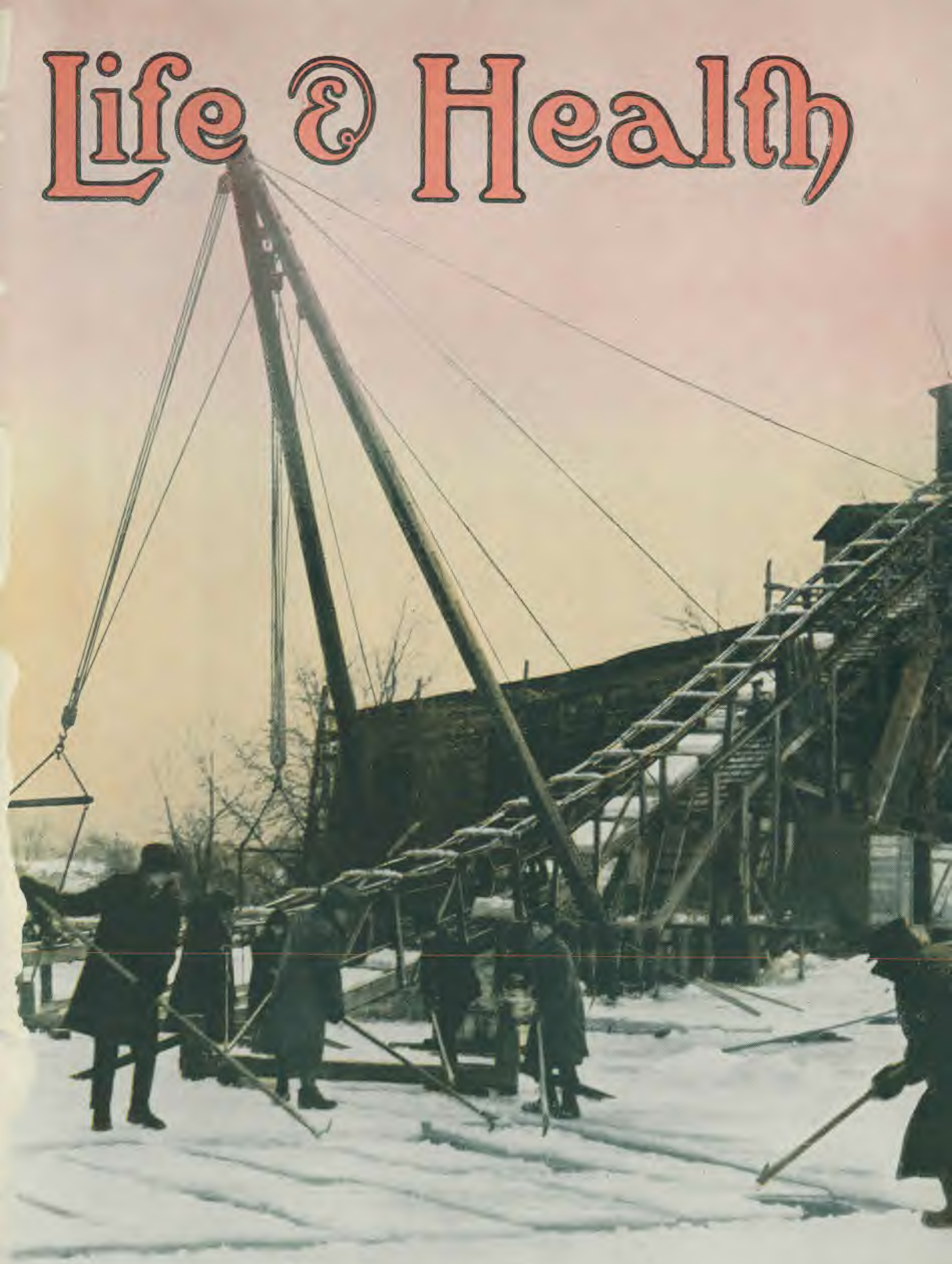
Life & Health



WASHINGTON, D. C.

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Sanitarium, Napa County - - - California

Life & Health

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FEEDING THE HUNGRY

Life & Health

HOW TO LIVE

Editor H. W. MILLER, M. D. | *Associate Editor* L. A. HANSEN | *Office Editor* G. H. HEALD, M. D.

VOL. 34 | FEBRUARY, 1919 | NO. 2

The Higher Education of the Trained Nurse

G. Henry Hale

ACCORDING to the curriculum, the nurses' training course consists of a certain number of lectures or recitations in physiology, in nursing, in the principles of hydrotherapy, massage, and the like, with a number of hours' drill in practical massage, hydrotherapy, bandaging, etc., and a number of hours' practical work in the different departments of the sanitarium. The course is intended to be a training in technical skill, but it is much more than that. Technical skill alone, while it is important, never made a successful nurse. The training course, while it gives the requisite technical training, is emphatically a character-building course. And perhaps, after all, this is its chief function, for character is of more worth, even, than skill.

Young people come to the training school from homes where, presumably, they have had the advantage of exalted precept and worthy example. But they are not seasoned; they are not tried; they have been protected from temptation by the parental roof. In the training school some are for the first time thrown upon their own character resources, to find, it may be, that they are not so strong as they supposed they were. New situations have called for new decisions without mother's or father's sympathetic aid. And under these new conditions they may have learned to their sorrow that what they supposed was strength of character was but the protecting cordon thrown around them temporarily by home influences. It is true the institution throws around the nurses in training its protecting influence, but this cannot be so intimate, so personal, as the home influence; and it is well that it cannot. The tree in the midst of the forest never sends its roots so deep as the tree exposed to the gale. Complete protection never develops strength. Gradually the young person must learn to meet new situations, trusting to her own judgment rather than leaning upon that of others. This ability to meet new situations promptly and with wisdom is what constitutes character.

Character is not something learned from a book or from a course of lectures, but is something developed slowly as a result of our attitude toward the daily experiences of life. It is true that sound, sympathetic advice and an occasional admonition are not without their

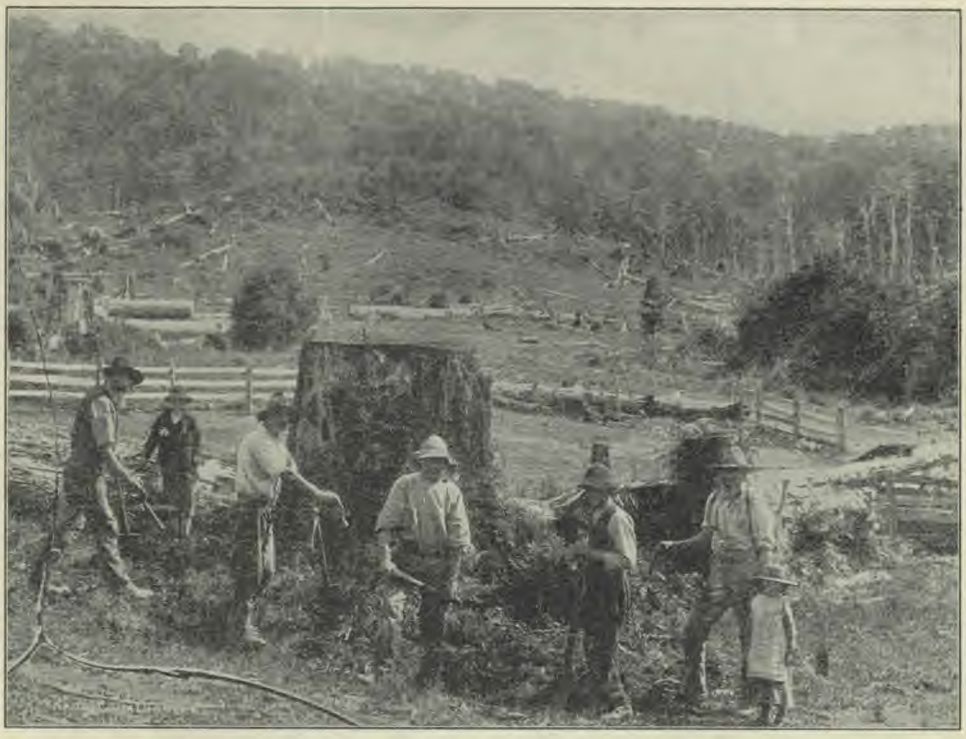
weight in helping one to make a right choice. But the choice must be made by the individual; and it is the habitual reaction in certain ways, under the varying circumstances of life, that constitutes character. Character, it may be said, is the tendency to act in certain ways under certain circumstances. A strong character is the result of repeated choice of the right in the face of adverse temptation.

