Life & Health

THE NATIONAL HEALTH MAGAZINE

September, 1914

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A. J. S. BOURDEAU, Circulation Manager

THE LURE OF THE WILD

VOL. XXIX
No. 9

Life & Health
THE NATIONAL HEALTH MAGAZINE

SEPTEMBER
1914

AIM: To assist in the physical, mental, and moral uplift of humanity through the individual and the home.

Editor, GEORGE HENRY HEALD, M. D. Associate Editors H. W. MILLER, M. D. L. A. HANSEN

Three Strong Numbers

☞ After vacation — school.

☞ And after this vacation number — the SCHOOL NUMBER.

☞ Are you a teacher or a parent?

☞ Have you an interest in children or in education?

☞ Do you feel an interest in any of the sociological problems having in view the production of a better race of men and women?

☞ If you are interested in the child, in education, or in race betterment, you will want the October or School number.

❦ ❦ ❦

☞ The mind is the man, and mental hygiene is the real hygiene.

☞ The cultivation of the body with neglect of the mind, if it could be accomplished, would make us a race of healthy cabbages — that's all.

☞ Mental hygiene is the keystone in the hygiene arch.

☞ The November number of "Life and Health" will be a MENTAL HYGIENE NUMBER.

❦ ❦ ❦

☞ The most important conservation is the conservation of health — the wise and economical management of our powers, so that we may enjoy the fruits of a ripe and efficient old age.

☞ How to grow old gracefully is a problem of vital interest to everybody.

☞ There will be in the December number a symposium on GROWING OLD GRACEFULLY, by doctors, by observers, and by some who have grown old in years but not in spirit.

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LIFE AND HEALTH

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TEN-MILE LAKE

VACATIONS THAT COUNT

ALDEN CARVER NAUD

WHAT constitutes a good vacation? For the average person to answer this inquiry correctly will determine whether the annual period of recreation shall be profitable or merely a season of boredom and ennui. A successful vacation includes the elements of rest, recreation, and opportunity. It should be a tonic or a sedative as the individual case demands. Whether you take your vacation to escape hot weather, or to evade the cold, or at such date as will best enable you to enjoy some special event, scene, or privilege, there are a few general principles that determine the value of vacation time.

Carry light baggage.
Leave your worries behind.
Attempt only what you can do easily and without exhaustion.
Avoid strenuous exercise at first.
Practice economy in your expenditures.
Vacation is no time for extensive letter writing; you can do that at home.
Eat judiciously.
A vacation that does not put a new song in your mouth and joy into your heart is a failure.

For a vacation to be even moderately successful from the standpoint of the ordinary individual, it should commend itself for the change it offers, the contentment it promises, and the economic advantage it presents. Almost always the satisfactory vacation is the one that has proved satisfactory from the standpoint of cheapness, change, and contentment.

By change is meant the "something different" one longs for while weary with the monotonous treadmill existence encountered every day. The country girl or boy or the housewife on a farm will find an agreeable change in indulging in a trip to the city at the time of a fair or convention. Or an opportunity to enjoy the amusement parks will offer variety to what otherwise might become drab-colored living. On the other hand, those who are weary of the verve and commotion of metropolitan experience may find respite in the calm and serenity of quiet country life, and may locate the elements they need in the simple environments of rural regions.

To each and all there comes at times the yearning for vacation. When the world palls on one, and cares and perplexities harass and annoy, then to the weary, the satiated, the lethargic, the nervous,— employer and employed,— there awakens a longing for rest and change. This is the first stage of the vacation fever.

There are, all told, but two ways to spend vacation,— so that the vacation will be satisfactory, or so it will be a

failure. Of course, it is only at the end of a vacation that one can review the season of rest and determine positively under which of the two classifications a vacation is to be listed. This is the great tragedy of vacation projects. However, in planning all subsequent vacations, one may profit by the experience gleaned, and may outline a program for the future hours of leisure that will eventually prove eminently gratifying.

"At times it is only necessary to rest oneself in silence for a few moments in order to take off the pressure and become wonderfully refreshed." Just so the most profitable vacations are the ones that are experienced when one seeks and finds a region where there is room to meditate and gain possession of the mind and soul. Whether this calls to the wilds and silent places, or to the haunts of men, it is for each individual to decide for himself. One should be honest enough to do what the heart dictates, and not attempt to be conventional or dramatic in the vacation season.

Many take vacations only because it is customary, or because their business or social contemporaries expect them to do so. Some indulge in a vacation only when they are almost "down and out" and feel the crying need of recuperation. To others, vacations are frequently a means unto an end, and the time is spent in gathering new ideas that may be advantageously incorporated into the pursuits of the remainder of the year.

The where-to-go phase of the vacation question may be answered by saying, "Try something different." It will be found most restful to spend the vacation time at something as radically different from the ordinary routine as possible. Whether to go to a far country or remain at home, whether to go into camp in some solitary place or take a dip into the "maddening crowd,"— all these are points for the individual to determine for himself. The main thing is to go where contentment will abound, and where one may relax from the activities of ordinary living.

Many people at vacation time, fortunately, hear more or less distinctly the call of the wild, and feel the impulse to search out some quiet wilderness retreat. This, no doubt, is the best sort of vacation. Boating, camping, bathing, tramping, sleeping in the open,— all these diversions, individually or collectively, have their devotees. Both the amateur and the professional will find ample returns for any attention bestowed upon any of the sports or pastimes enumerated.

Although many points regarding the annual summer outing are optional with the individual, there are some facts that must be persistently borne in mind by those who would have no regrets with reference to their vacation after the rest time is over and ordinary everyday life once more resumed.

Perhaps these objectionable features may be emphasized in a tangible way by enumerating them in a series of "don'ts," which they who are wise will do well to heed: —

First and foremost, don't carry too much baggage. The simpler the outfit, the more satisfactory the outing.

Don't carry your worries and cares with you. Let your mind be as serene as possible while vacation lasts. You will reap greater benefits if your heart is at peace with itself and the world.

Don't attempt to do too much in a short time. That is, do not decide to visit a great many places or engage in too many forms of recreation. Single out some particular place that for some obvious reason seems desirable, and specialize on some particular form of recreation while there.

Whatever forms of amusement you may decide upon, don't exercise too strenuously at first. Begin cautiously, and do not overestimate your strength. After you have gradually hardened yourself, you may make greater efforts and prolong your activities.

Don't spend too much money. Without being miserly, husband your re-

(*Concluded on page 394*)

A CAMPING VACATION

MARGARET WEIR

IN order to make the most of a short vacation it should be well planned. The time, the wearing apparel, and the place should be agreeably arranged, so that the best results may be obtained, remembering that the manner in which one spends his vacation might be beneficial to him but not to another. But for the one who desires to break away from the busy world, to get rid of the cares of indoor work, and out into God's great out of doors, perhaps there is nothing better than a stay at some camping cottage by a lake or a stream, among the woods, hills, and valleys.

There are many three- or four-room cottages so located, which by a few hours' ride from some rural town are accessible by horse and carriage. Generally these are furnished with all the necessities for from four to twelve dollars a week, according to the size of the camp. This includes fuel, light, ice, and rowboats, but does not include bed linen or towels.

