohol, on account of its hardening and shriveling effects, hastens these changes, and thus brings premature old age and premature death.

It is scarcely necessary to refer to the statistics of the insurance societies to prove that the total abstainer not only has a healthier, and we believe a happier life, but also a longer life than even the moderate drinker. According to statistics of the United Kingdom Temperance and Provident Association, the leading mutual assurance society of the kingdom, from the age of twenty-five to sixty the average death rate of the abstainer is forty per cent lower than that of the moderate drinker. Again, the Abstainer's and General Insurance Society reckons a total abstainer at the age of thirty as equivalent to a nonabstainer at the age of twenty-four, and requires from him a proportionately lower premium for life insurance. Many similar statistics might be quoted to show that even the temperate use of alcohol militates against good health and long life, and materially hastens physical and mental decay.

Slackness or Fitness

We believe it is the ambition of every man and woman to be as fit and efficient

as possible for the daily task. Consequently, anything that seriously hinders fitness should be strictly avoided. We have heard recently a great deal about slackness and slackers, especially in regard to the manufacture of munitions of war, but we have yet to hear of slackers and slackness among abstainers. It is the whisky or gin, or even the beer,

else except the real cause of the mischief. Nerve force is diminished, and the nerves become unsteady and unreliable.

This explains why the morning drink is so objectionable, for it interferes more seriously with the day's work. Drinking in the evening after work is bad enough, but not nearly so destructive of efficiency



A GAME OF FOLLOW YOUR LEADER

Mr. Moderate Drinker is a dangerous leader to follow.

which diminishes both willingness and ability to work and tempts a man to take things easy, do as little as possible, or play truant with his work.

The explanation is very simple, for alcohol has the direct effect of weakening the muscles and stealing away a man's strength. Alcohol, even in small doses, limits the powers of endurance, and in large doses destroys them entirely. And alcohol so muddles the brain and warps the judgment that the poor victim is ready to blame anything and everything

as a morning drink, because at evening the man has the night before him to sleep off some of the worst effects.

This also explains the slackness of the Monday's work in those workmen who have imbibed too freely on Saturday night and have found Sunday too short a time in which to get over the disastrous influence of the alcohol.

Alcohol a Waster

In short, alcohol is an economic waster; it wastes our money and wastes

our substance. Alcohol kills thrift and encourages debt, ultimately leading to bankruptcy.

Even more emphatically alcohol wastes our energy, both physical and nervous, and its daily use makes it impossible to attain to that natural and normal fitness

for labor which characterizes the successful worker.

Alcohol wastes both health and strength, and opens the door for sickness, disease, and invalidism. It wastes life itself, and never fails to shorten the days of its slaves.

AS VIEWED BY THE CARTOONISTS

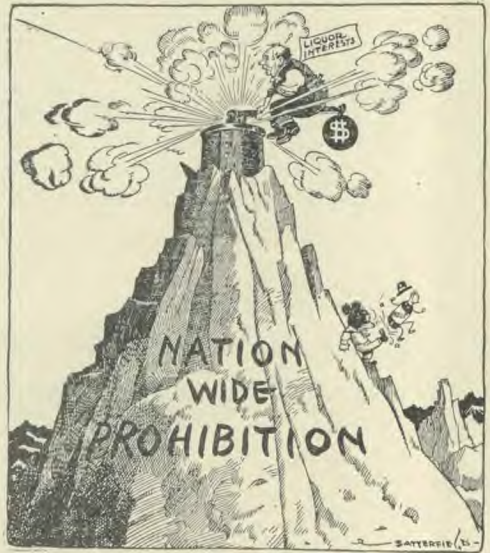


IN ALBERTA

Two of our illustrations this month, taken from the *Pioneer*, are intended to show the gains made in two of Canada's great provinces, Alberta and Saskatchewan, against the open saloon.

Another illustration shows the national volcano becoming active, and the vain at-

tempt to prevent it. First, towns went dry, then counties, then States; and now the liquor interests are making a desperate attempt to prevent the nation's going dry. Satterlee has well represented the saloon interests as attempting to prevent the bursting forth of a volcano. The explosion may be prevented for a time, but as the pent-up forces within increase, the bursting point will eventually be



HOPELESS!

A volcano that cannot be stifled!

reached, and the man on the safety valve will suddenly disappear.

The cartoon on the previous page tells its own story. It is a dangerous example that the "moderate drinker" sets to the younger generation.

The licensed factory of drunkards and criminals at present upheld by federal law is really a crime mill in which Uncle Sam is a principal partner.



IN SASKATCHEWAN

TEMPERANCE NEWS NOTES

British Government Controls Liquor.—An order in council put in operation by the British government places under official control the sale and the supply of liquors in the areas where war munitions are being manufactured.

Whisky No Longer a Medicine.—The next edition of the National Pharmacopœia will not list whisky or brandy, according to the decision of the committee. This means that if any druggist dispenses liquor on a prescription, he will have to have a liquor license.

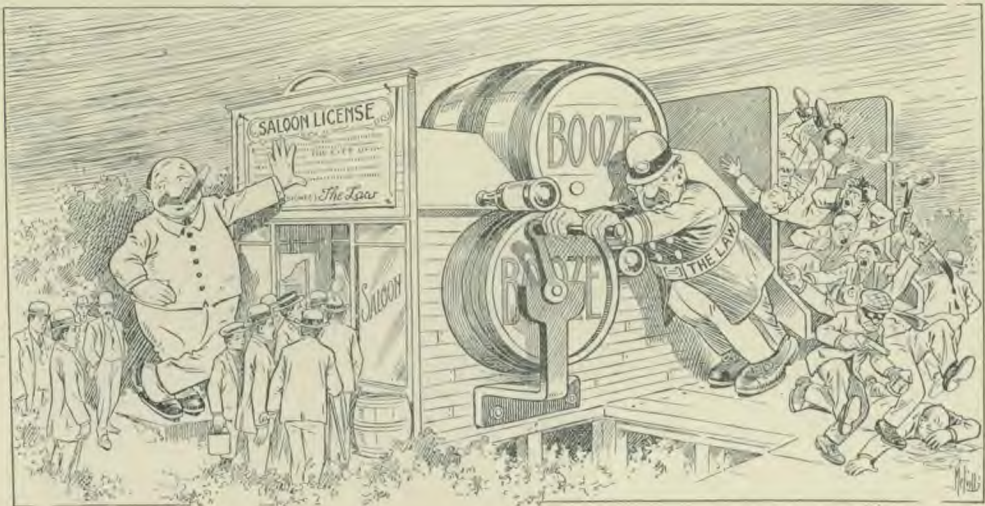
Alcohol the Dehumanizer.—Dr. W. Robertson, medical officer of health of Leith, Scotland, asserts that alcohol has been the greatest dehumanizing influence in history. Whether it is the cause or the effect, any measures which promise to save chronic offenders from its baneful blight will be for the good of the race as well as for the individual.

Beer a Poor Food.—In Germany, opinion usually favors the proposition that the alcohol in beer when used in moderate quantities is burned in the body, with the liberation of energy; and it is common to regard beer as "liquid bread." At the recent meeting of the antialcohol physicians in Munich, Dr. Theilhaber said: "The value of beer calories is supported by one-sided arguments. No regard is had to the toxic action of alcohol; brewing leaves out the vitamins and the mineral constituents of the outer coatings of the grain. Even at its best, beer nutriment represents the luxus consumption. Doubtless those

who consume it do not require these extra calories." The sense of the meeting was that brewing should cease during the war, or at least should be minimized.