The nurse has set before her, in her classes, certain ideals of conduct which appeal to her as right. But she feels something within her pulling the other way. In the new situations into which she is thrown in her daily routine, she meets with strong temptation to fall short of the ideal — to slight some of her work, to neglect duty, to appropriate to herself food intended for patients, to utilize for her own use time belonging to the institution or to the patient. Yielding to such temptation is a process of forming character, but character that means defeat for life — an entrance into the downward road from which return is difficult. Neither the superintendent nor the faculty may suspect the deceit. The nurse may go on for months seeming to be faithful when she is faithless — yes, may even carry her deception to the point of receiving her diploma; yet her life is a failure. She has failed utterly to learn the most important lesson, the one most valuable to her, in the entire course! Persistent withstanding of temptation, on the other hand, is character formation of the right kind. Such faithfulness may be overlooked, as it sometimes is, and the faithful nurse apparently may not get along any better than some of those who are more sneaking; yet she is laying a solid foundation for her future life, and her worth will be recognized by her patients.

Among the things which a nurse should gain through her experience are the following: She must be observant and sympathetic. She must be quick to see the wants the patient feels but does not express, must detect discomfort, and be ready to relieve it, if relief is possible and proper. If it is not, she must be prepared to explain the fact to the patient in such a sympathetic way that the patient will feel resigned to the discomfort. Her sympathetic nature must also detect the mental discomfort, the strangeness, the homesickness, the worry about money matters and bills, and so far as possible, apply the needed consolation. It seems almost needless to say that nothing will so prepare a nurse for such work as a real live Christian experience and a personal acquaintance with God through prayer. Patients turn instinctively to the godly nurse, to the nurse who has had a personal experience of power through prayer. If the nurse steadfastly adheres to the program, "The comfort and welfare of the patient before everything else," the patient will know it, and will trust her almost as if she were an angel sent from heaven. And who dare say such nurses are not Heaven-sent?

The nurse must possess tact. Sometimes the patient wants to know things the physician would withhold for the good of the patient. An unskilful nurse will, in her embarrassment and awkwardness, "let the cat out of the bag," or at least leave the patient with a suspicion that may be worse than the actual truth. A "worldly wise" nurse will lie out of it. Such a course, while it may seem justifiable, robs a nurse of her confidence in God and of her spiritual power, and sooner or later, the patient learns to distrust the nurse — a most unfortunate condition. The tactful nurse will know how to turn the mind of the patient into some other channel, without arousing her suspicions. Tact seems to be a special gift vouchsafed to some persons and denied to others, but it is not altogether a gift. The earnest, conscientious nurse, with a real love for her work and for her patients, will gradually, from her experiences, develop tact.

One of the most important lessons a nurse must learn is that all real excellence is the result of painstaking and long-continued work, perhaps drudgery! We think of Edison as a genius; but Edison himself said that genius is five per cent inspiration and ninety-five per cent perspiration. He himself is one of the hardest-working men in this country. He scarcely allows himself time for his sleep and meals. It was because he formed the habit of hard work, of sticking to an unpleasant job until it was completed, that he has been able to give so many valuable inventions to the world. And if you will go over the list of men and women at the head of affairs, who are doing, with apparent ease, the work of the world, you will find that every one of them first formed a habit of going at the job in hand and sticking to it, no matter how distasteful, no matter how humble, until it was completed. It was the *habit* formed in this way that fitted them for greater responsibilities. The Master brought this out beautifully in his parable of the talents, where he said, "Well done, good and faithful servant; thou hast been faithful over a few things, I will make thee ruler over many things."



A Scene in New Zealand, Showing Gum Diggers at Work

According to mortality statistics, New Zealand has the lowest death rate.

Lessons from Recent Mortality Statistics

G. H. Heald, M. D.

IT is profitable for this magazine, though it is devoted to the prolongation of life and the increase of health, to make an occasional study of disease and death. Some of the most effective work of life insurance officials is their study of their mortality statistics, through which they work out a program for more efficient prevention of disease and death.

Accompanying this article are some diagrams and figures taken from the "Mortality Statistics" of the United States registration area for the year 1916, recently issued by the Bureau of the Census. From the diagrams may be obtained an airplane view of some of the important facts regarding death rates, which would not be so apparent from a study of tables of figures.

In the first diagram are given the general death rates of the United States (registration area) and of a number of other countries, since 1900. It will be noted: (1) That in most of the countries shown, the death rate is slowly falling; (2) that there is a vast difference between the death rates of the different countries; (3) that New Zealand and Australia have the lowest death rates; (4) that the United States, England and Wales, and Sweden come next lowest on the list; (5) that the rates of other countries range upward to those of Chile and Russia, the highest of which we have record. Whether or not climate or other natural factors contribute to the extremely high and the extremely low mortalities of certain countries, there is evidence that the gradual lowering of mortality rates is due largely to increased knowledge of and more thorough use of preventive measures, and to the better organization of health department work. In general, it may be surmised that countries having lower mortality rates have the more efficient public health organizations.

Diagram 2 gives the death rates per 100,000 of the population in the United States (registration area) for various diseases from 1900 to 1916. From this diagram, the first thing

apparent is that tuberculosis was the leading cause of death until, during the last four or five years, organic heart disease took the lead. The steady fall in the death rate from tuberculosis would seem to be a natural result of the vigorous antituberculosis campaign that has been waged for nearly a generation. Though the results are not all that some might expect, the crusade against the "great white plague" has not been without good effect. The campaigns for clean water and pure milk have not been in vain, if we may judge from the lowering in the death rate from typhoid fever; and the steady fall in the diphtheria mortality bears testimony to the more general and more prompt use of antitoxic serum. The marked reduction in deaths from infantile diarrhea is evidence that the campaign for better milk was worth while.

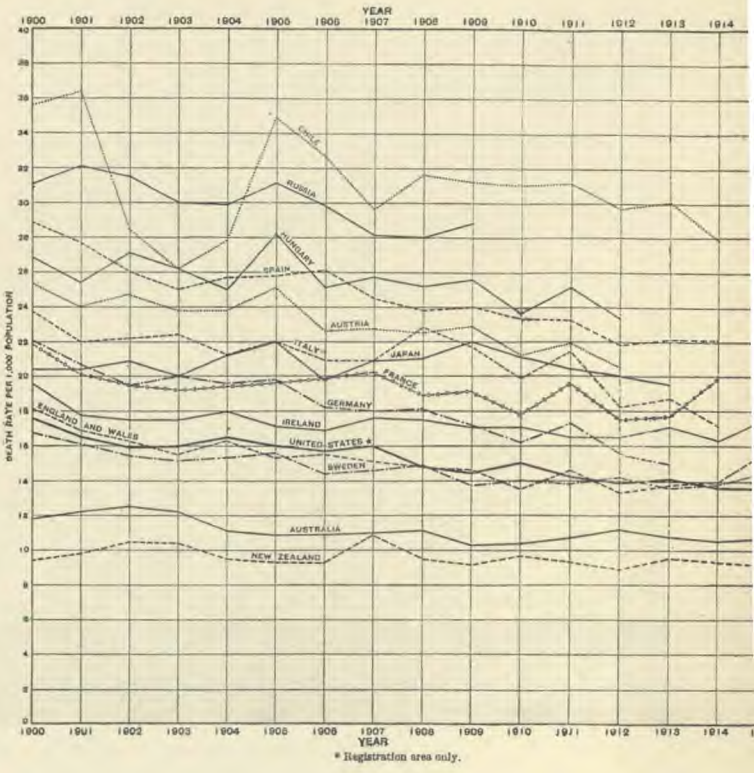


DIAGRAM I

MORTALITY STATISTICS 1916, UNITED STATES BUREAU OF THE CENSUS

Death Rates from Certain Important Causes of Death in the Registration Area o the United States for Each of the Years from 1900 to 1916.

Notwithstanding the use of preventive measures, such as quarantine and disinfection, there are certain of the infectious diseases which have maintained their level. Among these are measles and whooping cough. Here, there is opportunity for careful study regarding the possibility of improvement in method.

There is still another class of diseases which are not only not decreasing, but are actually on the increase, notably the so-called degenerative diseases of old age, including organic heart disease, Bright's disease and other kidney diseases, cancer, and cerebral hemorrhage or apoplexy. While much more is being done than formerly to save children, little is being accomplished in the prevention and cure of those diseases which take men off when they should be doing their best work.