> To derive the most benefit from your vacation, lay aside all thought of office duties, and forget that there is an outside world. Do not confine yourself to letter writing; inform your friends that they will not hear from you during your absence, and be sure to follow out your resolution. Remember that your vacation is the time in which to regain health and strength. An outing such as described will without doubt yield the best results, and you will return home feeling stronger, happier, and better able to perform your duties for another year.

True simplicity should be the rigorous order of life while at camp, and therefore only substantial provisions are necessary. The wearing apparel should be the plainest, khaki-colored material being preferred for either man or woman. A sweater, overshoes, and a raincoat should not be forgotten for rainy days or cool, brisk mornings and damp evenings.

The first day at camp is one of interest, for after the unpacking and necessary arrangement of household things, the launching of boats, and the hanging of hammocks, one is free to reconnoiter

the surroundings, to plan for the little side trips he will take in the days to follow, in which he will learn to know each flower, shrub, tree, rock, hill, and dale around his camp. One will find that communion with nature has a peculiar soothing effect on his tired nerves.

Perhaps there is nothing more invigorating, and for the one who has a poor appetite nothing which will do more to stimulate it, than to arise in the early hours of the morning for a row of five or ten minutes and a short walk through the woods to a spring for water. On the way through the woods, one may add some berries to his menu.

As an antidote for restlessness and a means of health and recreation, arrange a tramp trip, if you enjoy walking, for one day, and a boat trip for another; but a combination of the two would undoubtedly give the most pleasure. For a trip upstream, start out early in the morning, provided with lunch and other necessities. Be sure to wear your "observation glasses," and you will be surprised and delighted with the many new sights that meet your eyes. Take note of the water lilies, for under these sometimes lurk the largest fish. Observe the banks of the stream, and you will see the tracks of the deer which have come down for a drink. Notice the different trees and birds. When the dinner hour comes, select a spot in the woods with enough clearing so that after the meal is over, some game which does not require too much physical exertion, may be entered into and enjoyed by all. A tramp through the woods, a climb up a hill, or an hour's swimming may also comprise part of the day's program. A day spent in this way should be beneficial both physically and mentally, especially to one whose work in the office or shop is a nervous strain. The return to camp with the setting of the sun, or a little later when one may listen to the evening whippoorwill, will be heartily welcomed.

A rainy day at camp is by no means unpleasant, for there are many interesting indoor or porch games which can be played to the profit of all.

To derive the most real benefit from your vacation, you should lay aside all thoughts of office duties, and forget that there is an outside world. Do not confine yourself to letter writing; inform your friends that they will not hear from you during your absence, and be sure to follow out your resolution. Remember that your vacation is the time in which to regain health and strength. An outing such as described will without doubt yield the best results, and you will return home feeling stronger, happier, and better able to perform your duties for another year.

VACATIONS THAT COUNT

(*Concluded from page 392*)

sources so that you may reap the greatest possible amount of benefit from the amount spent. Post cards are a pleasant reminder of one's whereabouts, and are far less expensive than telegrams. Every dollar wisely saved on a vacation trip is a source of great satisfaction after "all the fun is over."

Don't tire yourself by writing too many letters. Letter writing is a bore to you while you are resting, and often occupies valuable time that might better be bestowed upon your pursuit of happiness.

Don't eat injudiciously. It is wise to let the digestive organs relax a trifle while you are resting.

There is something wrong with the vacation that does not fulfill its mission and return you to your work in better condition mentally, morally, and physically. If it is worth while, and the time is well spent, you will go back to your everyday duties more fit in every way to do them well.

A vacation that doesn't put a new song in your mouth and joy into your heart is a failure.

VACATIONS FOR MOTHERS

EDYTHE STODDARD SEYMOUR

EVERY one needs some time for rest and recreation. Often we think of persons shut in an office, or of those whose work is a severe tax on the muscles, as having a life of great hardship, for we mothers can open all our windows at will and let in the sun and air, and if necessary we can let some of the work wait.

Mothers who have help or who have small families can get out at times, and can have more of their evenings free, like office workers; others belong to the muscle-using class, and do all or nearly all the work of caring for the home and for a number of children. Such mothers acquire strong muscles, but they are likely to become nervous and dispirited, and so very weary that they are placed at a disadvantage, and are always behind in their work.

It is a mistaken notion that only the idle class have "nerves;" overworked mothers are almost invariably nervous and irritable. Every mother should try to avoid becoming nervous; and if she is already on the ragged edge, for her own sake and for the good of her family she should use every means to lessen her work and to get out into the open air.

It is a mistaken notion that only the idle class have "nerves;" overworked mothers are almost invariably nervous and irritable. Every mother should try to avoid becoming nervous; and if she is already on the ragged edge, for her own sake and for the good of her family, she should use every means to lessen her work and to get out into the open air.

There are many little things children of even eight or ten years can do to help, and when not attending school they should be assigned tasks requiring about two hours' work every morning, for the training is good; even though they may not be much help at first, they will be when older. These older ones can see that the younger children are dressed and washed and their hair combed, and that they are kept in another room or out in the air until called to their meals. Placing the small and the large children alternately at the table lessens the friction and the tendency to play. When there are only young children in the family, a small table and an earlier meal hour, especially if the table is set outside in favorable weather, saves work and confusion.

A good plan for the care of the beds in summer is to put each to air in the morning, then spread the covers when putting the little ones to bed at night. Mantel draperies, curtains, and unnecessary ornaments are best put away. The clocks, and the vases for fresh flowers, are all that are needed to keep the mantels from looking bare.

The frequent changes in clothing, which seem so necessary in the summer, cause the undoing of many a mother. The use of cotton crepes, seersuckers, and other goods which require no ironing, will materially lessen the mother's work; and if the little folks' play clothes are stretched smooth on the line, and turned when partly dry, and the lower side turned up and pinned smooth, most goods, such as chambray, will need no ironing. Sheets, towels, and many pieces of underwear can be shaken and folded, and then put away. Such pieces have a sweet, fresh smell that ironed pieces lose. Low-necked, short-sleeved, one-piece dresses for the toddling baby in diapers, and rompers for those from two to seven years old, are excellent. Common sense tells us to make these of dark colors, so the children can be free in their outdoor play; but when the other children in the neighborhood dress in white and frills, it takes strength of will to do what is best for oneself and family. So if the little girl wears colored dresses ordinarily, and when playing wears black sateen bloomers instead of drawers and petticoats, she will in most localities still need the white dress for extra occasions; but this can be made of fine material and in one of the simpler designs that make less work for the mother.

A comfortable seat near the kitchen door where mother can sit in the open while preparing vegetables or doing other work that can be done sitting, is very helpful.

I have also a cozy nook under a drooping oak tree in a back lot, where I can take the children to nap or play, while I rest, read, or sew. Such a place can be found in most localities, away from the enervating noise and stifling dust of the street.

A drive through quiet country roads where there are frequent strips of shade and beautiful scenery, and a nice place to eat luncheon, is a restful form of recreation for a tired mother who must take her little flock with her. The return can be planned so as to arrive home just in time to put the little ones to bed on sultry days. Many families in their own or rented business delivery wagons, pass my home on such trips.

There will be some breeze on such drives, even when the air is hot and stifling at home. The children are little trouble, because they are interested in their surroundings, and have the prospect of a great romp at the end of the trip in the wood. With cushions and rugs for the wee ones' naps, and a big lump of ice in a covered pail to keep the food cool, there is no desire to be back home. Some summers my "vacation" has been day-long wagon trips; so I call these my installment vacations, and enjoy them as much as any others.