Drinkers Not Wanted as Officeholders in Kansas.—The Kansas State Civil Service Commission has made a ruling that no applicants shall be considered who are addicted to the use of intoxicating beverages. It is put a little stronger than that, however, as that would leave the burden of proof with the State. The ruling reads: "No application will be considered except from persons of good moral character, of good habits, and who are not addicted to the use of intoxicating beverages." If there is any question regarding the matter, it is up to the applicant to demonstrate that he is not addicted to drink.

Harrisburg Physicians Against Liquor.—One hundred practicing physicians of Harrisburg, Pa., signing a petition for local option subscribed to the following statements: "The use of alcohol is detrimental to the public health. It shortens the average length of human life. It is productive of much disease of the body and mind, causing deleterious hereditary effects on succeeding generations. It produces private immorality. It promotes disorder and crime. It is an economic waste and is productive of poverty. It reduces the efficiency of State or nation addicted to its use. Scientific investigation has proved alcohol to be a poison to the human body, and it should be treated as such." None of these statements can be successfully controverted.

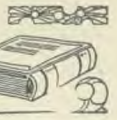


PARTNERS IN CRIME

The law, sworn to uphold justice and repress crime, is, and always has been, a part of the crime-making machinery of the saloon.



BIBLE HYGIENE



MAN'S NATURAL DIET

1. WHAT diet did God give to man in his perfect condition?

"And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat." Gen. 1: 29.

2. After the fall, what change was made in man's permitted diet?

"Thorns also and thistles shall it bring forth to thee; and thou shalt eat the herb of the field." Gen. 3: 18.

3. After the flood, what second permission was given man?

"Every moving thing that liveth shall be meat for you; even as the green herb have I given you all things. But flesh with the life thereof, which is the blood thereof, shall ye not eat." Gen. 9: 3, 4.

4. How was this permission restricted? See Leviticus 11.

NOTE.—Man was restricted to the use of clean animals as food. Leviticus 11. That this restriction was given to Noah would seem probable from Gen. 8: 20.

The Diet in the Wilderness

5. What special diet did the Lord provide for the children of Israel in the desert?

"Then said the Lord unto Moses, Behold, I will rain bread from heaven for you; and the people shall go out and gather a certain rate every day, that I may prove them, whether they will walk in my law, or no." "And when the children of Israel saw it, they said one to another, It is manna; for they wist not what it was. And Moses said unto them, This is the bread which the Lord hath given you to eat." Ex. 16: 4, 15.

6. What was the purpose of this diet?

"That I may prove them, whether

they will walk in my law, or no." Verse 4.

7. What had occurred on the part of the children of Israel that led to the giving of the manna?

"And the children of Israel said unto them, Would to God we had died by the hand of the Lord in the land of Egypt, when we sat by the fleshpots, and when we did eat bread to the full; for ye have brought us forth into this wilderness, to kill this whole assembly with hunger." Verse 3.

8. How did the manna prove the people?

"And the mixed multitude that was among them fell a lusting: and the children of Israel also wept again, and said, Who shall give us flesh to eat? . . . But now our soul is dried away: there is nothing at all, besides this manna, before our eyes." Num. 11: 4-6.

9. What did the Lord say the people had done?

"Ye have despised the Lord which is among you, and have wept before him, saying, Why came we forth out of Egypt?" Num. 11: 20.

NOTE.—In Hebrews we learn that the children of Israel "could not enter in because of unbelief." At every step in the leadings of God they murmured. There may be nothing evil in a melon or a cucumber, or even an onion; but crying after these things and complaining that their souls were dried up on the diet given by the Lord, was unbelief and rebellion.

10. Why were these things written?

"Now these things were our examples, to the intent we should not lust after evil things, as they also lusted." "Now all these things happened unto them for ensamples: and they are written for our admonition, upon whom the ends of the world are come. Wherefore let him that thinketh he standeth take heed lest he fall." 1 Cor. 10: 6, 11, 12.

EDITORIAL

GIVING HEALTH ITS TRUE PLACE

HEALTH does not class with commercial products. It does not come within trade lists. There are no market quotations on it. It is not bought and sold. In spite of newspaper and magazine advertisements, no one can make a *bona fide* offer to sell health in any form to anybody. No syndicate of men organized as a "Medical Company" or "Health Association" carries health as its stock in trade. Catalogues, prospectuses, and circulars ever so elaborately written, are worthless in their claims to give health.

There is no monopoly of healing, no secret process possessed by some man, no new method known only to its alleged discoverer. The laws of health are not copyrighted, and no one holds advantage over another in obtaining health. It is under the control of no man, unless it is the man who holds it for himself. All the power of man to give health is absolutely nil in itself. Every "pathy," every dose of medicine, every device, and all the skill and ingenuity of the best-trained men are worth nothing in themselves for giving health.

Health is not a matter of material manufacture or of chemical elaboration. It is not made by men. Nor is health simply a matter of the mind, produced by mental effort—present when you think it is, and absent when you don't. It is not a thought product. It does not come and go as one wills.

Oh, yes, it is true that man has much to do in determining what his health shall be—practically everything. And men's methods are brought into use in securing health. The mind, too, plays a big part in the matter of whether one is sick or well. But for all that, we say again, Health is not a product of human power.

Health has its source higher than any earthly level. It is a blessing from heaven. It comes from God. No more than man can give life in the first place, can he maintain it or restore it, in part or in whole. To heal is to give life, and that rests with the Life-giver.

To recognize health as a divine blessing does not narrow the conception, nor subject to religious fanaticism or irrationalism. Neither does it discount the value of human effort and scientific research and skill. Rather, it places all rational methods of healing, every really curative agent and every remedial measure, on a higher plane of recognition. It gives true therapeutics a place of highest honor.

While the surgeon, the physician, and the nurse must disclaim personal power to heal, each is an instrument in the hands of God in his ministry of healing service. The true practitioner sees beyond the commercial or professional side of his work, and discerns in the healing art a coworking with God.

Laws of health are laws of God, and as such are immutable. Their violation means a sure penalty; their obedience a reward. A beneficent Creator has endowed us with health as a human heritage, and made every provision for us to keep it. It is by actual sin, transgression of law, either by ourselves or by somebody else, that we lose it.

If we look at the subject of health and healing right, we shall distinguish between the true and the false, by the standard of health's laws. Every method for healing disease, every remedy, every means of whatever kind, must be in conformity with divinely established law. Reason rules in the selection of remedies. Scientific study seeks to know the ways of working in accord with nature's laws. Intelligence unites with spiritual fervor to make the most of their application. And God blesses every effort to understand his laws, and gives grace to obey them.

And we have health.

L. A. H.

LAWS OF NATURE AND LAWS OF HEALTH

THE statement, sometimes heard, that "the laws of nature are the laws of God," seems to involve a little loose thinking. What we call "laws of nature" are not laws in the sense that they are the fiat of God; they would better be called "generalizations," for they are the summing up in a few words of what men have perceived of the processes of nature. They are a kind of shorthand description of nature's way of doing things as men have observed it. To call these generalizations, made by scientists, the laws of God is to imply that scientists, by means of microscope and telescope and scales, can learn the ultimate secrets of God.