To a certain extent these diseases are an aftermath of the acute diseases that take off so many in early life. Those who escape death from an attack of influenza, or measles, or diphtheria, or scarlet fever, or whooping cough, or other acute disease, may be left with crippled heart or damaged kidneys, or a broken-

A SCENE

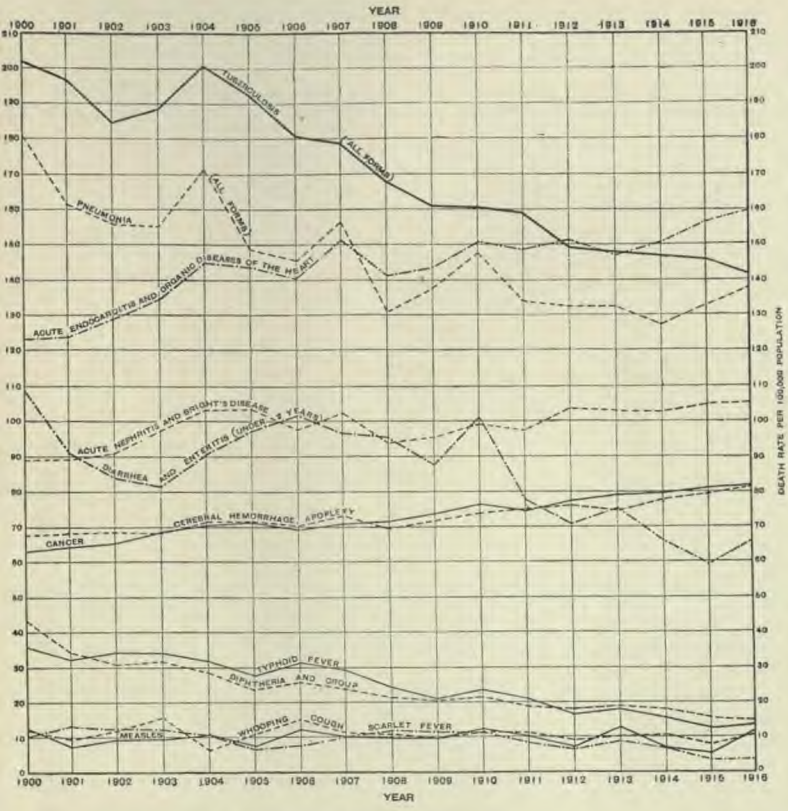


DIAGRAM II

MORTALITY STATISTICS 1916, UNITED STATES BUREAU OF THE CENSUS

General Death Rates of the United States (Registration Area) and Certain Foreign Countries for Each of the Years from 1900 to 1915.

down digestive system, or some other condition which, while it may not cause immediate serious symptoms, and may be overlooked for the time, may at some critical time later in life, throw its weight on the wrong side of the balance.

The lessening of infant deaths has been largely the result of efficient public health administration, though increased knowledge has enabled mothers to do their share in the prevention of infant mortality. But the public health administration cannot interfere with the private habits of adults, except perhaps in a few things, and the adults themselves too often are far from living up to the knowledge they possess regarding the care of the body.

Right here comes in the great value of personal hygiene. One who recognizes his physical shortcomings, and avoids everything that puts unusual strain on the weakened organs, may prevent an early crash; but one who indulges in late hours, heavy suppers, overtaxing work, exposure, excesses, and the use of stimulants and narcotics, is not giving his damaged organs a fair show; and sometime when he least expects it, they will fail him. Many are the men and women who have thus gone down suddenly when every one supposed them to be in the best of health. Organs damaged in early years by some of the infectious diseases, and not properly guarded against unnecessary strain, gave out long before their time. This is the secret of many an untimely death. And death in the prime of life from this cause is on the increase, doubtless because people are now living at a faster rate, eating and drinking more, turning night into day, and dissipating in other ways which were unknown to our forefathers.

VALPARAISO, CHILE

Eternal vigilence, care, and moderation are the price of long life and sound health, a price many are unwilling to pay.

In connection with the foregoing, a table prepared by Guilfoy from New York City statistics (*Weekly Bulletin* of the Department of

Health, City of New York, Nov. 24, 1917) is interesting as showing that the process of diminishing mortality in the early age groups and increasing mortality in the higher age groups, has been in operation in that city at least since 1880.

APPROXIMATE LIFE TABLE, TRIENNA 1879-1881 AND 1909-1911, BASED ON NEW YORK CITY STATISTICS

Ages	Expectation of Life, 1879-81	Expectation of Life, 1909-11	Gains (+) or Loss (—) in Years of Expectancy
Under 5	41.3	51.9	+10.6
5	46.3	51.1	+ 4.8
10	43.8	46.9	+ 3.1
15	39.7	42.5	+ 2.8
20	35.8	38.3	+ 2.5
25	32.6	34.3	+ 1.7
30	29.6	30.5	+ 0.9
35	26.7	26.9	+ 0.2
40	23.9	23.4	— 0.5
45	21.1	20.0	— 1.1
50	18.3	16.8	— 1.5
55	15.4	13.9	— 1.5
60	13.0	11.3	— 1.7
65	10.5	9.1	— 1.4
70	8.9	7.2	— 1.7
75	7.3	5.5	— 1.8
80	6.4	4.3	— 2.1
85	5.5	2.2	— 3.3

Another table, prepared by Rittenhouse, including the native whites of native parentage in nine registration States, shows that in the period 1900-10 there has been a decreased mortality in the lower age periods (up to and including 45-54), and an increased mortality in the higher age periods.

DECREASE OR INCREASE OF MORTALITY 1900-1910 IN THE DIFFERENT AGE PERIODS

Age Periods	Decrease	Increase
Under 5	15 per cent	.....
5 - 9	18 per cent	.....
10-14	12 per cent	.....
15-19	19 per cent	.....
20-24	16 per cent	.....
25-34	14 per cent	.....
35-44	7 per cent	.....
45-54	2 per cent	.....
55-64	.....	9 per cent
65-74	.....	9 per cent
75 and over	.....	7 per cent

MORTALITY FROM CERTAIN DISEASES IN THE REGISTRATION AREA IN 1916

	Deaths in 1916	Rate per 100,000
1. Organic diseases of the heart	107,475	150.1
2. Tuberculosis of the lungs	88,666	123.8
3. Acute nephritis and Bright's disease	75,316	105.2
4. Pneumonia	63,229	88.3
5. Cerebral hemorrhage and softening	59,154	82.6
6. Cancer and other malignant tumors	58,600	81.8
7. Diarrhea and enteritis (under 2 years)	46,956	65.6
8. Influenza	18,886	26.4
9. Diphtheria and croup	10,367	14.5
10. Typhoid fever	9,510	13.3
11. Appendicitis and typhlitis	9,157	12.8
12. Cirrhosis of liver	8,709	12.3
13. Hernia, intestinal obstruction	8,074	11.3
14. Measles	7,947	11.1
15. Whooping cough	7,284	10.2
16. Acute bronchitis	6,700	9.4
17. Chronic bronchitis	4,887	6.8
18. Scarlet fever	2,355	3.3
19. Malaria	2,175	3.0

BENEFITS OF VACCINATION

Take Your Choice — One Little Vaccination Mark or Thousands of Smallpox Pustules

Recognition and Prevention of Smallpox

G. H. Heald, M. D.

THOUGH smallpox in its severe form is easily recognized, in its mild form — milder, often, than chickenpox — it may escape detection until a neighborhood has been exposed and an epidemic has developed. It is this danger of starting an epidemic from an unrecognized source that makes it important that smallpox cases should be detected at the outset. For while one person may have the disease in so mild a form as to cause no suspicion, he may transmit it in a form severe enough to cause much disfigurement, or even prove fatal.

Smallpox is not the scourge that it once was. Its very mildness in the usual run of cases has led many to think it not worth while to take preventive measures against it. But if we keep in mind its high degree of infectiousness and its rapid spread when once it gets a footing in an unprotected neighborhood, if we think of the inconvenience and the futility of quarantine, the disturbance of business, the time lost in sickness, the possibility of fatal termination in a certain proportion of cases and disfigurement in others, we ought to realize that anything is worth while that will help to stamp out the disease. And the fact that the disease is often so mild as to escape detection makes it worth while for every family to know enough regarding the disease to be able to recognize it even in its milder forms.

There are three principal means of distinguishing between smallpox and other rashes, such as chickenpox: (1) Its mode of onset; (2) the location of the eruption; and (3) the character of the eruption.

Smallpox begins with a mild fever, and with headache and backache growing in severity for about two days. There may also be some vomiting. After the third day the eruption appears, the temperature drops, and the patient feels much better. It is this pre-eruption, grip-like fever, headache and backache, that serve first to distinguish between smallpox and chickenpox, for in the latter disease the fever begins with the rash. A pimply rash coming on after two or three days of grip-like symptoms should immediately cause a suspicion of smallpox. But this is not all. There are other means of identification.

The second point of distinction between smallpox and chickenpox is that in smallpox the eruption shows first and most freely on the exposed parts of the body,— the face and hands,— while in chickenpox the rash shows by preference on the covered parts — the chest and back.

The eruption in smallpox first likely to be noticed consists of hard, reddish pimples which *feel like shot under the skin.* The formation of pimples is completed within a day or two, so that during the course of the disease all the eruptions appear to be at very nearly the same stage of development, progressing first from pimples to blisters, then pustules, then sunken pustules, then scabs. In chickenpox, the eruption begins as water blisters, going through the stages given above; but new crops of blisters continue to form, so that all the different forms of the eruption may be seen at once.

Another diagnostic point is that chickenpox rarely attacks any but children. A pimple eruption on the uncovered parts of the body, coming on suddenly after two or three days of fever and aching, particularly if the patient is over twelve years old, points strongly to a diagnosis of smallpox.