Although all such simple helps are beneficial, the mother often feels shut in and needs entirely new scenes. There are many who have no conveniently situated shady nooks and no way of taking drives; but I have found that practically all who will make an effort to do so can have a vacation.

In looking up ways and means to take a trip myself with my little flock of six lively youngsters under twelve years of age, I considered the fact that I could not take them where there were others boarding whom they might annoy, and particularly I could not manage them in a public dining room without help. The price of board for so many, even in the most modest places, would be too expensive for me. By watching the Sunday papers for advertisements for "rooms to rent, with housekeeping conveniences," I learned of favorable places in the country, where tents and rooms were furnished with everything needed, except blankets, bed linen, table linen, and cutlery, at prices ranging from seven dollars up. So the whole family could go for the same amount as it cost when I had one or two children, and boarded.

If interested mothers will watch the advertisements in their papers from the nearest large city, they will find a number of places that are suitable to choose from, and accessible from their homes.

INSTEAD OF A VACATION
FOR THOSE WHO CANNOT GET ONE

CARL EASTON WILLIAMS

VACATION! What's the use of talking about vacation to a man who cannot get one? For while a vacation is the thing this time of year, yet if you were to go down the back streets, you would find that the people who cannot take a vacation are a great deal more numerous than those who can. And you don't need to go to the back streets either. There are many on your own street, wherever you live. And perhaps you are one of them yourself.

There are two difficulties about taking vacations, for some of us: they take time, and usually they cost money; perhaps not much money, but even a little is a lot for some of us who suffer from extreme atrophy of the pocketbook. And so the only thing that remains for many of us is to do the next best thing. The trouble is that in our discouragement we are apt to forget that there is any next best thing. And so we stay at home and do nothing at all.

> **If we can get the big vacation, we shall certainly have it, but if it is not to be had, we shall get just as much as we can of the same thing every day in a small way. First, we shall get out a little bit the first thing in the morning, if we can. Then we shall get out where it is green, for two hours or more in the evening. And at the end of the week we shall have as much as possible out in the open.**

The main idea of a vacation, generally, is to "get away" somewhere. But if we can't get away for two weeks, it is at least worth while to get away for two hours. Why, two hours a day in the open air, all summer long, will really mean more by the end of the season than two weeks of it all bunched up together, with the neglect during the rest of the time of the small opportunities that lie close around us. The trouble with many of us is that we do not try to get out in the open even when we can. We are looking for the opportunities that are far away,—the mountains, the seashore, Europe, and what not,—and so we overlook the pleasant little green places that we can reach in almost any small fraction of an hour. We ignore the little groves and hills and patches of meadow that are available. In thinking about the glassy lake or the rolling sea we forget about the cheerful little creek that runs over there along the side of Jones's farm, with surroundings that are neither grand nor awe-inspiring, but which are just as close to nature and just as soothing to the nerves as ye crags and peaks and towering pines.

To a large extent, it all comes back to the old idea that "where there's a will there's a way." And to some extent it is a matter of habit. We Americans are too much given to the indoor habit. And we are too well satisfied, when we do leave the house, merely to stroll lazily about between walls of brick and on cement sidewalks. What we need is the outdoor habit, and usually if we really try to get out into the midst of the green

and the blue we can somehow manage to do so. Even if it is only for an hour it is worth while, to say nothing of what one can do in the way of an all-day outing on Sunday.

I know of nothing better, especially for the man with a family, than the small picnic idea. Really, you know, you don't have to have the whole Sunday school or the church organization on hand in order to have a picnic. The big picnic is all right, too, and jolly good fun, until the rain comes, as it usually does. Nothing like a big picnic to draw the rain, it seems. But it is just as possible for two persons to go on a picnic. In fact, a picnic of one is not the worst thing in the world, if one is driven or limited to that extremity. Anyhow, there is nothing the matter with the little family picnic, and for some strange reason it is not nearly so likely to rain on these little affairs as on the big church picnic. All it means is simply to get your food together and eat outdoors on the grass under the trees, instead of in the stuffy house. And remember that you don't really have to do a lot of fussing and take along a lot of fancy things as if you were expecting George V. and several members of the Vanderbilt family to join you. The simpler the food the better. Depend upon it that it will all taste good out there in the air, and the less fussing to get it ready the quicker you can get away from the house. O, I could mention lots of things to take along to eat, but you know your own tastes best!

Now that I have mentioned the family picnic, I fancy that you are thinking of Sunday. Well, I'm not thinking of Sunday merely, but of practically every evening in the week. It is simply the case of eating the evening meal outdoors on the green instead of in the house. The days are long. Early in the summer it is still daylight up to almost eight o'clock. Suppose that you get through with your work at five o'clock. Instead of going directly home, you go straight to the little picnic ground over on the hill or down by the creek, where your wife and the boys will be waiting for you with the big basket and the glad smile. And so you may have from two to three hours out there, either loafing or romping with the boys and the big girl, as suits you best. If you don't get through with your work until six o'clock, then naturally you will have less time to spend out there before dark; but even then it will be worth while, and the need for getting such air as you can will be all the more urgent if your working hours are long. Apart from the other advantages, the predominating colors of the open — green and blue — are especially restful and soothing.

Of course I am not simply talking to the man of the house, on this picnic idea. For how about a vacation for the housewife? She is often more tied to her work than father is to his, with the endless routine of her duties. Working over a hot stove in sweltering midsummer weather is no joke; so let her get out of the house and away from it as much as she can, and let the evening meal be cool instead of hot, though none the less substantial. It is a good plan for her to do her work during the heat of the day, when the house is so much cooler than the blistering sunshine without, and thus arrange to be outdoors in the cooler and more pleasant parts of the day, if possible both early and late.

And there are the youngsters, if youngsters there are. The writer has two of them, both live wires; and the way we do is to take a little old hammock along and tie it between two trees, or sometimes a rope for a swing, and all have a general good time.

Naturally the kind of time that you will have on your picnic, when not engaged in the important process of enveloping sundry articles of diet, will depend upon what you need in the way of a rest from your work. And of course the thing that will rest you will be a change. If you are busy all day long at some strenuous physical work, all you will want to do is to loaf, and the more