Let me illustrate in a simple and necessarily crude way how these "laws" are "discovered." An observer notes that a pendulum four feet long takes twice as long to make a complete swing as a pendulum one foot long. He experiments again, and observes that a pendulum six feet long takes twice as long to swing as a pendulum a foot and a half long, and that a pendulum two feet long takes twice as long to swing as a pendulum half a foot long. That is, if one pendulum is four times as long as the other, it will take twice as long to swing as the other, or, as the scientist might say, its *period* is twice as long. He makes other observations, taking various other lengths for the short pendulum, and each time having the other pendulum four times as long, and he always obtains the same result; namely, *when the lengths of the pendulums are in the ratio of one to four, the periods are in the ratio of one to two*. He might call this a law of the pendulum. Desiring further knowledge, he makes observations with pendulums whose ratio is as *one to nine*, and finds that the periods are always in the ratio of *one to three*. He might call this another law of the pendulum. By making numerous other observations he is able to summarize these various laws into one law, namely, *The ratio between the periods of two pendulums is the square root of the ratio between their respective lengths*. This "law," then, is merely a summing up of the results of observations regarding the motions of pendulums. Later he learns that the pendulum acts as a falling body, and that it is possible to demonstrate mathematically from the laws of falling bodies that this law of the pendulum could not be otherwise than as it is. But he perceives that the laws of falling bodies are but a phase of the laws of momentum,—the laws which "determine," as we say, the path of a cannon ball in the air or of a planet in its orbit,—the laws by which these motions can be calculated. As his knowledge of physics and mathematics increases, he "discovers" behind these laws, other

laws, and still others; but with all his research, he never arrives at the ultimate reality of the working of God in nature.

"Canst thou by searching find out God?"

"How unsearchable are his judgments, and his ways past finding out!"

The deepest insight of the most profound scientist or the greatest genius is only a rough approximation. We do not yet know what matter is, what electricity is, what gravitation is, and probably finite man never will know. How can we know their ultimate laws?

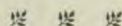
This, however, is only preliminary to another discussion.



We sometimes also fall into the loose way of speaking of "the laws of health," as if there were a definite, invariable health decalogue, or series of immutable Thou-shalts and Thou-shalt-nots, the observing of which will insure health. If there were, it would be a simple matter for a doctor to hand to each patient a copy of these commands and prohibitions, with the admonition to "get busy." But the doctor has no such bed of roses. He soon learns that he must study every case by itself, and that what is best in diet, exercise, and the like for one patient, may be anything but good for the next patient.

"But," one says, "that is because the patients have departed from the normal in different ways, and hence require various routes to bring them back to normal." That may be; but a little close observation of the so-called normals will reveal the fact that either there are few normal individuals, or else there is no set of health laws equally applicable to all who are normal. The same rules will not apply in the torrid, temperate, and frigid zones. The missionary going to India must be cautioned as to how to live in that country; for should he attempt to live in the tropics as he lived at home, he will soon return on sick leave, if, indeed, he succeeds in reaching home.

Again: persons otherwise apparently healthy are unable to eat certain foods. One whose occupation is largely intellectual may have a miserable time for a week because he ate a plate of beans, though his gardener may thrive on beans three times a day. To multiply instances would be useless, as the reader probably knows of many such.



We can arrive at approximations to health laws, as, "It is injurious to overeat;" but what constitutes overeating varies with the age, the weight, the climate, the occupation, etc. Again we may agree that it is injurious to eat too often; but here, too, we shall find a difference as to what are the best intervals between meals; and in some cases of illness at least, we shall find that the food is best assimilated if given in very small amounts, and frequently.

Health is the result of a proper adjustment of the individual to his environment; and this adjustment each one must make for himself. Some succeed much better than others; and not always do those succeed best who attempt to do it by a set of formulated rules. This is not to say that it makes no difference how one lives. It makes a vast difference whether one lives for his own gratification or conscientiously adopts that manner of life which will best conserve his vitality;

that course to him is the law of health: "This do and thou shalt live." But some of the things that are best for me might not be best for you.

There is yet another phase to this discussion that merits attention. Though natural laws, or the laws of nature, as we are pleased to call them, only measure what man has been able to discern of the workings of nature, they sum up man's observations that there is a marvelous uniformity throughout the universe, a wonderful harmony in nature, which has compelled even agnostics to admit that back of "nature" there must be an Intelligent Personality.

"The heavens declare the glory of God; and the firmament sheweth his handiwork."

Though we may not dignify any of the Thou-shalts and Thou-shalt-nots of the health code as immutable laws of health, there are such laws, a most important one being:—

"Whatsoever a man soweth, that shall he also reap. For he that soweth to his flesh shall of the flesh reap corruption; but he that soweth to the Spirit shall of the Spirit reap life everlasting."



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AFTERMATH OF THE "EASTLAND" DISASTER

Vehicles of every description were requisitioned to carry bodies of the victims to temporary morgues. White streamers fluttered from nearly half of the homes of the suburbs of Cicero and Hawthorne, whence came most of the Western Electric's excursionists.



The "Eastland" Disaster ONE of the saddest of accidents terminated suddenly what was intended to be a pleasure excursion and outing for the employees of a great Chicago electric plant, and cast a pall of gloom not only over the city of Chicago, but over the entire country. In an instant the huge top-heavy pleasure boat "Eastland" capsized while yet at her moorings in the Chicago River, and more than eight hundred men, women, and children were caught in a death trap.

There was, of course, an investigation to fix the blame for the accident, for it could not have occurred had it not been preceded by gross and criminal carelessness. The investigation, conducted by several independent committees, may be a month in coming to a final decision—the punishment of the guilty party, and the addition to our legislation of other safeguards to life on excursion and other boats.

The Counterpart of the "Eastland" DURING the month following the "Eastland" disaster, while the committees are trying to fix the blame for the boat's overturning, more than a thousand persons in Chicago will die of *preventable* diseases. This is a toll more than that of the "Eastland;" but there is no investigating committee to fix the blame, there is no indignation, and there is little being done that will materially better the situation. And this death toll is not for one month, but for every month—twelve "Eastlands" a year. In Chicago alone twelve times a thousand people die every year of causes that might be avoided. And there is a like proportion in every city and town.

Considering the energy with which we handle an "Eastland" disaster, is it not strange that we take so complacently the fact of an overwhelmingly large death rate from causes that are avoidable? Must evils be presented to us in a melodramatic manner before we take cognizance of them?

Causes and Symptoms of Arteriosclerosis

BLIGHT, in the (London) *Lancet*, gives as causes of arteriosclerosis, (1) The normal wear and tear of life, especially from such occupations as cause overaction of the heart through heavy muscular work, as done by blacksmiths, porters, laborers, soldiers, and mountaineers; (2) acute infections, such as syphilis, the exanthems, influenza, and tuberculosis; (3) intoxications, as by alcohol, lead, or tobacco; (4) disturbed metabolism, as in gout, diabetes, Bright's disease, and obesity.

The premonitory symptoms of arteriosclerosis in the middle aged are headache, drowsiness, morning fatigue, unfitness for work, cold extremities, ringing in the ears, attacks of migraine or neuralgia, together with high-pressure pulse and accentuated second sound of the heart.