One attack of smallpox — even a mild attack — confers immunity which may be lifelong. An attack of chickenpox confers no immunity whatever against smallpox. But the use of a modified smallpox virus, modified by passing through the body of a calf, is capable, without the least danger of being transmitted to others, of conferring absolute immunity against smallpox. This immunity will last for a number of years, after which it may gradually be lost. In any smallpox epidemic investigation shows that the victims either have never been vaccinated, or if vaccinated, the scar shows plainly that the vaccination never

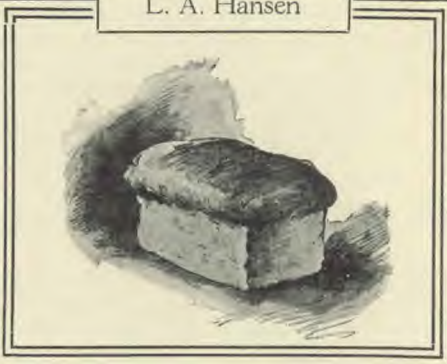
properly "took," or many years have elapsed since vaccination. Any person who has recently been successfully vaccinated may with absolute security attend smallpox patients in the full assurance that he will not contract the disease. Even if one is vaccinated after exposure, the course of the vaccine disease is so much more rapid than smallpox that it will act as a protective. But it is not safe on that account to postpone vaccination until one is exposed, for one runs a risk of being exposed sometime without knowing it.

There has been much prejudice against vaccination because of accidents following the use of infected vaccine or careless methods of vaccination. Vaccinia itself is a mild disease, showing comparatively little reaction, and devoid of danger. But infection from the accidental contamination of the vaccine, or from dirty methods of vaccination, may result most seriously, causing blood poisoning, bad ulcers, permanent invalidism, or death. A "bad arm" is not a sign of a successful vaccination, rather the reverse. A successful vaccination runs a regular course similar to a smallpox lesion, showing successively as pimple, blister, pustule, sunken pustule, and scab. Any vaccination sore that does not follow this course is probably not a successful "take," and cannot be relied on as a protection against smallpox. If people realized the difference between vaccination and infection in the mildness of the reaction and in the protection afforded, there would be much less opposition to vaccination.

In view of the improved methods of preparing vaccine and the improved technique of vaccination, it is just as inexcusable for a vaccination to be followed by infection as for a surgical operation to be followed by suppuration. In view of the slightness of the risk, as compared with the immunity conferred, it is the part of wisdom for every one to be properly protected against risk of smallpox infection.

The Fight Against Famine

L. A. Hansen



THE change of slogan from "Food will win the war" to "Food will win the world," expresses a change only in sentiment in food conservation. The great movement for saving food to feed hungry people was not reversed when there came a change in the war situation. On the contrary, the movement itself took on a broader scope and it was geared up for a greater efficiency.

With the striking of an hour by the clock came a new world situation in food. The end of the fighting brought to view a task which, while not altogether new in its operation, was new in its application, for it set itself to the saving of life, not only of friend but of foe. Besides the people of the Allied countries, there were those of the enemy lands to feed, making a sum total of hungry people greater than any figure ever before known.

The famished people of Belgium, northern France, central Russia, Serbia, Montenegro, Poland, Rumania, and Armenia, had not only already undergone long suffering of hunger, but faced a future which threatened further peril. With their countries in ruins, their soils degenerated, their herds depleted, their farming implements destroyed or stolen, and with privation of every sort, these people faced a long season before their own harvests could offer any relief. The rebuilding of homes, factories, and all that goes to make life approach the normal, would take time that should go to food production, were this possible.

The people in the countries of Germany, Austria-Hungary, Bulgaria, and Turkey, had stomachs, but little food. Millions of human beings faced death by starvation because of a war which most of them could not prevent. Men, women, and children were left helpless in their hunger and misery.

While the cessation of warfare released shipping for carrying foods and made available the stores of India, Australia, South America, and other countries, it still remained for America to take on the heavier part of the burden of feeding starving Europe. A call for 20,000,000 tons of foodstuffs came to the American people. We are now filling the order. This is 14,000,000 tons more than we shipped annually in prewar times.

America cannot send this enormous supply of food without its being felt in a measure by

A Market Scene in Russia Before the War

every one. When we increased our food export to 11,820,000 tons in 1917, we all felt it, though we did not suffer. We can meet the demands now made upon us in the name of a common humanity, and do it without serious results to ourselves.

The whole scope of food production and use is affected in this greater food conservation movement. From producer to consumer it must be known and felt that others besides ourselves are dependent in a large measure upon our fields, storehouses, and pantries. The stress is now being laid on the non-waste of food. Every ounce, every little bit, is needed to fill the order from across the seas, where pinched faces and emaciated bodies are waiting for all the food we can send them.

Very soon after the signing of the armistice, the United States Food Administration increased our sugar ration and allowed the use of clear wheat flour for bread. This action was in line with the general policy of the Food Administration, which, while giving full thought to the wants of the countries in need, has always been considerate of America's needs. At no time have we been put under regulations that worked hardship. The work of the Administration has been such as to inspire confidence and enlist co-operation in its policies.

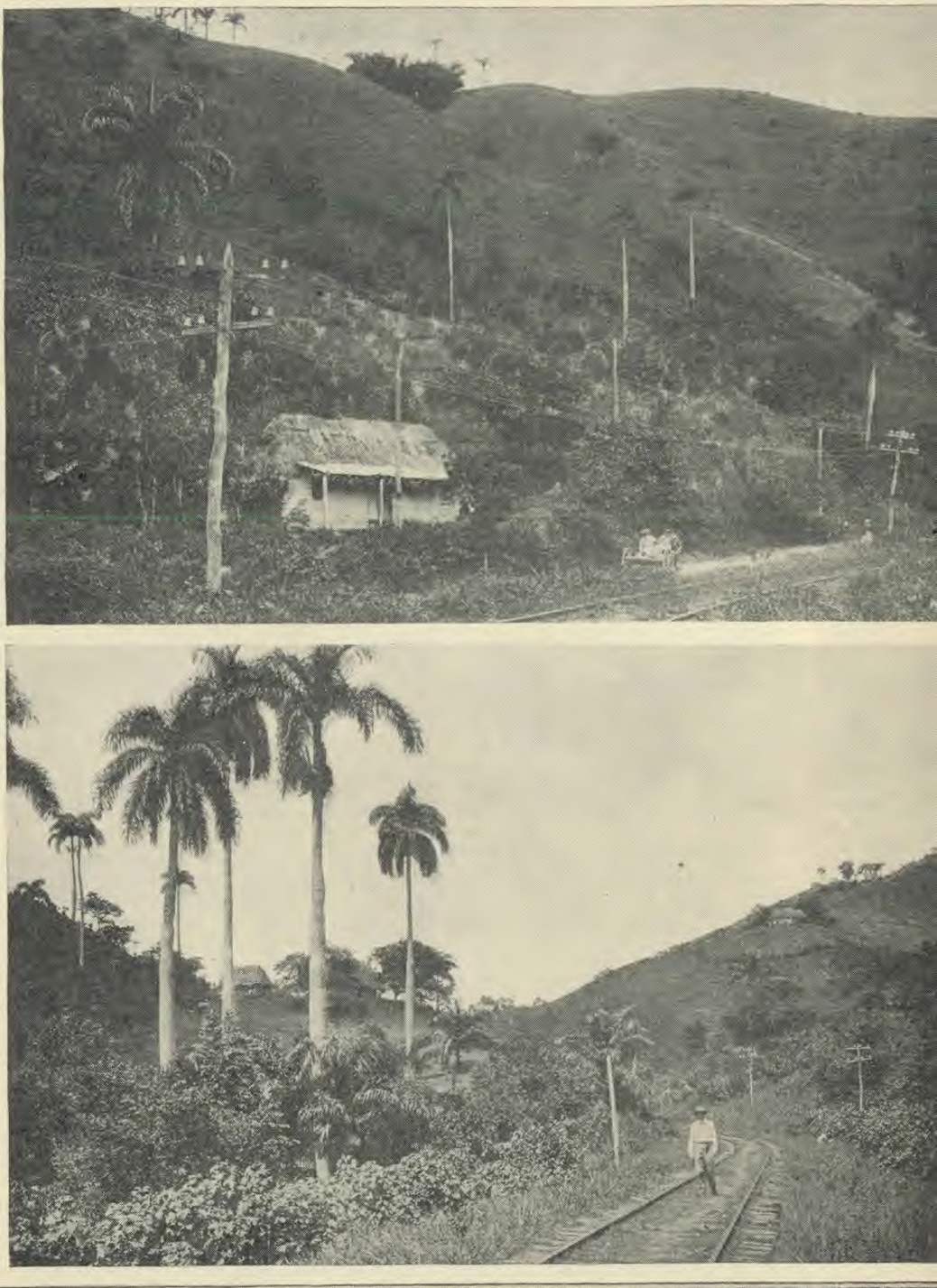
The opportunity given us as a nation to serve in such a material way the needs of so many of our fellow men, is one to be appreciated fully as much as the telling part which our country played in deciding the outcome of the war. Not only is it a privilege, but an obligation, for this country to assume as great a share as possible in feeding the famishing portion of the world. The ideals of the American people would demand such a response as we are giving to the call for help. Our ability to render the help needed should make it incumbent upon us to do all we possibly can.