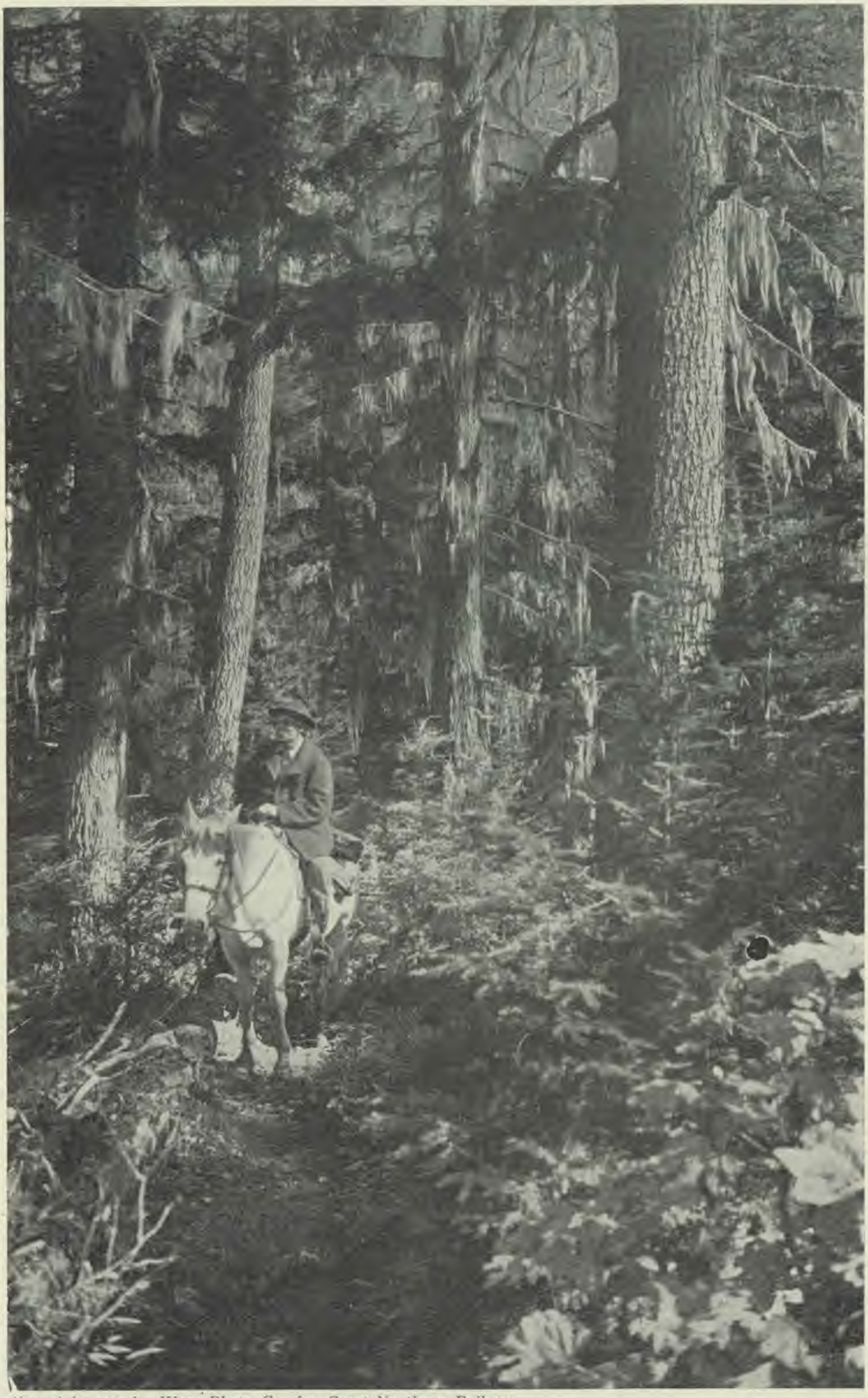
thoroughly you can relax the better for you. But if you are chained down to a desk all day long, the thing that will rest you most will be some light physical activity, and the cool of the evening, in summer, is the best time for this. Don't kill yourself with the exercise, but just do something or other to get your blood in circulation, stretch your muscles, and make you feel that you are alive, in spite of the summer weather. If there is enough water about, and you have a boat, fine! The evening is also a good time to go swimming. Or you can scamper about with the boys, or play catch with Tommy's ball, or climb the trees, or do broad jumping — anything you like. Or you and your wife can join the children in some game like puss in the corner.

Of course there are lots of other things that one can do if he has a mind to. He could specialize on a nice little garden, the family helping. He could build a big, comfortable, flat-bottomed family boat that could not tip, and could not sink if it did tip. It might not be much on speed, but great on safety and all-round fun. And then there are bicycles and cameras and other things which may interest various ones. But I have tried here to emphasize the little picnic idea partly because it is a sort of vacation on the installment plan that is not going to cost one cent more than the ordinary living expenses, and partly because it is something especially suited to the circumstances of the family man.

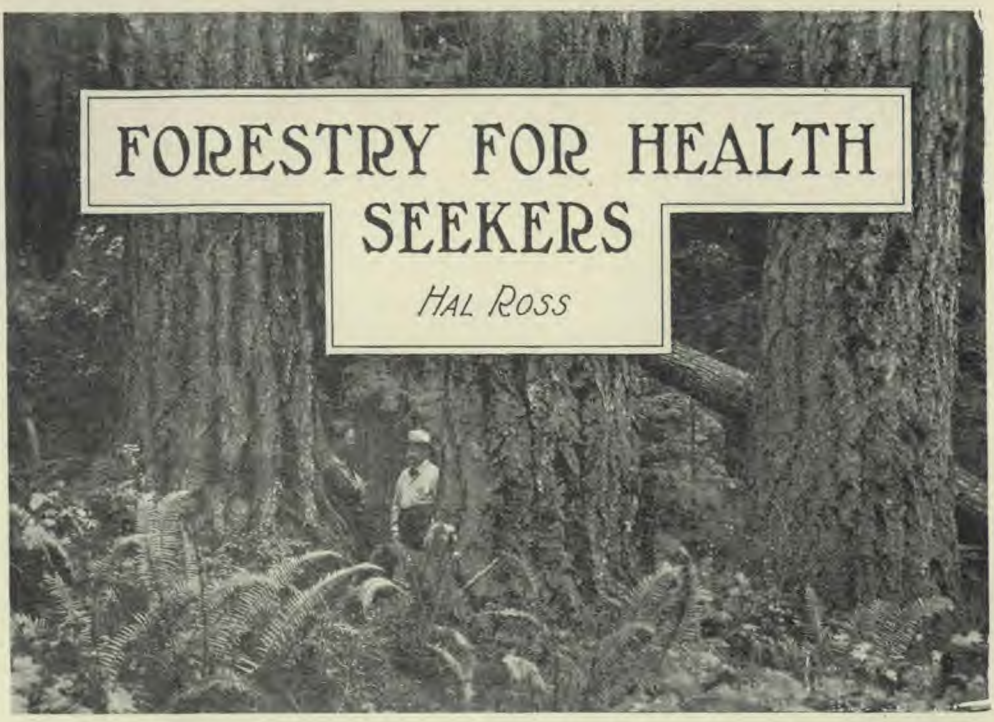
However, for unmarried men or women the case is much more simple in many respects. For the unmarried there are all kinds of "week-end" possibilities, and always there is the freedom to come and go and do. If there is nothing else, there is always the possibility of delightful walks through the country, whether individually, in couples, or in walking clubs. Too much cannot be said in favor of the latter, and if you join one, or start one, getting out for country hikes whenever you can, including short walks on pleasant evenings, you will find that you have on your hands throughout the whole year a pretty good substitute for a vacation. In fact, to make a comparison of the benefits year in and year out, membership in a real live walking club will do you more good than the finest two weeks' or four weeks' vacation that you ever heard of.