Why Men Die Earlier

IN the *Scientific American* of July 17, Dr. Charles F. Bolduan, director of public health education of the New York City Department of Health, attempts to answer the query, "Why do men over forty break down?" He shows from the United States census reports, that between the ages of forty-five and seventy-four there was in 1911 a marked increase in the number of deaths over the year

1900, and this increase seems to be progressive. One cause mentioned by the doctor for this increase is that more weak babies are saved by modern methods than formerly, and these weak babies would naturally tend to die before the babies born strong. He names as diseases causing increased mortality in men of this age, heart disease, arteriosclerosis, Bright's disease, and certain diseases of the nervous system, adding:—

"These diseases are intimately related to one another, and have many causative factors in common. Among these the most important are overindulgence in alcohol and tobacco, the poisons of syphilis and gout, rheumatism, and certain other diseases, and lead poisoning, muscular overwork, exposure to cold and wet, and exposure to great heat."

Bolduan is convinced that if syphilis and alcohol could be entirely eliminated, the death rate would fall at once from fourteen per thousand of population, to twelve or less; in other words, that these two causes are responsible for at least one seventh of all deaths. Doubtless many will consider this estimate extremely conservative. Bolduan has omitted what is, perhaps, a very important cause of premature death, a cause which has been mentioned recently by a number of writers; that is, overeating.

Honors to Rupert Blue

It was eminently fitting that the American Medical Association, at its annual meeting held in San Francisco, should elect to the highest office at its disposal, Rupert Blue, Surgeon-General of the United States Public Health Service.

It was fitting in the first place, because General Blue performed in San Francisco a few years ago a work of incalculable benefit not only to the city and State, but also to the nation, and in doing it he displayed rare executive ability as well as scientific skill. It will be remembered that it was Blue who cleared the city of what threatened to be a disastrous epidemic of plague. His executive ability was manifested in his success in uniting antagonistic and warring factions

and concentrating their energy on the one great enemy. His scientific ability was shown in his demonstration that a city can be made practically rat proof by proper building construction.

It was fitting in the second place because the great Panama-Pacific Exposition, in connection with which the American Medical Association meeting was held, is a tribute to the victories of sanitary science or public health administration which made possible the successful completion of the Panama Canal; and it is particularly appropriate that the great body of physicians whose duty it is to cure disease, and who met in San Francisco in commemoration of the triumph of disease prevention on the Canal Zone, should signally honor the man who is at the head of the federal machinery for the prevention of disease.

Typhus Fever

FOLLOWING a report that typhus fever had been practically stamped out in Serbia, we have received a report indicating that the disease is still a menace not only to Europe, but to America as well. It may be interesting to the reader to learn something of the discussions by various German physicians who have had experience with the disease, regarding the manner of its transmission.

It is generally accepted that the disease is transmitted by means of the body louse, but it has not been shown that the louse is the only means of transmitting the disease, and physicians who have had experience in helping to control the disease have varied in opinion as to other means of transmission. It is believed by some that fresh blood from a typhus patient may be infectious; by others that the breath, especially when there is coughing, may be a source of infection; still others believe that the fly may be capable of carrying the disease; and the head louse comes in for a share of suspicion on what appears to be good grounds.

The energy with which German phy-

sicians are preparing to resist a typhus epidemic is indication that they believe that there is still real danger of a general epidemic of the disease.

It will be noted by the reader that nearly all the suspected means of transmission are such as would not be found in connection with sanitary, well-kept homes.

Doctors and War

A NEW organization, the Medical Brotherhood for the Furtherance of International Morality, has been formed, with headquarters in New York City. On its committees are named a large number of prominent medical men, and men connected with the allied sciences. The president of this association, Dr. S. J. Meltzer, member of the Rockefeller Institute, has recently issued an appeal to medical men, from which the following is taken:—

"The present horrible war among civilized nations has brought out impressively certain sad facts; that although there are civilized individual nations, we are still very far from having a civilized humanity—that is an abyss between intranational and international morality; that, no matter how cultured and enlightened nations may be, they still settle their international differences by brute force, by maiming and killing their adversaries; and, finally, that the present high development of science and invention in individual nations only serves to make the results of this war more destructive than any other in history.

"The war has demonstrated, however, one encouraging fact, namely, that among all the sciences and professions, the medical sciences and medical practice occupy an almost unique relationship to warfare, and that among all the citizens of a country at war, medical men and women occupy a peculiar and distinctive position.

"No discovery in medical science has been utilized for the purpose of destroying or harming the enemy. Medical men in each of the warring countries are as courageous, as patriotic, as any other citizens, and are as ready to die or to be crippled for life in the service of their country as any other class of their fellow countrymen. But their services consist in ministering to the sick and to the injured and in attending to their sanitary needs. Furthermore, they often risk their lives by venturing into the firing line to bring the injured to places of safety and to attend to their immediate needs. In these heroic and humanitarian acts, friend and foe are treated alike. Finally, the majority of the members of the medical profession and of the medical jour-

nals of the neutral as well as of the warring countries abstain from public utterances that might be grossly offensive to any of the belligerent nations."

It is thought that at the close of the war such an organization as this brotherhood might facilitate the reunion of the members of the medical profession of all the nations which are now at war, and increase the good feeling among them. "A humanitarian body such as the proposed brotherhood, if already in existence and ready for service, might and could be of the greatest usefulness in many ways."

Journalistic Honor

THE Canton (Ohio) *Daily News*, in its issue of May 15, announced that it would "no longer accept any patent medicine advertising or other medical advertising." Some of the reasons for this decision are thus given by the *News*:—

"The *Daily News* believes that patent medicines, taken in the bulk, are an evil. Therefore they should not exist. The *News* has never heard any one argue to the contrary, and it does not believe that there are any arguments to the contrary. It has already received many indorsements of its stand, and no criticism.

"Some patent medicines are the most vicious products of our time. They promise cures for incurable diseases. They cost lives by standing in the way of proper treatment of diseases which are curable by such treatment. They act as substitutes for liquor where liquor is barred. They create drug fiends.

"Such patent medicines as these are vipers that ought to be crushed, and must be crushed, and will be crushed. They prosper largely because they are advertised in newspapers, magazines, and other mediums. They are advertised because these mediums make money by advertising them. This is a source of revenue which the *News* is only too glad to forgo. The day will come when all newspapers, whether they want to or not, will be compelled to do without this blood money."

This newspaper previously had tried to censor its patent medicine advertisements, and to admit only such as were unobjectionable; but it finally reached the conclusion that "the only remedy for the patent medicine evil is not regulation but prohibition,—the prohibition of all patent medicine advertising,"—a conclusion that will one day be accepted by all periodicals that wish to be classed as respectable.

WHAT TO DO FIRST



Lime in the Eye

Do not stop to remove the lime, but quickly drop into the eye a little water to which has been added an equal quantity of vinegar or lemon juice. Do not wait to reach a surgeon, otherwise the eye may be seriously damaged. The lime must be neutralized at once. Even then the ulcers will likely be several days healing.

Starvation for Diabetes

THE treatment of diabetes by limitation of the starch and sugar has had its disadvantages, and is not at all devoid of danger. Recently a new method of attacking the disease has come into vogue; that is, the starvation or fasting method. Christian, in the *Boston Medical and Surgical Journal* of June 24, reports good results by this method. He finds that it is safe, and that it shortens materially the time required to get a diabetic patient sugar free. Once this stage is reached, the physician can begin to build up the patient's tolerance for carbohydrates.