Our experience in food conservation during the period of the war was valuable in preparing us for the greater relief movement following. We had already had some good lessons and had learned fairly well how to do a number of things necessary in following our national food program.

The famished people of Belgium, northern France, central Russia, Serbia, Montenegro, Poland, Rumania, and Armenia, are depending on America for food. Save food. Don't waste it. Food will win the world.

The shifting of a pound or two of sugar per month or of varying amounts of wheat substitutes has not been the principal phase of food conservation. One policy that has seen no change, and which is now emphasized more than ever, is that of economy in the use of all foods. Simple living has been for some time and is now of vital necessity. America cannot load her table, knowing that her sister countries are fighting famine and death. Every mouthful of overfeeding here means that much actual hunger elsewhere.

(*Concluded on page 38*)



SCENE

CUBA

Remember, our food conservation is now a fight against famine. It is a question of the lives of a great many people to make the present world food supply feed the world. There is not enough food for feasting for any. Until next harvest, economy in food consumption is a necessity, if all are to have a share.

That simple living is not going to hurt any one, goes without saying. It has been preached too long to need discussion, and the experience of many who have tried it has been convincingly for it. So whatever sacrifice we now make at our tables, at soda fountains, and at the candy counter, will not only serve to give life and strength to others, but will make our own living the better.

May we express the hope that out of our food conservation movement we shall gain a knowledge and experience that will prove permanently helpful in that we have learned, through necessity, ways of healthful living that we shall want to continue to follow for their own good value. Thus shall we profit physically by the recent war conditions.

And may it be realized by us all that in opening our hearts to the appeals coming from the many hungry ones, and in practicing self-sacrifice and self-denial in our daily living, a blessing has come to our spiritual life that cannot be measured by dollars and cents, or food values, or anything else but the benediction of God.

Food Saving and Christianity

L. A. Hansen

ECONOMY is not stinginess. It savors not of closeness or meanness. It is a basis of liberality, for without economy there can be no liberality. If we do not save, we cannot give. The more we save, the more we can give.

Waste is an expression of selfishness. It takes no thought of others. It is satisfied with seeing self satisfied, and thinks not of the good that might be done to others by the surplus. Everything that is wasted represents just that much that could be saved, and anything that will benefit others is worth saving.

It was Jesus Christ who said, "Gather up the fragments that remain, that nothing be lost." John 6: 12. The occasion was the feeding of the multitude when a few small loaves and fishes were multiplied in the hands of Christ to feed thousands and have twelve basketfuls of fragments left. The lesson of economy that may be drawn from the occasion is all the stronger when we bear in mind that it was not a matter of necessity that gave importance to saving the bits of bread and fish. He who had demonstrated his power to create food could easily have made many basketfuls.

Food is food, and is too valuable to waste. It will sustain life, and life is the most precious of possessions. The people that ate from the hands of Jesus had friends at home who could benefit by the bits of food left after everybody in the company was satisfied. Though there was no need of the food right then and there, it could be taken to others who could use it, and those others could share in the blessing of food.

The command of Jesus to gather up the fragments, that nothing be lost, makes food saving a Christian duty. We are learning the value of food conservation in dollars and cents. It is being impressed upon us that its value may be measured in lives of human beings. Let it be clear that it is always a question of Christianity. No higher obligation can be placed upon us to refrain from food waste than was given us by Jesus.

If food wasting has ever been wrong, it must be much more so in a time of need such as we now see. With millions of our fellow men going hungry and with many facing death by famine, it becomes more imperative that we make the best use possible of every bit of food, and see that nothing goes to waste.

So the housewife sees her kitchen work in a broader scope and greater light. Peeling potatoes properly, saving the water in which they are boiled and which contains food elements, using scraps of bread, seeing that not the smallest amount of milk spoils, caring for the bits of food, and doing all the other details of food preparation with strict economy, become far more important than are the few cents represented.

Macaroni of Different Shapes

Conservation Recipes

George E. Cornforth

MACARONI is a conservation food, even though it is made from wheat, because it is made from a kind of wheat that is not suited to the making of bread flour. It is made from a wheat that is rich in gluten, and therefore is a substantial food, and when combined with cheese or nuts it may well make up the hearty part of the meal.

To cook macaroni properly, drop it into about six times its bulk of actively boiling salted water, and keep it boiling briskly for from fifteen minutes to three quarters of an hour, according to the size and age of the macaroni. Macaroni should be clean when it is bought and should not be washed. When the macaroni is tender, turn it into a strainer to drain off the water, and run cold water through it to prevent the tubes from sticking together. The macaroni may then be put into cream sauce, egg sauce, or tomato, or may be combined with cottage cheese to make macaroni au gratin. Cottage cheese is equal in food value to lean meat, and costs only half as much, or less.

MACARONI AU GRATIN

3-4 cup macaroni.
1-2 cup cottage cheese.
1 cup milk.
1 tablespoon fat.
1 1-2 teaspoons salt.
1 egg.
1-2 clove garlic, cut fine.

After the macaroni has been boiled, drained, and rinsed with cold water, stir it into the other ingredients, which have been beaten together. Pour into a baking dish, sprinkle with crumbs, and bake till set.

SPAGHETTI WITH TOMATO SAUCE

1-2 pound spaghetti.

Break in pieces and boil in salted water till tender.

SAUCE

1 small onion, chopped fine.
1-2 clove garlic, chopped.
3 tablespoons oil.
1-3 cup flour.
1 cup bean broth.
2 cups strained tomatoes.
1-3 cup chopped pine nuts which have been slightly roasted.

Cook the onion and garlic in the oil until they begin to turn yellow, then add the flour, and mix. Heat the strained tomato and bean broth to boiling, and stir it into the flour and oil mixture, and cook till thickened, then add the pine nuts and macaroni.

The bean broth may be some of the broth from stewed beans, or the water in which beans have been cooked for bean loaf. Or, if the beans are parboiled for baking, the water in which they were parboiled may be used as broth.

Food for Central Powers

Just before going abroad, Mr. Hoover, speaking of the problem of rationing the enemy peoples, said: "I would certainly approach this problem with mixed feelings, having long been a witness to the robbery of food from women and children, and the destruction of millions of tons of food at sea, and to the misery under which the millions among the big and little Allies have suffered under the German yoke. Justice requires that government be established able to make amends for the wrong done, and it cannot be accomplished through the spread of anarchy. Famine is the mother of anarchy."

MOUTH HYGIENE

Unclean Mouths and Colds

W. C. Dalbey, D. D. S.

AN unclean mouth is a standing menace, not only to the individual himself, but to those around him as well. Such a mouth is a hotbed for the development of germs alike baneful to the possessor and transmissible by the breath, especially when one has a cold.

It has been shown that in an apartment where there is little or no current of air, a person coughing or sneezing could scatter germs to a distance of from twenty-five to thirty-five feet. Germs are scattered through the air by means of salivary droplets. These droplets are little balloons, having a bubble of air in the center, and they remain in suspense for only a short time. The scattering of these droplets, with their germ-originating capabilities and tendencies, is most marked from those suffering from colds in coughing and sneezing. Of course the more harmful microbes the mouth contains, the greater the danger of infection. That is to say, the more unclean the teeth and mouth, the greater the possibility of infection.

In the mouth of every person from eight to twenty years of age and over, there is an exposed surface of the top and side surfaces of natural teeth from twenty to thirty square inches, and a surface of tongue, gum, cheeks, and oral mucous membrane amounting to several times that in extent. When these surfaces are covered with decomposing food particles, excretions from inflamed gums, decomposed salivary fluids, mixed with deposits of salivary calculus (tartar), together with chemical poisons which result from decomposition due to mingling of secretions and food remainants; while the mouth is maintained at a normal temperature of 98°, it is easy to understand the opportunity for growth of germs, and the extent to which the system may become infected solely from mouth and teeth conditions.

Washing the mouth has the effect of decreasing the number of germs likely to become detached and thrown out in coughing and sneezing. Placing the hand or handkerchief over the mouth will largely prevent the emission of these droplets charged with germs. It becomes almost a crime not to do so in a place of public gathering; even when few are around, such care will be appreciated, and shows good breeding as well.

AS WE SEE IT

Conducted by G. H. Heald, M. D.

WAS IT THE WORK OF THE TOBACCO TRUST?