There is another possibility in getting outdoors a little while in the early morning before going to work. For those of us in town who go to work between eight and nine in the morning it is always possible, unless we are extremely somnolent or fussy about dress, to get out anywhere from a half hour to an hour and a half before beginning work, even if we do nothing else than walk to our work. Even in the city streets the air seems clean and sweet at this time of day, and it gives one a large measure of the joy of living just to be out at such an hour. And this is neither joking nor poetry. Bill Nye once remarked that "if all that has been said about it is true, the sunrise must indeed be one of nature's grandest phenomena." However, don't rob yourself of sleep, if you need the sleep, to get up for the sunrise in summer. It is much easier to do it in winter. But generally speaking, the earlier in the day that you can get out and get the air and the glorious colorings of earth and sky, the more pleasant you will find it. It won't exactly give you a clear conscience, but it will help to give you a clear head.

To size the thing up again quickly, if we can get the big vacation we shall certainly have it; but if it is not to be had, we shall get just as much as we can of the same thing every day in a small way. First, we shall get out a little bit the first thing in the morning, if we can. Then we shall get out where it is green, for two hours or more in the evening. And at the end of the week we shall have as much as possible out in the open. Really, the only way to get away from the house is to break away. Well, now, we shall stop talking about it, and go out for a walk.



ON TRAIL TO AVALANCHE LAKE



FORESTRY FOR HEALTH SEEKERS

HAL ROSS

IN order that we may appreciate the great opportunities for the building of health afforded by the profession of forestry in this country, a short sketch of its history will be necessary.

Forestry is Teutonic, and more particularly German, in its origin and development, although it is now well established in all central Europe, in Scandinavia, and in a large portion of Russia. It is an old industry. Thousands of men for centuries have made their living by the care of the forests, planting and starting new crops, thinning and protecting the older crops started by other men many years before, and by cutting or harvesting old timber which had been a century or more in growing to its maturity. Before the year A. D. 1000, some of the forests in central Europe were watched over regularly by rangers. The forest called Shiwald has been in the possession of the free people of the city of Zürich, Switzerland, for about one thousand years, and has furnished a crop of timber every year, and is today in better shape, and growing more and better trees, than ever before.

By the year 1300, thousands of acres of land had been planted to forest trees, and a large part of many forests received a reasonable degree of care. By the year 1700, all the different meth-

> If a man has the "stuff" and is willing to work; if he loves the out of doors and is not afraid to risk the dust, heat, cold, or storm; if he wants to learn about the fox, the squirrel, and other wild creatures; if he wants to know all about the trees, the shrubs, the plants, the birds and insects; if he wants to sleep out in the open, to swim and paddle,—to such a man forestry offers everything. To him it offers a good living, a large and ever-interesting field of work and pleasure; it offers, as few lines of work do, the best of health, with an opportunity to give real service to his fellow man, to his country, and to work for the future of our great nation.

ods of work now practiced in forestry, from the collection and planting of seed to the cutting of the timber, were well understood.

Forestry in the United States and Canada is, however, a comparatively recent innovation, having really been started in the nineties by B. E. Fernow, and later spread the length and breadth of the country by Gifford Pinchot, supported by Theodore Roosevelt. The profession is decidedly in the foreground these days, but not a moment too soon. While Germany has about thirty-five million acres of woods, the United States has over five hundred million acres. While in Germany every acre of woods is carefully attended and watched, in the United States not one per cent is effectively protected; and outside of the national forests, and some of the farmers' wood lots, hardly any of our forests get any protection at all. The forests of Germany have been under the care of foresters for centuries; ours are wild woods. While the German forests annually grow about sixty cubic feet of wood an acre, in our great wild woods the growth is practically offset by the decay. The tremendous amount of wood we are harvesting every year is reducing the supply just that much.

And this is not all: in Germany, France, and other European countries, the people use about fifty cubic feet of wood per capita annually. We in the United States have had plenty, and are using over three hundred cubic feet per capita. And instead of learning to save, we have thus far only learned to use more. Our industries, our commerce and transportation, our very home life, are based on a liberal use of wood.

China has been called "the country which used up its trees," and might well be called the country which forgot the value of the forest tree. When China's forests were gone, the building of houses and barns, the building of bridges, the making of vehicles, boxes, and barrels, housing, storage, and transportation, all had to be reduced to the minimum, or made to depend on stone, brick, and other unsatisfactory materials; and it has been suggested repeatedly that the progress of China's civilization came to a halt when people ceased to have timber to use. But China also suffered in other ways; great areas were flooded, and millions of acres of hilly lands were washed and gullied to such an extent that today they can no longer be farmed, and will not even produce good pasture.

With these lessons before us, with the lesson of the great floods along the Mississippi and other rivers, with the cost of lumber and pulp ever rising, it is to be seen that we have a great problem to deal with, a big task for the American forester to undertake. He must get into shape and keep in growing condition forests that shall supply this great nation, even now one hundred million people, and supply it liberally, that our material welfare shall not decrease, but continue to increase.

Our forests are wild woods, and little is known about them. Our species are practically new to the forester; everything to learn, everything to do! The forest is waiting for the forester, calling for him, in fact. Fifteen years ago it was difficult, almost impossible, to place a dozen men in real forestry work. Today thousands of the best we can prepare are needed to go out into regular forestry, now a profession. The federal and State governments, countless individuals and firms, are clamoring for men in this line of work.

Here is a golden opportunity for health seekers, thousands of them,—a good living, a large and ever-interesting field, good health and pleasure at every turn. The forester is expected to get out into the woods practically every day, summer and winter, rain or shine. Part of his work he does afoot; for part of it he must have horses or team, as he is expected to see every parcel of woods under his control, every piece of road, every rod of boundary line, often enough to make sure that he has his business properly in hand. In springtime he must visit the pieces where he is seeding or

planting the land cleared of timber the winter before. In summer he is repairing and building roads and houses, draining wet lands, watching for insect troubles, protecting the game, tending to the nurseries or tree gardens, examining different parcels of woods to see which ones need cutting first and where thinnings are most needed. When fall comes, the forester makes contracts for cutting timber. This work he and his rangers watch very carefully. Then come sale days, when the forester sells timber at auction. In the busy winter season, there are permits to be issued for the hauling of the timber, and the forester must watch to see that the men buying the timber haul the right stuff, and only what is theirs. He must ever be on the lookout for fires. And incidentally come quite a bit of hunting, and at all times the pleasure of being out and seeing things.

The forester who has charge of a certain section or sections of timber lands is aided by from three to eight rangers, on whom he must rely a great deal. Most of the foresters who have not had the advantage of college training, started in the capacity of rangers and worked their way up. The ranger is out in the woods every day; he has only a portion of the forester's section to watch over, and is primarily policeman to watch over land, timber, improvements, and game. He goes armed, gets out early to catch the small timber thief or poacher, and watches late to keep track of the number of roe or deer, or to take in a stray fox or other game destroyer. During the day he looks after the work done by the extra help, keeps the time of the men working on the roads or in the nurseries, and goes with the forester and helps mark trees where a thinning is to be made.

The foresters and rangers show the virtue of the quiet forest life; they are not suspicious, nervous, irritable, dyspeptic. They are hearty men, quiet as their forests, fearless and true; real men. They are hospitable and friendly, and it is good fun and a real privilege to take a trip through the woods with one of these experienced men. The forester is usually conservative, like a good farmer, for he knows well that in his business, mistakes live a long time.

The forest is a great university, and opens the way to many other fields. Some foresters have gone to teaching, some into scientific investigations, some into state service, some have connected with lumber and pulp companies, and a few have worked into some forest property of their own, while others have taken a course in forestry to fit them for better work in modern magazine writing, for service on a technical paper, to strengthen their law course, and others have taken it as a matter of culture.