Treatment of Erysipelas

By means of a cotton swab, paint the entire area involved and half an inch of the surrounding skin with a 95-per-cent solution of carbolic acid, allowing it to remain until the purplish color is changed to a pretty complete whitening of the skin. It is essential to wait until this stage is reached in order to destroy the infection. But if the process is continued to a thorough bleaching of the skin, the result will be delayed healing and the formation of scar tissue.

When the action of the carbolic acid has reached the proper stage, the area treated should be swabbed with alcohol until it is again a pinkish color. If the area is large, a portion of it should be treated with the carbolic acid and alcohol, then another portion, continuing until the entire area has been treated.

Judd, who described this treatment in the *New York Medical Journal* of June 12, failed to note any evil result from the treatment.

There was no toxic action from the carbolic acid, though the urine was sometimes dark; and as a result of the treatment, the temperature rapidly fell. He found it necessary in severe cases to support the patient with stimulants.

To Remove the Germs of Diphtheria

POWDERED kaolin, blown into the nose and throat six or seven times a day for three or four days, removes the germs of diphtheria, and practically all germs. The success of the treatment depends on the thorough distribution of the kaolin over the entire surface. This is difficult if there is any obstruction in the nasal passages. For the throat, the patient may swallow a third of a teaspoonful of kaolin four or five times a day.

Foreign Body in the Eye

DUST, cinder, or other foreign matter may be removed sometimes by grasping the upper eyelashes and drawing the eyelid downward, allowing it in returning to come in contact with the lower lashes so that they may act as a broom or brush. If the foreign body is on the ball, this will not remove it.

Frequently it is sufficient to rub the other eye vigorously. Thus by causing sympathetic movements of the injured eye, an increase of tears may help to wash out the offending particle. Do not in any case rub the injured eye.

Some make a practice of inserting a flaxseed in the eye, the seed moving around and removing the foreign matter.

The best way to remove foreign matter is to hold a toothpick over the upper lid with one hand, and with the other grasp the upper eyelashes, and lift and bend the eyelid sharply back over the toothpick so that the inner pink surface is in plain sight.

Sharp eyes and good light, with perhaps the assistance of a magnifying glass, should detect the intruding particle, which should be removed by some sterile body, if possible, such as sterilized gauze.

Occasionally after the object has been removed there will be an irritation giving the impression that the object is still there.

OUR WORK AND WORKERS

A CALL FOR MEDICAL EVANGELISTIC STUDENTS

THE College of Medical Evangelists, Loma Linda, Cal., announces that it is now prepared to give special attention to developing and perfecting its medical evangelistic courses, of which there are two.

One of these is a two-year course, designed to give a speedy preparation for new fields to workers, such as graduate nurses, Bible workers, young ministers, and others who have already had some experience in missionary work.

The other course covers quite fully the complete medical course of four years, but does not require the same preliminary training as the medical course. While its design is to give its students the qualifications of physicians, they are not to seek recognition as such, but are to labor as evangelists.

Any one interested in either of these courses may secure full information by sending for a calendar to the College of Medical Evangelists, Loma Linda, Cal.

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SANITARIUM NEWS NOTES

THE Chamberlain (S. Dak.) Sanitarium reports a successful business, together with good results in its evangelical work.

Dr. W. A. Ruble, of the College of Medical Evangelists, spent part of the summer in special graduate work at San Francisco.

The Wabash Valley Sanitarium at last report had just one vacant room in the main building, and a few in the cottages. All were busy and happy.

Dr. C. A. Hanson, of Marsland, Nebr., is taking time from his private practice to hold Sunday night meetings in a small town. He is having a good interest.

Miss Helena A. Richards, who accompanied Miss Martin to Porto Rico, expects to remain in that island for at least another year, having signed a contract to that effect.

Miss Pearl Waggoner, for a number of years with the Hinsdale (Ill.) Sanitarium, is now at the Washington Sanitarium Mission Hospital and Dispensary, beginning a year of special work.

Miss Kathryn Vaughan, a graduate nurse from the Iowa Sanitarium, who has had several years' experience in treatment room work in Sioux City, Iowa, is now holding down a claim near Van Tassell, Wyo.

An article in *Hospital News*, by Dr. H. W. Miller, superintendent of the Washington (D. C.) Sanitarium, entitled "Sanitariums and Sanatoriums," very ably sets forth the work of the sanitarium, showing wherein it differs from the sanatorium, and wherein both these institutions differ from the hospital. The article received wide circulation, as this number of the *Hospital News* was used in a special publicity effort. A full-page picture of the Washington Sanitarium accompanied the article.

We have already reported that the sanitarium at Wichita, Kans., had to turn away patients. The latest report from there is that from ten to sixteen patients are going out there from the city every day for treatments.

Mr. C. R. Webster, a graduate nurse from the Washington Sanitarium, is carrying on the sanitarium work formerly conducted by Mr. W. P. Schuster, at Jackson, Mich. Physicians of the city are cooperating with Mr. Webster, and the work is developing.

The Chicago Institute of Physiologic Therapeutics, conducted by Dr. W. S. Sadler, Wilfred C. Kellogg, and their associates, has secured an additional floor of the Reliance Building for offices, gymnasium, X-ray department, and laboratories. The second floor is now used entirely for the two bath departments.

The Nebraska Sanitarium, at Hastings, Nebr., has purchased adjoining property, which will be used for institutional purposes. It has also been decided to erect an annex of twenty rooms. These additions are made necessary by the growing business of the institution. The acquisition of the new property gives the sanitarium ownership of one half of the block. The other one half is owned by the city, and is used for golf grounds. Thus the sanitarium enjoys a location free from other near-by buildings.

A banquet given by the Glendale (Cal.) Sanitarium received a fine write-up in the *Glendale Evening News*. Two columns were devoted to a detailed account of the affair, besides interesting information about the sanitarium and a favorable mention of its work and influence. The banquet proved an occasion of closer touch between a number of Glendale's leading citizens and the sanitarium staff, and gave opportunity to demonstrate and explain the methods of the institution. Such occasions are mutually beneficial.

Dr. A. B. Olsen writes of the Caterham (England) Sanitarium, that the institution is enjoying a large patronage, having been quite full for several months. The present season is the best in the history of the institution, notwithstanding the depressing influence of the war. This is most gratifying.

The portion of the Dixie Highway, in front of the Florida Sanitarium, at Orlando, has just been finished. It is a fine brick road, the thoroughfare of thousands of automobiles, and will give many persons access to the sanitarium. The institution has had a prosperous year.

Miss Minnie E. Martin, who went to Porto Rico a year ago, has just returned to this country, and will do nursing near her home, in Iowa. She found plenty to do in her last field, and had many interesting experiences.

Dr. B. E. Nicola, of the Attleboro (Mass.) Sanitarium, had a birthday not long ago. It being his fiftieth, it was made an occasion of special notice by his friends, unknown to him until he was called into the brightly lighted and nicely decorated gymnasium, to meet a large company with a program that included a shower of fifty silver dollars.