BEFORE the war, the anti-tobacco crusade had proceeded to the extent that many employers were turning down the cigarette user as unreliable. From a comparatively small beginning, the warfare against tobacco had taken into its sweep the Woman's Christian Temperance Union, many of the church activities, and many of the industrial establishments. Young men were learning from such employers as Burbank, Edison, and Ford that it pays to let tobacco alone. Each of these men, great in his own specialty, had learned from experience that the cigarette spells ruin for the young man and loss for his employer, and had written forcefully to this effect; and Mr. Ford had published a booklet against the cigarette, and when challenged by the head of the tobacco trust, he published another still more forceful. Large establishments were beginning to discriminate against the cigarette user. It began to look as if there were dark days ahead for

the tobacco industry. Nevertheless, promoters were busily exploiting other countries, especially China, where they were attempting, with much success, to replace the forbidding opium pipe with the cigarette. But notwithstanding these new openings, the tobacco stocks were still storing up in this country in a way that did not promise well for the tobacco business.

The advent of the war brought an opportunity that was not to be missed. If but the good people at home could be influenced to send unlimited quantities of tobacco to the front and to the camps, the difficulties of the tobacco industry would be solved. It was not long before newspapers were found which became very solicitous that the boys in the trenches should not lack for tobacco, and it became an act of patriotism to contribute to a cigarette fund. The result was that tobacco has been about the most plentiful and easily obtainable commodity in the soldier camps and at the front, and even in hospitals for pneumonia cases, where of all places in the world the air should be pure.

Somehow the idea has been fostered that tobacco makes a little better soldier of a young man. It was a cunning bit of salesmanship, and it worked like a charm. It has been reported that even some of the W. C. T. U. and Red Cross women and other war workers who in peace times may have been opponents of the cigarette, vied with each other in passing out the "smokes" to the boys. The victory of the tobacco industry has been well-nigh complete. Many a young fellow who left home clean in every way, and guilty of nothing that he would not have his mother or sister witness, has fallen victim to the various temptations that commercialized vice has set for his feet. To the honor of the army and navy heads, these features were minimized as much as possible, but it was not possible at all times and in all cases to circumvent the tempter. And as commercialized vice and liquor came as a temptation to some, tobacco came as a temptation to all, and few are the boys who escaped. The tobacco industry scored a great victory. For this reason, it is all the more important that it be taught, and insistently taught, that tobacco is not the harmless thing that those interested in the tobacco business would have us believe.

WHY DO WE DISCOUNTENANCE THE USE OF TOBACCO?

THERE are three forms of evidence which, taken separately or together, lead to the conviction that tobacco is injurious to the user, and if generally used, injurious to the community, and hence to the human race. Either of these classes of evidence, taken by itself, is weighty enough, if fully understood, to cause a prudent person to pause before forming a habit which involves such risk.

1. The laboratory evidence shows that tobacco is a poison, that nicotine, the active ingredient, is too violent a poison to be tolerated by the body in any but minute quantities. It is admitted that the body can be trained to tolerate increasing doses of tobacco, as it does of other poisons, such as morphine, cocaine, and arsenic. But with none of these does tolerance mean that the poison becomes harmless. The laboratory also shows that the smoke of the cigarette contains other injurious substances, such as acrolein, exceedingly irritant to the mucous membranes, and carbon monoxide, a dangerous blood poison — too dangerous to be inhaled into the lungs.

2. The statistical evidence, gathered in the athletic departments of our universities, shows that college boys who are non-smokers develop more rapidly in height, weight, and especially in lung capacity than college boys who are smokers, and evidence gathered in schools and colleges shows that the non-smokers, taken as a whole, average better in their studies than the smokers.

3. The personal testimony of many gymnasium leaders, high-school teachers and principals, reform-school directors, executives of industrial establishments, and the like, is that cigarette smokers are not so efficient nor so trustworthy as non-smokers. Unquestionably, one can find a smoker who is more brilliant « more gifted than some non-smoker; but when the investigation covers large numbers of young men, competent observers witness that the non-smokers are superior.

This is not to say that the smoker is going into an early grave, or that he will lose his mind, or that he will eke out a miserable existence. But it is to say that in these strenuous times, when there is such a struggle for first place, when it behooves every young man to be his best, it is not safe to tamper with the cigarette.

Much more might be said against tobacco than has been condensed in the three classes of evidence just given. For instance, the smoker carries with him an offensive odor, just as does the onion eater. The fact that many others smoke does not make it any the less offensive to those who abstain. A man may refrain from smoking in his friend's house, but nevertheless, if he is a smoker he leaves behind him the odor of stale tobacco, which often is particularly repulsive to those who do not smoke. The use of tobacco is an economic waste, both as regards the individual smoker and as regards the use of land and of industry for the production of that which yields no profit to the user.

In brief, tobacco is a poison. Statistics show that smokers are inferior in physical and mental development to non-smokers. Many competent observers of young men concur in the same conclusion, and also that tobacco in some way tends to lower a young man's moral ideas. The tobacco habit is uncleanly. It is wasteful.

That it was expedient to furnish tobacco to all those in the army who were already addicted to its use, we have no disposition to deny. Without tobacco, those accustomed to its use would have been unfitted for their duties. What we are contending for is that the young man is more fortunate who is not addicted to its use. And though the battle field might not have been the place to break away from the habit, we still believe that the average tobacco user, in the less strenuous times of home life, cannot do better than to get rid of the habit, and again declare himself a free man.

THE NEXT GOAL
WORLD-WIDE PROHIBITION

ANOTHER epoch in the antialcohol crusade takes form in the movement for world-wide prohibition begun at the conference of the Anti-Saloon League of America held at Columbus, Ohio, Nov. 19-22, 1918.

The progress of prohibition in this country during the last twenty-five years has been remarkable. Looking back that many years to the time when the Anti-Saloon League was organized, we see the liquor traffic a powerful foe,

holding strong sway in politics, and influencing the enactment and enforcement of laws affecting its business. But gradually, owing to the persistent work of the temperance forces, a mighty change has come. Beginning with local prohibition for townships and rural districts, then for counties, then for individual States, the antiliquor movement has grown till national prohibition is practically assured.

The reports by representatives from the various States of this country indicate that the amendment to the United States Constitution calling for nation-wide prohibition is sure of ratification by the required number of States within the time limit. With this goal virtually attained, a greater one is now set for the temperance forces.

The success of prohibition in this country offers encouragement to strike for world-wide prohibition. Just now is the psychological time to make the effort. America stands well in the eyes of most of the countries of the world. As an exponent of democracy, its example should have strong influence with nations now seeking to establish democratic governments. As America has found that it is not only ideal to make the world safe for democracy but necessary to make democracy safe for the world, it should be recognized that a safe democracy must be sober as well as patriotic.

While the nations are now planning for world peace, it should be taken into consideration that a lasting peace is not possible so long as the drink traffic flourishes. Nations must at least be sober not to go to war. In the drink evil every nation finds a greater enemy than autocracy could ever be, and that is not saying the least thing in favor of autocracy.

The war-devastated countries are now planning for reconstruction. They are confronted with large financial demands, heavy liabilities, and depleted treasuries. Alcohol has shown itself a poor dependence for big revenue. The war conservation measures have proved the liquor traffic to be in all essentials a liability instead of an asset. Now is the time to eliminate the tremendous cost burden that goes with the support of the liquor business. But the liquor interests are not going to surrender readily. The old scheme of defending the traffic as a source of revenue to the Government will no doubt be tried on the governments that now need revenue; and in the face of heavy taxation the people may yield to what seems a means of relief.

A large part of the world has known the tragedies of war. Hearts have been made susceptible to spiritual and moral influences. The minds of people have been turned in the direction of reforms. Just now is the logical time to make a telling impression in behalf of the temperance reform. But the temperance forces of Great Britain and other European countries, as a result of the war, are low in financial resources. America's help will be needed. Let Americans give support to the movement for world-wide prohibition. It is a great fight and a most worthy one. L. A. H.

QUESTIONS AND ANSWERS

Conducted by J. W. Hopkins, M. D., Washington (D. C.) Sanitarium

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State your questions as briefly as possible, consistent with clearness, and on a sheet separate from all business matters. Otherwise they may be overlooked.
For prompt attention, questions should be addressed to J. W. Hopkins, M. D., Takoma Park, D. C.

Rain or Spring Water?

"Is the use of rain water to be preferred to pure spring water?"

No, rain water, if used, should be filtered. Pure spring water contains the necessary mineral elements, and is a more natural drink than is rain water.

Disease from Raw Foods?

"Is there not great danger of contracting disease by using raw foods?"

We do occasionally hear of typhoid fever and other infectious diseases' being communicated by celery, lettuce, and raw fruits. This may be prevented by soaking the fruits and vegetables in a five-per-cent solution of peroxide of hydrogen for five minutes.

Heat and Vitamines

"Does heat destroy vitamines?"

Yes, if the degree of heat is sufficiently high. Fortunately, many vitamines are not destroyed even by a boiling temperature, and common raw foods, as oranges and other fresh fruits, green vegetables, and raw whole milk, are a very valuable source of vitamines, and supply the loss sustained by the use of cooked foods.