But above all these things, it offers a most wonderful opportunity for the building of robust health and manhood. If a man has the "stuff" and is willing to work; if he loves the out of doors and is not afraid to risk the dust, heat, cold, or storm; if he wants to learn about the fox, the squirrel, and other wild creatures; if he wants to know all about the trees, the shrubs, the plants, the birds and insects; if he wants to sleep out in the open, to swim and paddle,—to such a man forestry offers everything. To him it offers a good living, a large and ever-interesting field of work and pleasure; it offers, as few lines of work do, *the best of health,* with an opportunity to give real service to his fellow man, to his country, and to work for the future of our great nation.

ARTIFICIAL ICE THE MOST SANITARY REFRIGERANT

JOHN L. HODELL

MUCH has been said and written concerning the impurities found in natural ice and of the consequent danger in using it in the home, and but little in support of the artificial product, notwithstanding that many question its purity. While it is true that the artificial refrigerant is fast supplanting Mother Nature's product for household use, many still foster the early belief that it is poisonous and injurious to health, causing its sanitary qualities to be looked upon with more or less suspicion. Such a belief is not only untrue, but unjustly condemns an article of great hygienic value, and should be arrested in the public mind. The popular impression leading to this uncanny belief is that the chemical employed in the freezing process is placed directly within the water, and, by a supposed chemical action, the whole mass is thought to congeal and solidify into ice. This supposition is undoubtedly the result of a wrong conception formed regarding the use of ammonia in the freezing process.

Today nearly all ice-making machinery operates on what is termed the compression principle, employing anhydrous ammonia as the refrigerating or cold-producing agent. By this system the ammonia, which is a highly volatile liquid, is compressed, condensed, and then evaporated to effect a low state of temperature in adjacent bodies by absorbing heat from them. A visit to a modern ice plant is one not only of much interest, but sure to dispel any delusion one may entertain concerning the purity of artificial ice. The engineer, if not busy, will not only be glad to show you the massive machinery and other apparatus to be found in his care, but will explain in detail how, with its operation, even in the hottest weather, water is transformed under the most sanitary conditions from a comparatively warm liquid into ice. Here it will readily be seen that the ammonia used is securely held within huge coils of iron pipe, and at no time comes into actual contact with the water being frozen.

For ice making the utmost care is taken to obtain the purest and best water furnished by nature; consequently most ice plants have their own Artesian or deep wells, whence it is lifted and de-

There is a popular belief that artificial ice is injurious.

This belief probably comes from the notion that the ammonia is in some way mixed with the water to induce freezing.

Though ammonia is used in refrigeration, it never comes in contact with the water or ice.

For the manufacture of ice the purest obtainable water is used.

This water is first distilled and then filtered, in order to make it as nearly absolutely pure as possible.

The purest water obtainable, unless it is distilled water, is not so pure as artificial ice.

livered by a steam pump to a large tank, usually located on the roof. Water, however, as found in its natural state, is considered unfit for ice manufacture; for, while it may be absolutely pure and free from contagious disease germs, it invariably holds in solution more or less mineral solids, such as lime, sulphur, and magnesia, which, when frozen with the water, tend to give the ice a white or milky appearance. All these mineral solids must be eliminated from the water before freezing. To accomplish this, and, at the same time, render the water absolutely germless and free from all other impurities it may have contained, it is caused to pass through a distilling and filtering system, a process essential to the production of a pure and crystal-like refrigerant. In thus treating the water before freezing, the purity of the ice, which it eventually becomes, is to be unquestioned. The purifying, in fact, is so thoroughly and effectually done that practically nothing outside of the two combined gases necessary to form water, oxygen and hydrogen, enters into the formation of the ice.

From the tank mentioned, the water, by virtue of gravity, begins its journey through the purifying system; first, to a pump, which feeds it to the steam boilers, where, by evaporation, it is quickly converted into a highly expanded and gaseous state called steam. Here, within the boilers, the water (now steam) is held under a pressure of about eighty pounds to the square inch, a condition in which it has acquired, and holds locked up within it, considerable potential energy. This energy is employed to great advantage before the water is restored to its original or natural state by being expended in giving motion and power to the various steam engines and pumps required about the plant. Upon performing this mission, the water, which is now a vaporous steam, is exhausted into a steam condenser, where it quickly assumes its original form. This condensed steam, or, rather, distilled water, is next conveyed from the condenser to what is termed a "reboiler," here to be once more brought to the boiling point for the purpose of removing traces of oil carried over from the engine and pump cylinders through which it passed. The oil, being of a less specific gravity than the water, readily forms on the surface, from which it is automatically skimmed. On leaving the reboiler, which it does from the bottom, the water passes through a huge filter, then a cooler, and finally enters a storage tank, where its temperature is further reduced to about 40° F. The water now, minus practically every element it contained on leaving the well, except, of course, the two combined gases essential to its formation, is ready to become ice.

Fully to understand the freezing process, it is necessary to know the properties of the refrigerating agent in use, especially that one relating to its cold-producing ability. In all such agents the boiling point mostly determines its value as a refrigerant, which must be as low as possible without resorting to excessively low pressure.

Pure anhydrous ammonia, the favorite agent employed today, boils at about 28.6 degrees below zero at atmospheric pressure on the Fahrenheit scale, or 240.6 degrees lower than that of fresh water. It must not be understood, however, that, because the ammonia boils, the heat causing it to do so can be detected by the human sense of feeling. Temperature merely indicates how hot a body is, not the amount of heat it may possess; and since the transfer of heat is always from the warmer to the colder body, human flesh cannot detect it in bodies of such low temperature. If the hand is placed on a block of ice, no heat is perceptible; yet, in comparison, the heat within the ice is to ammonia as a hot stove would be to water of ordinary temperature, and a glass of the liquid placed on the ice will boil violently. It may, perhaps, make the cold-producing property of ammonia more apprehensive to the mind to state that the heat required to boil the ammonia is obtained from the

ice by absorption, which, by reason of having lost this heat, is made even colder than it was formerly.

In the process of artificial ice making the water is robbed of its heat in precisely the same manner; the ammonia, being the colder of the two, absorbs and carries the heat away, degree by degree, until the water, at 32 degrees above zero, no longer able to retain its liquid state, yields to a law of nature and forms ice. It will be seen here that, as the water loses its liquid state at a point 60.6 degrees warmer than that at which ammonia boils, the refrigerating agent in circulation is still capable of absorbing 60.6 degrees of heat from the newly formed ice.

In the ice plant this interchanging of heat and cold between the water and ammonia takes place in the freezing tank, which is large and usually of steel construction, well insulated on the bottom and sides from surrounding heat. The tank inside is equipped with numerous iron-pipe coils, connected at one end and running parallel to one another, called the congealer, into and through which the ammonia expands and circulates, while around the coils is a strong solution of salt water or brine, kept in constant circulation by an agitator or steam pump. Many small lids form the top or floor of this tank, beneath each of which a galvanized iron can or mold holding the water to be frozen is placed in the brine, resting in such position that a coil conveying the ammonia passes within an inch or two of it on either side.