L. A. H.



THE NATIONAL CASH REGISTER BOOTH AT THE PANAMA-PACIFIC EXPOSITION
See article "The Injury Hazard" on page 466.

QUESTIONS and ANSWERS

Questions accompanied by return postage will receive prompt reply by mail.

It should be remembered, however, that it is impossible to diagnose or to treat disease at a distance or by mail. All serious conditions require the care of a physician who can examine the case in person.

Such questions as are considered of general interest will be answered in this column; but as, in any case, reply in this column will be delayed, and as the query may not be considered appropriate for this column, correspondents should always inclose postage for reply.

Corns.—"I am very much troubled with corns, though I try to be careful as to my shoes. Can you suggest some relief?"

The following corn paint has been recommended to cure the most inveterate corns. I have not tried this one, but I have tried one similar that gave good results:—

Have the druggist make a mixture containing 15 grains each of resorcin and salicylic acid in 2½ drams each of lactic acid and flexible collodion.

This is to be applied as a paint five or six days in succession, and then, after soaking the foot in hot water, the collodion may be lifted off, bringing the corn with it.

Arteriosclerosis.—"Kindly inform me what is the best diet for arteriosclerosis. Is it better to take medicines or not for this condition?"

Very little can be done in the way of relieving or curing arteriosclerosis. The important thing is to prevent it.

In order to prevent a tendency to this condition one should avoid all irritating foods and condiments, tobacco, alcohol, tea, coffee, and the like. Any food that causes decomposition in the intestines or indigestion may add to the trouble. Decayed or loose teeth, and an unhealthy mouth with pus pockets around the teeth, may have something to do with bringing on the condition. I know of no medicine that will cure arteriosclerosis, although anything that will prevent indigestion and intestinal fermentation will retard the process.

Any case of arteriosclerosis would have to be studied on its own merits in order that an appropriate diet might be prescribed to fit that particular case. One who is threatened with arteriosclerosis should be under the care of a physician who is not particularly wedded to drugs, and who is willing to give the case the careful study that it requires, and recommend such dietetic and hygienic measures as may be necessary.

In general, it may be said that a nonmeat diet, and one that has the minimum of proteins and decomposable foods, will be best adapted. The diet should also be chosen to favor free movement of the bowels.

Poultices.—"I should like your opinion of poultices, Doctor. I have heard that they are objectionable."

You have heard aright. These old-fashioned applications, bread-and-milk, flaxseed, and the like, are no longer used by modern physicians, nurses, and housekeepers, having been superseded by the more cleanly compress.

The efficacy of the poultice is due to the fact that it keeps the part moist and warm. A poultice on an open wound or on a bruise with a broken skin is apt to cause infection with disease germs or pus germs. Erysipelas or abscesses may be caused in this way. The modern method is to apply nothing to a wound that is not surgically clean, that is, entirely free from germs.

For the dressing of wounds it is customary to use sterilized gauze, that is, gauze which has been made free from germs either by chemical means or by heat. This gauze, which is a sort of muslin prepared for the purpose, is usually kept in germ-tight bottles or packages, and should not be handled with hands not surgically clean. And the part that is to be applied over the wound should not be touched if it can be avoided.

In place of a poultice, a clean cloth or compress wet in boiled water may be applied, and over this a hot water bag, if it is desired to keep the part continuously warm.

There is a prevalent belief that a poultice "draws;" but this drawing—if there is any such effect—is probably due to the effect of the heat and moisture.

Growing Fleshly After Operation.—"Why do women bloat and grow fleshy following a pelvic operation? and is there any way to avoid this?"

The removal of certain organs, as the ovaries, causes profound changes in the organism. This is probably because the ovaries secrete a "hormone," or substance which is useful in helping to regulate the metabolism of the body. When deprived of this secretion, the body suffers. It has been found that if a piece of the ovary is planted in the abdominal wall, it will continue to elaborate its secretion, the same as if it were at its old place of business.

COOKING Made Easy

By the Laurel
Health Cookery

In presenting this symposium in cookery, the author, who has had long experience as a cook and as a conductor of cooking schools, has kept two things prominently in mind,—that the contents shall be practical, and that the recipes shall be so explicit that the most inexperienced person cannot fail to succeed. ¶ There is no reason for worrying about what to cook, by the person who owns a copy of the Laurel Health Cookery.

CONTENTS

Nonmeat Diet

- 125 Nourishing, palatable soups
- 260 Meat substitutes
- 116 Tasty entrées
- 56 Cakes
- 88 Unleavened breads
- 100 Fillings for pies
- 34 Salad dressings
- 122 Puddings
- 1760 Recipes in all

GENERAL SUGGESTIONS

Meals, menus, traveling lunches, picnic lunches, sandwiches, "reasons why," etc.

FOR EVERY HOME

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IN ONE VOLUME

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WASHINGTON, D. C.

The Salt Glow.—"I find a salt glow very strengthening to me. Is it all right to take one every morning, followed by a bath? Is it fattening?"

I do not know why the salt glow should not be beneficial to you as you are taking it. It is found, however, that better results are obtained by varying treatments. One may get too much of even a good thing. So far as I know, the action of the salt glow followed by a bath ending with a cold spray would be a decided tonic. I do not know that it would be fattening.

Adenoids and Nasal Difficulty.—"Our little girl of nine years was operated on for adenoids, and ever since she has had nasal or head difficulty, and hawks so much that it is uncomfortable to hear her. Kindly prescribe treatment or harmless wash, as we are far from the nearest physician."

It is possible that your little girl's trouble comes from the uvula's being too long, so that it hangs down and tickles the throat. An elongated uvula will sometimes cause persistent irritation until it is shortened by an operation. Or her hawking may be from nervousness. If there is any mucus in the throat, you may have her use a gargle consisting of a teaspoonful of bicarbonate of soda to a cup of water. I am inclined to think, however, that her trouble is largely nervous. Is she not apt to hawk more when she is excited? I suppose you find that the more you say to her on the subject, the worse it makes her.

Liniments.—"What is your advice regarding the use of liniments? Are they harmless, and do they accomplish any real good?"

There is a very prevalent belief in the efficacy of liniments. It is probable, however, that most liniments do little good except as irritants or stimulants of the nerves of the skin. The effort to rub the liniment in is a sort of massage, which in itself is often beneficial. You will notice that most liniments are accompanied by directions to rub well.

Some medicaments are absorbed by the skin in sufficient quantity to have a medicinal effect. It is thus possible that oil of wintergreen, which contains a compound of salicylic acid, may be of real benefit when applied over a rheumatic joint.

For a fresh injury of the surface of the body, a cold compress, possibly an ice compress, will act better than liniment. If it is a deeper injury, as of a joint, a hot fomentation may give greater relief.

Retracted Eardrums.—"Kindly advise me concerning retracted eardrums caused by long-continued catarrh of the throat. Will such retraction cause deafness?"

Retracted drumheads may cause difficulty of hearing. If your drumheads have been retracted for some time, and have caused no change in your hearing, it is possible that the difficulty will not increase. You ought, however, to have the matter attended to, by a specialist if possible. At any rate it is best for you to have your throat trouble treated.

Turpentine as a Dressing.—"What is your opinion of turpentine as a dressing for fresh wounds?"