Bad Breath

"What is the cause of bad breath, and how can it be cured?"

Bad teeth, diseased tonsils, and nasal catarrh, with indigestion, are the most common causes. If these diseases are cured, your breath will in a short time become sweet once more. It is important to take good care of the teeth, and to keep the nose and throat in proper condition.

Tea and Coffee

"Do you advise one accustomed to coffee and tea to continue their use moderately? Do they not act as tonics?"

I would not advise any one to continue the use of these drugs. One becomes accustomed to them in the same way he becomes accustomed to alcohol, morphine, or cocaine, and they are tonics in the same way as are these drugs. In common with other drugs, they have an occasional use as medicines, and should not be administered for any other purpose. They are especially harmful to young and growing individuals.

Effect of Tobacco

"What part of the body is affected by the use of tobacco?"

Tobacco produces general poisoning of the system. This may be especially localized in disturbances of vision, or it may produce heart disease, hardening of the arteries, or nervous disturbances. Tobacco is a poison, and the individual who uses it lessens his margin of safety, and renders himself more liable to the attacks of disease.

Blood Pressure

"Explain diastolic and systolic blood pressure."

Diastolic pressure is the constant pressure of the blood in the blood tubes or vessels. It is a constant tension of these vessels between the heart beats, and is dependent upon the elasticity of the vessels and the amount of blood in them. Systolic pressure is that produced by the heart beat, and is dependent upon the strength of the heart and the other two factors above mentioned.

Heart Diseases

"Are diseases of the heart curable?"

Yes, if taken before they begin or in the early stages of the disease. Unfortunately, many cases of heart disease are discovered in the late stages, and the best that can be done is only a patching up. A permanent cure cannot then be effected. The great secret in the care of heart difficulties is to induce the individual to conserve his strength. If one recognizes his limitations and keeps within them, he can in most cases enjoy many years of happy and useful life.

Multiple Neuritis

"Please give cause and treatment of multiple neuritis."

This is often due to acute fevers, and may be caused by poisons, as lead or alcohol. Recent reports from the United States Government chemists indicate that a very common cause is the use of patent flour. The mineral food elements and vitamines are taken out by the patent process. The use of whole-grain prepara-

tions, war bread, and unpolished rice, with raw vegetables and fresh fruits, will prevent this disease.

Bran an Irritant?

"Does bran produce irritation of the mucous membrane of the bowels?"

No, unless it is used in much too large amounts. One or two tablespoonfuls once or twice a day will not irritate the mucous membrane. If mineral oil is used once or twice a day, the amount of bran needed will not be so great. Water drinking, exercise, regulation of the habits, and the use of other laxative foods, should be combined with the use of bran and mineral oil; and with patience and perseverance, the latter articles may be in time almost entirely dispensed with.

Wine in Diabetes

"Is wine drinking ever permissible in diabetes?"

We do not recommend the use of alcohol in diabetes, believing that better results can be obtained in the great majority of cases without the use of alcohol, and also with a less amount of sodium bicarbonate than is commonly used. All wines and many whiskies and brandies contain some sugar. Therefore, if alcohol is administered, it should be in the form of pure alcohol diluted with water. The successful treatment of diabetes involves the employment of a non-flesh diet and the elimination of condiments, alcohol, and tobacco, in the vast majority of cases.

Fruit at Meals

"When should fruit be eaten, at the beginning or close of a meal?"

Starch digestion begins in the mouth and is carried on in the stomach until the gastric juice is formed in sufficient amount for its acid to neutralize the alkaline saliva, thus checking the digestion of the starch. For this reason acid sweets should be eaten at the close of a meal, but very mild subacid fruits may be eaten at the beginning of, or during, the meal. Of greater importance is the matter of regulating the number of foods taken at meals. Less danger is done by wrong combinations than by overeating and taking a great number of different foods at one meal.

Sleeping Powders

"Is the use of sleeping powders ever justifiable? What would you use?"

The continued use of even the most harmless sleeping powders will eventually bring mental depression, leading oftentimes to melancholia. It is also a common cause of indigestion and circulatory disturbances. The occasional use of mild sleeping powders is often an urgent necessity, and should not be forbidden. This need is often seen in various nervous conditions, in fevers after surgical operations, etc. The use of these drugs should be preceded or accompanied by rational measures, as hydrotherapy in the form of neutral baths, warm foot baths, witch-hazel rubs, saline sponges, hot fomentations to the stomach and abdomen or spine. Mild general massage without percussion is also very useful. The cause of insomnia should first be sought out and removed. For sleeplessness I should use the above-mentioned treatments, and if necessary, an occasional dose of a mild hypnotic, as barbitol or sulphonal. A person who is troubled with insomnia should visit a doctor, and have the cause ascertained and the proper treatment prescribed.

Diabetes

"Please give cause and treatment of diabetes mellitus."

As this disease may be due to disturbances of the liver, pancreas, thyroid gland, or kidneys, it will be well to submit to a thorough physical examination and study of the case. This will occupy some time. The treatment is not the same in all cases, but includes radical care of the diet, feeding according to the weight of the patient, and the amount of sugar excreted, fasting at proper intervals, regulated exercise and rest, and the careful administration of hydrotherapeutic treatments. These measures demand the supervision and careful attention of a physician. Raw cereals and raw vegetables very often produce wonderful results.

Injured Ankle

"How should a swollen ankle be treated? The injury was caused by a fall, bruising or perhaps breaking the small bone of the ankle."

This condition demands an X-ray examination. If the bone is broken, it should be placed in a splint and receive rest, fomentations, and derivative massage at intervals. If the trouble is simply a sprained ankle, it can be treated by alternate hot and cold foot baths, followed by a heating compress and close bandaging of the foot and ankle. Derivative massage, gradually taking in the foot and ankle, may begin about the second or third day. Much pain and discomfort may be avoided by elevating the limb.

Calomel Habit

"I have taken 365 doses of calomel a year for twenty-three years, and have had to gradually increase the dose. Can I get away from this medicine?"

Yes, you should adopt a laxative diet, using freely of whole-grain products and taking a tablespoonful or two of sterilized bran at two meals a day. Take two tablespoonfuls of mineral oil at bedtime, and repeat the dose one-half hour before breakfast, drinking a glass of cool water after each dose of oil. Take a tepid saline enema three nights a week, using a teaspoonful of salt to a quart of water. Apply three fomentations to the liver and abdomen just before retiring, and a moist abdominal girdle following the fomentations. In addition to the whole-grain products you should use many green vegetables, taking them at the midday meal. Use fruits with your cereals at breakfast and supper. If you need laxative

medicines, get cascara or use an occasional dose of podophyllin or effervescent sodium phosphate. Drink much water between meals and on rising and retiring.

Itching from Jaundice

"What is the cause and treatment of itching of the heels and occasionally of other parts of the body. This itching accompanies an attack of yellow jaundice."

The itching is due to the deposit of bile pigments in the skin. As the bile is more and more carried off by the bowels, the itching will become less. Use neutral saline baths or neutral bran baths, or sponge the body with hot water for the itching. Take fomentations over the liver and abdomen for fifteen minutes every three hours, and wear a heating compress to the abdomen during the interval between the fomentations. A hot blanket pack or a hot tub bath at 103° to 105° for ten minutes will also help to relieve the obstructive jaundice.

Probably Influenza

"Four weeks ago I took a bad cold in my head. I went to bed the third day, remaining about forty-five hours. During this time I had a dull headache, a little fever, was very weak, and my lungs felt sore. Give cause and treatment."

You undoubtedly suffered from a mild attack of influenza, and did right in going to bed. You should have stayed there until two or three days after your temperature was normal, thus avoiding a possibility of pneumonia. You should have a physician in charge of your case until you recover from the complaint. During the attack cleanse the nose and throat often with a mild antiseptic saline solution, as Dobell's or Listerine properly diluted. Secure two or three daily movements of the bowels by mild laxatives and by enemas. Drink plenty of water and take but little food, using mostly liquids, as fruit juices, milk, cereal gruels, and buttermilk. The headache may be combated by the use of an ice bag to the head, and the pain and fever relieved by hot fomentations to the spine, chest, or abdomen, with warm or tepid sponges following. The hot foot bath should accompany the fomentations. These measures, with the necessary medicines, should be taken under the direction of your physician.

Cold Abdominal Girdle

"Is there any benefit in the cold, wet girdle at night?"

A cold, wet girdle applied not too wet and covered snugly with flannel, is a great benefit in the treatment of constipation, flatulence, and slow digestion. It should be preceded by an application of two or three fomentations to the abdomen and liver. In cases of hyperacidity and mucous colitis, much benefit is often received by the protection given by a thin layer of some impervious material, as oiled silk, between the wet girdle and the dry flannel.

Sweating Feet

"Give treatment for sweating feet, made worse by ivy poisoning."