The temperature of the circulating brine is regulated by means of a small valve, called the expansion valve, which controls the amount of ammonia expanded into the congealer coils, and is held at about ten or twelve degrees above zero, or midway between that of the water and ammonia, so that it serves as a conductor of heat from the former to the latter, eventually reducing the water to its freezing point — then ice.

On leaving the freezing tank, the ammonia is in a highly expanded and gaseous state, due to the extra heat absorbed from the water, and is conveyed to the compressors of the ice machine, where, by compression, it is raised to a liquefying pressure and discharged into a condenser. Here, under the combined influence of its high pressure and the cold

(*Concluded on page 429*)

VARIOUS OBJECTS FROZEN IN BLOCKS OF ICE SHOWING BY THEIR CLEARNESS THE PURITY OF THE WATER

DANGERS OF COUNTRY LIFE

JAMES FREDERICK ROGERS, M.D.

THE country is often a far more dangerous place to live in than the city, especially for that class of city dwellers who make an annual sojourn in rural regions. We do not refer to dangers from attacks by wild animals, from being lost in the woods, or of being shot for game by the careless hunter. Indeed, the deep woods are far safer than villages in many ways; and bears and catamounts are harmless compared with the bacteria which lurk about human habitations.

It is high time that those who live in the country and who find it a source of some income to have the city dweller in their homes for a season, were realizing that they do not live up to city standards of sanitation. The city dweller is beginning to learn that he gets his typhoid, malaria, and often his ptomaine poisoning while on his vacation, and he is developing enough common sense to shun such a summer place the next time he takes his outing.

The outer is, of course, partly to blame for many of the disasters which come to him, for comparatively few have learned how to spend their vacation in a safe and sane way. They have the idea that their outing must be occupied with extravagant performances,— in eating all things at all hours, in going bathing no matter what the temperature of the water or what their reaction to it, or in spending much time in the broiling sun for the purpose of getting tanned — as if tan means health.

But the country is to blame for much major suffering. The country considers itself as by nature healthful. Is there not abundance of sunlight unscreened by sky-reaching walls, and of pure air unsullied by smoke and gas? Are not all foods raised in the country, and therefore to be had "fresh"? And is not the fact that the poor city dwellers flock to the country and spend a fortnight with poor accommodations, at prices two or three times what such accommodations are worth, sufficient evidence of all this?

The outer is himself often to blame for his illness, through reckless practices in eating, bathing, etc.

The sanitary condition of many resorts is inferior to that of the average city.

The greatest menace to the summer visitor is the typhoid germ.

The food products offered the summer guest, including the milk, are often below par.

Mosquitoes and flies may be an annoyance — or worse.

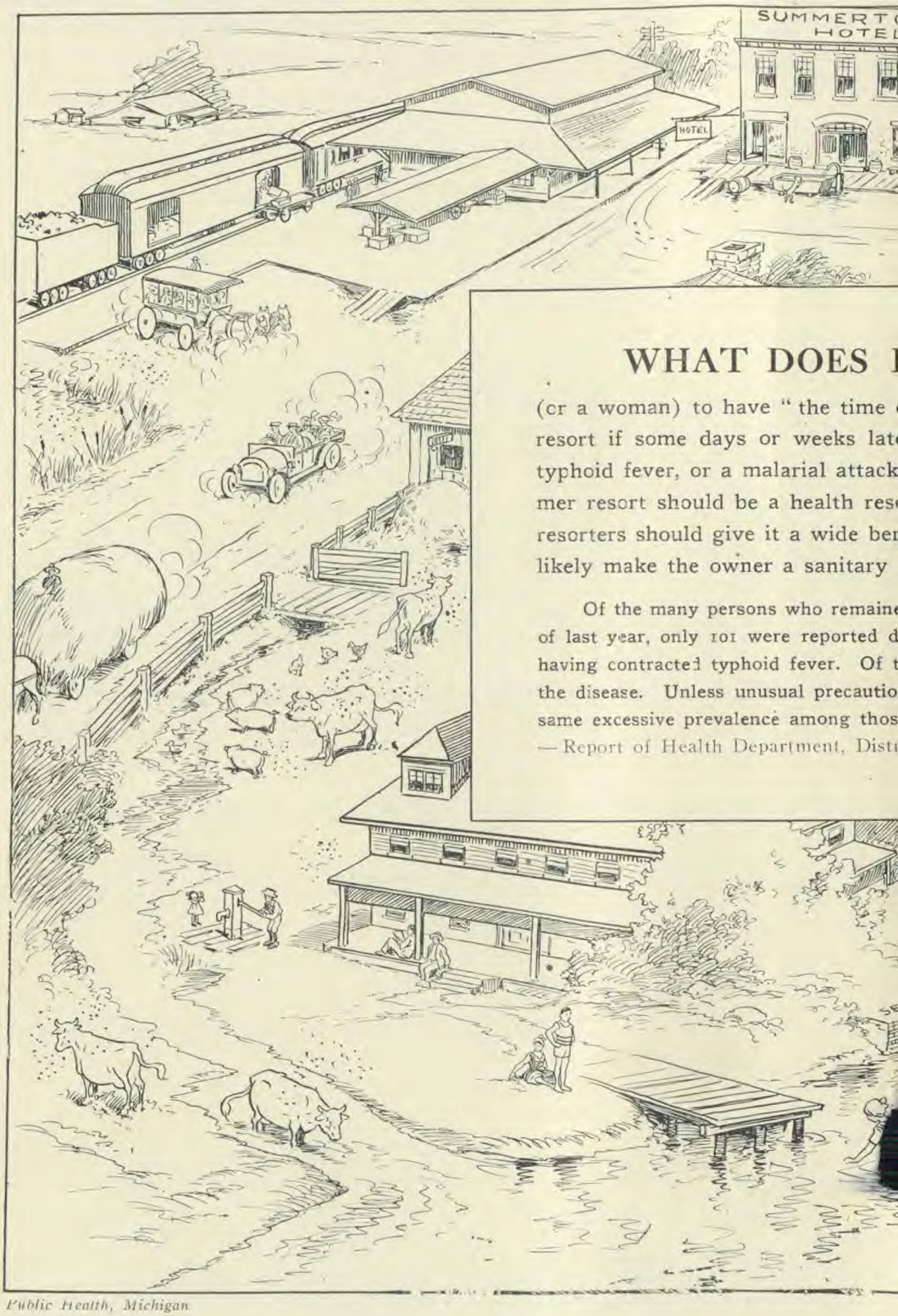
Poison ivy may be a source of untold misery.

These various drawbacks the wide-awake country community should eliminate, for the sake of business.

The wise vacationist will not summer at a place where they are not eliminated.

The greatest menace to the summer visitor is the typhoid germ. The water supply of the city is obtained largely from one source, which is well guarded and frequently tested, and at the present day fairly free from typhoid germs. In a country village there are often dozens of wells, many of them constantly polluted in various ways. As it takes some little time for typhoid to develop, the city visitor has usually returned home before he comes down with the disease, and he may not realize where he got the infection, but undoubtedly most of the typhoid of our cities is contracted during visits to rural districts.