This is a favorite household remedy for application to fresh wounds, and, like many of the household remedies, it has merit. It is usually not painful when applied, provided it is not covered up. If it is applied on a cloth or covered with a cloth soon after it is applied, it will be extremely painful. It should be left uncovered for a few minutes, until the more volatile and irritating part of the turpentine has evaporated.

A favorite method of treating a fresh bruise is to pour on turpentine, then after a minute or two, to pour on more. After two or three such applications the part, if the skin is bruised or torn, may be bandaged. If in an hour or two the pain returns, make another application. Turpentine is most efficient to relieve soreness, and is an excellent antiseptic. Wounds thoroughly treated with turpentine are not likely to be followed by serious results.

Tobacco Depressant.—"Why is it that while there is a tendency to limit the amount of liquor, or cut it off entirely, to soldiers, tobacco is usually furnished freely? Has tobacco been found to be a benefit in time of war?"

It is because tobacco is a depressant that it seems to find a place of usefulness in the trenches. The effect of the excitement at the front is to key the nerves up to an intense pitch of excitement, which is wearing. Tobacco, acting as a sedative or depressant, calms the nerves. The bromides would do the same thing; and yet no one would think of a bromide as advisable for continuous use. An anesthetic, as morphine or ether, proves a sedative to the nerves during an operation, yet we are careful to limit the use of the anesthetic to the time when it is actually needed. An anesthetic is a dangerous drug, and at the best, it may leave some injury; but we use it in a crisis, such as an operation, to prevent greater damage. It is possible that in some such way one might excuse the use of tobacco in the trenches, but it should be remembered that tobacco is a most powerfully depressant drug, one of the most depressant we know of, and it is not wise to form a habit of keeping the nerves under a depressant. It is true that a good many habitual smokers do not apparently suffer much deterioration as a result of the habit, and some live to a good old age; but it is also true that the use of tobacco on the part of many, especially the young, is attended with results that are disastrous.

Crackling Sound in the Ear.—"What can be done for a crackling sound in the ear, caused by catarrh?"

This sound may be due to closure of the Eustachian tube, with consequent retraction of the drumhead, or it may be due to the presence of earwax in the outer ear, or to some other cause.

You should have the ear examined. To treat it without examination might result in irreparable injury. It will pay you to have that catarrh treated.



Colds

**Their Cause,
Prevention,
and Cure**

By G. H. Heald, M. D.

LOOK OUT

for the first drop in temperature. Sniffing of the nose, headache, shooting pains, etc., indicate that a cold is brewing.

SERIOUS CONSEQUENCES

often follow the lack of attention to the first symptoms of a cold. It is far better to run no risks, and give every cold immediate attention and intelligent treatment.

AVOID ALL COLDS

The object of this little book is to enable one not only to treat successfully all colds, but so to live as not to be susceptible to them. With the time of year approaching when this affection is prevalent, a copy of COLDS will be quite a household necessity. Be prepared. Order a copy today.

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SOME BOOKS

The Care of the Baby; How to Keep Your Baby Well, by J. P. Crozer Griffith, M. D. sixth edition. Cloth, \$1.50 net. W. B. Saunders Company, publishers, Philadelphia and London.

The popularity of this book, which was prepared as a guide for mothers as to the best way of caring for their children in sickness and health, is indicated by the fact that it has gone through six editions, and has gone to press about twenty times. On account of changing methods, it was thought best to revise completely and to reset the present edition. Some illustrations have been added, and others have been altered in order to make them more thoroughly modern.

The author, having in mind nurses and medical students as well as mothers, in the preparation of this volume has endeavored to make his statements not only plain and easily understood, but scientifically accurate. The book will also be valuable to general practitioners who have had only limited opportunities for observing and caring for children.

One is rather surprised to see that poultices are retained in this edition; and some of the recipes given in the appendix might be questionable unless the mother is more intelligent than is sometimes the case.

On the whole, however, the book is one that can be confidently recommended to those who have babies under their care.

Bodily Changes in Pain, Hunger, Fear, and Rage, by Walter B. Cannon, professor of physiology, Harvard University, \$2 net. Published by D. Appleton & Co., New York.

During the past four years Professor Cannon and his coworkers have conducted in the Harvard physiological laboratories a series of investigations showing that pain, fear, and rage are accompanied by certain important changes in body function—the stoppage of digestion, the setting free of sugar in the body, the abolition of fatigue, more rapid clotting of the blood, etc.—which fit the person or animal to perform great feats of strength and endurance, thus enabling him to give a good account of himself in his struggle with opponents.

A particularly interesting chapter is the one in which the author discusses war as a means of human development. Calling attention to the fact that the methods of modern warfare allow little place for the utilization of the

large muscular groups, he maintains that warfare does not develop the sturdy attributes of mankind; as "when the elemental anger, hate, and fear prevail, civilized conventions are abandoned, and the most savage instincts determine conduct." And to our great surprise and mortification, we have learned that the most civilized nations in this war are capable of the most brutal and savage acts. Cannon suggests athletics as a means to accomplish what war fails to accomplish, and cites the Filipinos, who, since they have adopted the athletic games of civilization, have ceased to war among themselves, having found in the athletic contests a natural outlet for their fighting instincts. Now that the Filipinos have learned from us a substitute for war, why should we not take to heart the lesson that they have learned? The physiological investigations by Cannon and his fellow workers, as recounted in this work, seem to furnish a scientific basis for the Filipino experiences.

The book has been written in nontechnical language, so that it may be readily understood by the reader who is not familiar with medical terms.

What Every Mother Should Know About Her Infants and Young Children, by Charles Gilmore Kerley, M. D., professor of diseases of children, New York Polyclinic Medical School and Hospital. Tough paper covers, 35 cents net. Published by Paul B. Hoeber, New York.

At the suggestion of a child's welfare organization, Dr. Kerley, best known throughout the country as the author of "Short Talks to Young Mothers on the Management of Infants and Young Children," has prepared the present volume to meet the wants of mothers of moderate means who might not feel able to purchase the larger work.

The book is concise, and yet plain and easily understood. Every other page is left blank for the insertion by the mother of notes or clippings which she may desire to preserve. Among the topics considered are, "Hygiene," "Maternal Nursing," "Artificial Feeding," "Food Formulas for Well Infants," "Feeding From First to Sixth Year," "Diet After Sixth Year," "Dentition," "Ailments," "First Aid to the Baby," "General Instructions," "Don'ts," "Formulas." It is a valuable compendium for any mother.



NEWS NOTES

Typhus in Baltimore.—Typhus fever has appeared in Baltimore, a case having been discovered in one of the Baltimore hospitals.

Individual Drinking Cups.—The Indiana State Board of Health has ordered that street vendors of beverages must serve beverages in individual cups of paper or other material.

Health Bulletins Replaced by Posters.—At a saving of \$62.50 a month, the public health director of Duluth, Minn., has superseded the monthly health bulletins with street car posters containing health epigrams.

Warning of War Diseases.—Dr. James A. Nyddegger of the U. S. Public Health Service, now in London, has sent warning of the danger of importing to America cholera, typhus fever, the plague, and other diseases from the war regions.

Reinoculation in German Army.—In Germany it has been thought wise to reinoculate the soldiers for typhoid fever every five months. It would seem that after a few months, the protective inoculation against typhoid begins to lose its efficiency.