Ivy poisoning renders the skin more sensitive and also more likely to break down with the excessive sweating, allowing sores to form. You should have several changes of stockings and at least two changes of shoes. Put on fresh, clean stockings two or more times a day and do not wear the same shoes more than one day at a time. Bathe the feet with warm water and then with a 1% solution of formaldehyde. To make this use about one teaspoonful of liquor formaldehyde to a pint of water. After washing the feet in this solution, dust them with boric acid powder. You will find the peculiar sensation in your limbs will clear up as soon as you get this condition of your feet cured. You should have a physical examination and see if there is any rheumatic trouble present.

BOOK REVIEWS

The Effect of Diet on Endurance

by Irving Fisher, Ph. D., Professor of Political Economy, Yale University. New and revised edition, 60 cents. Yale University Press, New Haven, Conn.

A study of the effect of a low-protein dietetic régime on the endurance of a number of university students. The work, carefully controlled, indicates that when men practice careful mastication, and follow the leading of appetite,— which in this case leads to a restricted intake of animal food,— there is a gradual and progressive increase in endurance.

Professor Fisher's thesis is that with adequate mastication and the reduction of the protein intake to near the actual requirement of the body, the physical endurance is markedly increased. Incidentally the experiments showed that there was also an increase in the capacity for mental work.

In this time of world famine, when there is still in the United States a tendency to indulge in a full menu and to cling to the theory that the body needs it, it is particularly fortunate that Professor Fisher and others have come out to prove beyond cavil *that we have been in the habit of eating too much, especially of flesh foods, for our own good.*

The Sister of a Certain Soldier

by Dr. Stephen J. Maher. Popular edition, paper, 25 cents. The Tuttle, Morehouse & Taylor Company, New Haven, Conn.

Whether 'tis fiction or fact, we trow not. If fact, 'tis stranger than fiction; if fiction, 'tis truer than fact.

At any rate, it's gripping; it makes a compelling onslaught on one's lachrymal reservoir, and above all, it leaves one with a new interest in the black race, which, through no fault of theirs, is scattered among us.

NEWS NOTES

Physicians in Parliament

One of the indirect results of the war will probably be an increase in the influence to be wielded by the medical profession. For instance, in England there is a movement for the establishment of a Ministry of Health, and for a representation of physicians in the House of Commons.

Infant Mortality Rate

The infant-mortality rate, that is the number of deaths of infants under one year of age per 1,000 born alive, throughout the birth-registration area as a whole, was 101 in 1916, as against 100 in 1915. This is equivalent to saying that of every ten infants born alive, one died before reaching the age of one year.

Child Labor Day

In Seventh-day Adventist churches and Jewish synagogues, Saturday, January 25, in other churches Sunday, January 26, and in the schools Monday, January 27, have been designated by the National Child Labor Committee as Child Labor Day, to be used as an occasion for reviewing the work and achievement of Children's Year.

Food Shortage in France

Vernon Kellogg, of the Food Administration, writes from France: "I have now been in France three weeks, eating in restaurants and hotels of all grades, and I have had butter on the table once, and a total of six lumps of sugar. Saccharine is universally used in coffee and tea. The small sugar ration is mostly reserved for cooking."

Typhoid in British Army

In the South African campaign, the British, with 200,000 men, had 50,000 cases of typhoid — *one in four*. In the present war, with perhaps 4,000,000 men, they have had 4,000 cases of typhoid — one in a thousand. Probably not less exposure now to typhoid infection, but antityphoid vaccination, generally practiced in the British Army, accounts for the difference.

Our Duty and Ability

According to Mr. Hoover, of the 420,000,000 people in Europe, only about 40,000,000 have sufficient food supplies to last until next harvest without imports. "Some must have immediate relief. We have a surplus of some 18,000,000 to 20,000,000 tons of food, if we are economical, so that the situation can be handled, if this and the other smaller surpluses in the world can be transported."

Influenza

At last account, the "flu" was still the disease of mystery. It is yet an open question whether we are dealing with a recurrence of the old, familiar influenza or la grippe, or whether it is a new disease; whether the germ is the Pfeiffer's bacillus or some ultramicroscopic germ. It has kept the doctors guessing. Why should New York, without closure of schools and theaters, have a milder experience than Boston, Philadelphia, and Washington, which closed schools and theaters? Why should the disease in many places die down, then flare up and run a more fatal course?

The Influenza Epidemic

The present epidemic of influenza is more severe than any that have preceded it, owing, doubtless, to the abnormal conditions of congestion and concentration in army camps and industrial centers. It spreads very rapidly, and probably reaches most of the susceptibles, notwithstanding the most careful precautions. However, this does not mean that precautions are useless.

Influenza in Europe

In Italy the epidemic has been particularly mild, and there have been comparatively few cases and scarcely any deaths. In Switzerland it has been notably severe, with many fatal pneumonia cases. The fatalities seem to have been higher with persons between the ages of twenty and forty. Infants have largely escaped. In the Netherlands the principal symptoms are diarrhea and abdominal pains.

Changes in Conservation Program

The opening of the Mediterranean routes to commerce has made accessible the wheat supplies of India and Australia, hence America will no longer be looked to as the main source for wheat, and our exports must be centered more largely on fats, meats, and feed for cattle. Europe is extremely short of feed and fodder, and as a consequence there has been a rapid deterioration of European herds.

Immense Food Exports

The 20,000,000 tons of food that we are to export to Europe this year will tax the loading capacity of our ports to the limit. In prewar times we exported less than 6,000,000 tons a year. Last year, the record-breaking year so far, we exported 11,820,000 tons. This year we are to increase the amount by more than two thirds. This means that we must conscientiously avoid all food waste, and must conserve to the limit.

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Persecution of Physicians

Recently there has been in Spain a disposition on the part of officials to hush up the fact that there were influenza patients within their jurisdiction; and physicians who refused to keep silent were punished. This reminds one of the attitude of some officials in San Francisco about twenty years ago, when it was discovered that there were bubonic plague patients in the city — an attitude hardly worthy of the officers of a civilized community. Recently a physician of one of the Spanish prisons was fined because he reported the presence of influenza among the inmates, and refused afterward to sign a paper stating that he had been wrong in his diagnosis.

Use of Wheat Bread

Two factors have made it advisable to stop the use in bread of all wheat substitutes. First, the end of the war has freed large quantities of wheat in Australia, Argentina, and India, and there will be more shipping to handle it, so that Europe is not in such pressing need of our wheat. Second, it is absolutely essential to the building up of the depleted European herds that we send them the grains that we have been recently using for wheat substitutes in bread.

Births and Deaths

In the recently established birth-registration area of the United States, comprising the six New England States, New York, Pennsylvania, Maryland, Michigan, Minnesota, and the District of Columbia, with an estimated population of 33,000,000, or about 32 per cent of the total population of the United States, 818,983 infants were born alive in 1916, representing a birth rate of 24.8 per 1,000 of population. The total number of deaths in the same area was 486,682, or 14.7 per 1,000. The births thus exceeded the deaths by more than 68 per cent. Of the total number of births reported in the birth-registration area for 1916, 799,817, or 24.9 per 1,000, were of white infants, and 19,166, or 22.8 per 1,000, were of colored infants. The death rates for the two elements of the population were 14.5 and 24.4 per 1,000, respectively. The deaths reported for the colored races (comprising all nonwhites) thus exceeded the births reported; but it is probable that the registration of births is less nearly complete among the colored than among the white population, and that, therefore, the rate shown for the former class is too low, whereas in the case of the death rates, there is probably not so great a margin of error.

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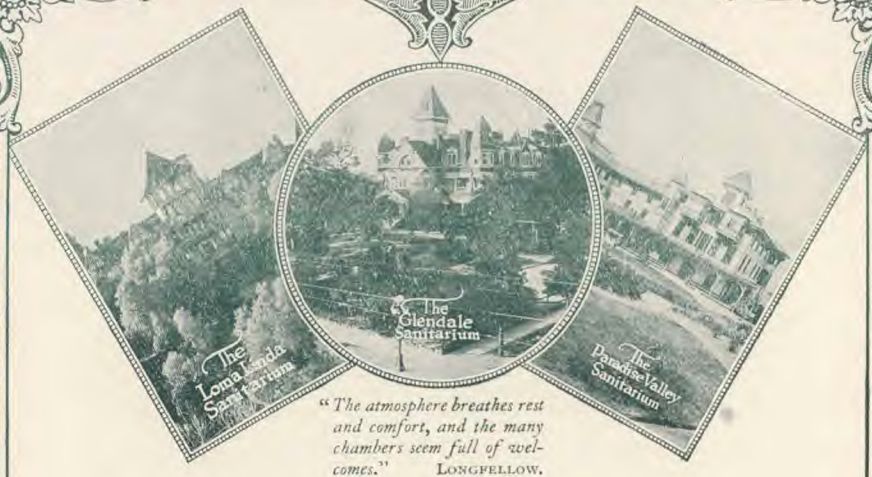

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