Bitter Tonics Have No Effect on Digestion.—A number of experiments performed on dogs and men indicate that bitter tonics—so-called—acting either on the mouth or the stomach, do not increase the flow of gastric juice. They are therefore probably of little value in digestion.

Fight Against Ragweed.—The board of health of the city of New York is working for the eradication of ragweed from all the parks in the city, in order to lessen the number of hay fever cases, it being known that a considerable number of such cases are due to the pollen of ragweed.

Rat Proofing in New Orleans.—Three ordinances for the extermination of rats have been passed without opposition by the city council of New Orleans. These ordinances have to do with the prevention of the landing of rats from vessels, the use of covered garbage cans, and the proper disposal of garbage.

Thorough Examination of Florida's School Children.—According to an act passed by the State legislature in June, all the school children of Florida, including those in the rural schools, must have a thorough medical examination, this examination to be under the direction of the State board of health. The bill also provides for the sanitary survey of all school buildings and their surroundings. Good for Florida!

Leprosy.—Considerable comment having been caused by a case of leprosy discovered in Ann Arbor, Mich., Prof. Udo J. Wilde, at the tristate medical meeting held in Ann Arbor, condemned the attitude of the public toward lepers, and made a plea for the better treatment of these unfortunates.

Osteopaths May Not Practice Surgery in Virginia.—The Virginia State Board of Medical Examiners has made the ruling that a knowledge of materia medica is a necessary requisite in the practice of surgery, thus indirectly barring osteopaths in that State from practicing surgery, for the osteopaths do not study materia medica.

French Honors to American Physician.—To Dr. Richard Norton, of Cambridge, Mass., founder of the American Ambulance Corps, has been awarded the French military cross for his great bravery in tending to wounded men on the battle field, especially for his work in rescuing the wounded during the evacuation of a village within 500 meters (about 500 yards) of the lines of the enemy.

A Home for Blinded Soldiers.—Miss Winnifred Holt, who established in New York City an institution for the aid of the blind, known as "The Lighthouse," has gone to France, where she has established a similar institution for the soldiers blinded in the war. The enterprise, which is in high esteem and has the support of the French military and hospital officers, is being financed by an American committee.

Sanitation in Poland.—The Germans found hygienic conditions bad in the Polish villages. Garbage was piled in front of the houses and never collected. Typhus fever was always present. In such places the necessity of caring for the health of the soldiers was especially important. Frequent baths, the changing of the clothing, and the subjection of clothing to some process to kill all vermin, are important measures. Apparatus for sterilizing drinking water accompanies all armies.

Free Diphtheria Antitoxin in Minnesota.—The legislature having appropriated \$5,000 for the purpose, the State of Minnesota began, the first of August, the free distribution of diphtheria antitoxin. Each county is provided with at least one antitoxin station, and the antitoxin is given out on the application of physicians, who must sign a receipt giving the name and address of the patient for whom the antitoxin is intended. It rests with the attending physician to determine whether the patient is entitled to have the remedy free.

Telephone in Surgery.—By attaching a telephone and its battery to a metal sound, it is possible, by means of the telephone, to determine when the sound strikes a bullet sunk deeply in the body. Forceps being introduced and following down the probe, it is easy to grasp and remove the bullet. This method was first used in the hospitals of London.

Fourth of July Accidents on the Increase.—For a number of years, on account of the agitation for a sane Fourth, there has been a gradual decrease in the number of accidents from gunpowder, so much so that the agitation began to weaken; and as a result, the small-boy propensity for noise, which never weakens, again manifested itself, with the result that, in some places at least, there has been an increase of gunpowder accidents over last year. This is an evidence that agitation is worth while, even when it seems to have gone stale.

Effects of Prohibition in Kansas.—According to Governor Capper of Kansas the Kansas banks, under prohibition, have increased their deposits 100 per cent in ten years; Kansas has a much larger relative number of young men and women in college than any other State; the percentage of illiteracy is lower than in any other State in the Union, except one; thirty-two Kansas counties have abandoned their poor farms; forty-eight counties out of one hundred and five did not send a prisoner to the penitentiary last year; the per capita consumption of liquor in Kansas is \$3.04, as against \$21 for the United States as a whole.

Child Labor a Result of Industrial Change.—Dr. Felix Adler, chairman of the National Child Labor Committee, says that child labor has always been a by-product of the change from an agricultural community. It has appeared in every part of the world going through that change. It appeared in England and our Eastern States during such a change, and it is at its height now in the South during a similar change, and it will appear in the West unless it is forestalled, says Dr. Adler. The West, if it realizes the national significance of wasted childhood and the community's responsibility to the individual child, can prevent child labor there if it will.

Shaving Brush and Anthrax.—A London lawyer clerk, aged thirty-eight years, having died of anthrax, it was determined at the inquest that the infection came probably from the use of a shaving brush. After shaving he had a pimple on his neck, which swelled so badly that he soon went to one of the London hospitals, where he died. An examination of his blood showed the presence of anthrax bacilli. He was not known to have been in contact with any animal. As anthrax is a cattle disease, the probability is that the bristles of his shaving brush were infected with the germs, some of which were transferred from the brush to an abraded portion of his skin. It is suggested from this, that when one buys a shaving brush, it might be well to disinfect it before use.

War Cost to American Red Cross.—The activities of the first year of the war cost the American Red Cross \$1,460,306, according to the annual report recently issued. This amount was spent in the relief of suffering caused by the war. Never before in history has there been such a gigantic relief organization, working entirely for the relief of suffering. The work of the Red Cross has been performed in all the countries involved in the war. At present there are working under the auspices of the Red Cross in Europe, 71 surgeons and 253 nurses.

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Typhoid Scarce in British Army.—It was recently reported by Sir William Osler that there had been only 1,000 cases of typhoid in the British Army since the beginning of the war. This shows well for modern military sanitation, for in the last century the dead from disease often outnumbered the dead from the enemy's bullets. Another evidence of the success of the medical operations is the fact that at least 60 per cent of the wounded are returned to the front. With millions of men in the fight, he calls attention to the remarkable fact that there has been no epidemic in the British Army. Tetanus was rather a serious menace at the beginning of the war, but at present it is comparatively rare.

The Panama-Pacific Health Exhibits.—According to the Public Health Reports for May 7, a considerable area of the exhibition grounds will be devoted to hygiene and sanitation. There will be exhibits by the American Social Hygiene Association, the International Health Commission of the Rockefeller Foundation (the hookworm disease), the International Mouth Hygiene Association (a remarkable collection of skulls of different races arranged with the idea of showing the effect of various foods of primitive man as compared with modern diet), the Woman's Christian Temperance Union (effects of alcohol and other habit-forming drugs), the New York State Hospital Commission (an exhibition of its work on mental hygiene, and the care and treatment of the insane), the Massachusetts State Lunacy Board (exhibition of work done for the feeble-minded), the State of Pennsylvania (school hygiene, open-air schools), the United States Children's Bureau (a very complete exhibition showing the methods available for the care and nutrition of the child; free medical examination is given to any child, and advice is furnished to parents), the government of Japan (military hygiene), the Philippine Bureau of Health (tropical diseases), and others.

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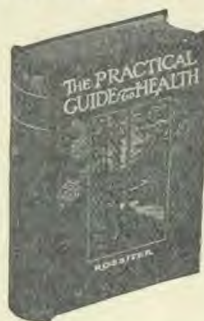
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