(*Concluded on page 410*)



WHAT DOES I

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Of the many persons who remaine
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having contracted typhoid fever. Of t
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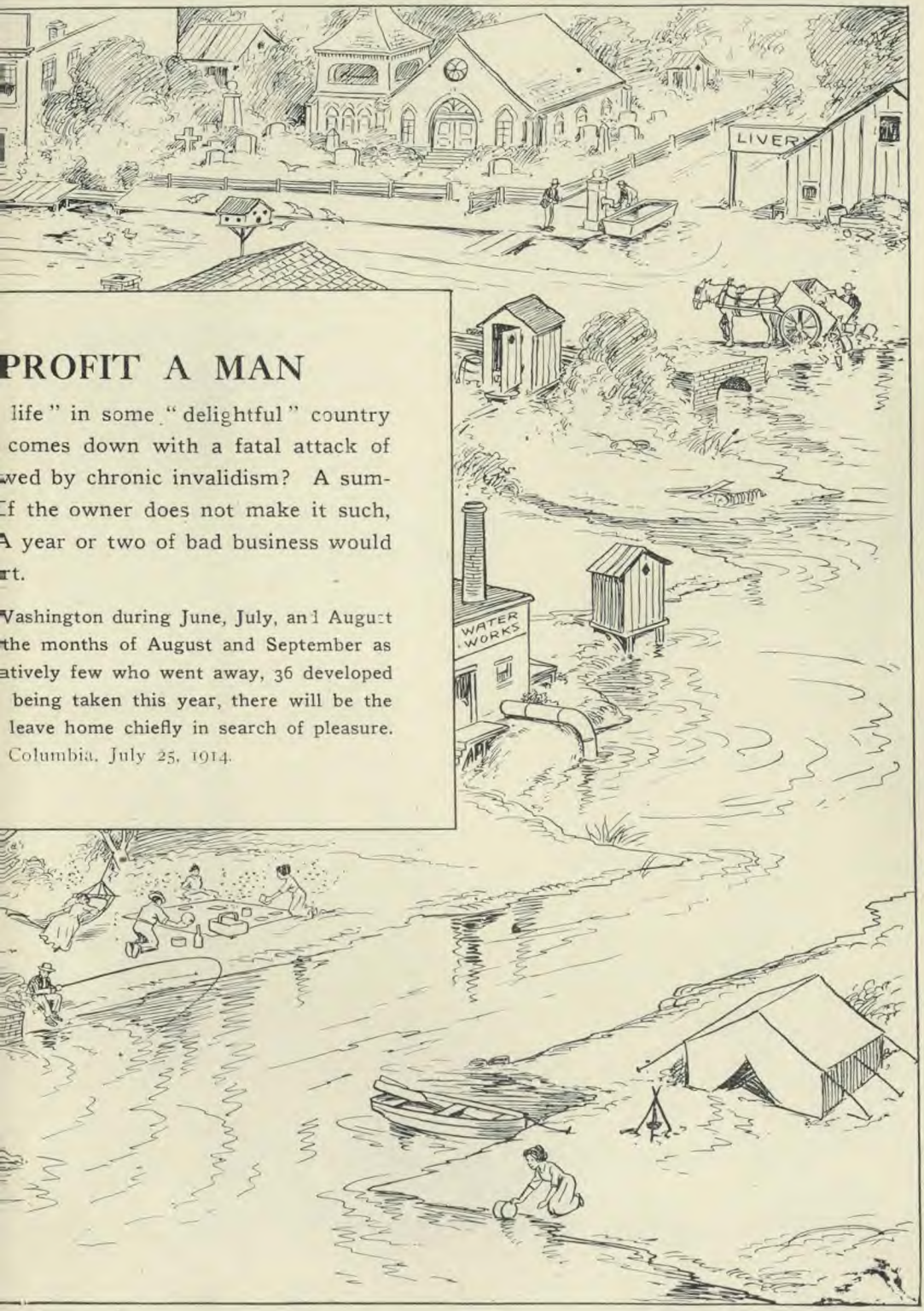
— Report of Health Department, Distr

Public Health, Michigan



PROFIT A MAN

life" in some "delightful" country comes down with a fatal attack of wed by chronic invalidism? A sum- Cf the owner does not make it such, A year or two of bad business would rt.

Washington during June, July, and August the months of August and September as atively few who went away, 36 developed being taken this year, there will be the leave home chiefly in search of pleasure. Columbia, July 25, 1914.

(*Concluded from page 407*)

The spread of typhoid is increased by flies, and the kitchen at the summer resort is often not so well protected as it should be. Flies swarm in from adjacent outbuildings, and often reach the dining room as well as the kitchen.

The food products offered the summer guest are often below par, the best things for the table having been shipped to the city whence the visitor came, and, perchance, to be seen in the grocery where he usually makes his purchases. At summer places the visitor not infrequently gets stale sea products, with disastrous consequences.

The milk supply is often a source of menace to children, and many visitors have their milk shipped from dairies in the city to the place where they are sojourning. Unless the milk comes from a large dairy which is kept up to a high standard of cleanliness by its city patrons, the matter of milk is usually left to the mercy of the "hired man," and the hired man's ideas and ideals of cleanliness are not always very lofty.

Mosquitoes, sometimes of the malarial sort, are a source of annoyance if nothing more, and help to take from the pleasure and profit of the summer visitor, though the native has often come to look upon them as a matter of course, and wonders that there should be complaints on that score.

Poison ivy may flourish so abundantly as to be to many visitors a source of misery which they will not forget.

Then there is the dust from passing automobiles, which, even when not a danger, is an annoyance that most cities attempt to suppress.

The summer visitor is fast becoming informed on matters of sanitation, and he at least has such a wide choice nowadays of places in which to spend his vacation that if he finds discomfort and danger to health in one locality he is not likely to visit it again. There is going to be a survival of the fittest in health resorts as in other things, and those places which wish to prosper would better get in the line of good sanitation at once.

It is not sufficient to plant a new hedge or a clump of evergreens at the side of the house, to beautify the village center, or to rake the beach. This is only working on the surface, and may hide much foulness beneath. The health officer, instead of being looked upon as an enemy, should be taken into confidence as an adviser of the utmost importance for both the family and the community. He should be consulted as to the condition and location of wells, and as to how to get rid of flies. There is little excuse for mosquitoes, and the health officer should know how to banish them. If it costs something, the money will soon come back in increased returns from more resorters. Poison ivy can be destroyed; the milk supply can be looked into; the roads can be oiled at a small cost; and it may pay to keep some of the better vegetables and fruits for the home table.

By such cleaning up, which of course takes a little labor and money, but which pays big in the long run, the country can easily be made what it usually is not, a more healthful place than the city. Thereafter if the city visitor comes to grief on his annual outing, it will be his own fault, and he will find it useless to go elsewhere in search of more favorable surroundings.

HEALTHFUL COOKERY

MENUS FOR A WEEK IN SEPTEMBER

George E. Cornforth

WHILE the springtime, when everything is coming again into new life, giving us the joy of looking forward to the good things of summer, affords pleasures peculiar to itself, September, with its harvests and the joy of gathering the fruit of the year's labors, offers satisfactions which come to us at no other time of year. The abundance of good things to choose from at this time lessens the task of planning the meals.

The breakfasts on these menus may be simplified by omitting either the article in parentheses or the one in brackets. The dinners may be simplified by omitting the soups.

Recipes are given for those dishes on the daily menu which are marked by a superior [1].

Baked Mush Cubes

1 quart water
1 teaspoon salt
1 cup corn meal

Bring the water to a boil in the inner cup of a double boiler directly over the fire, add the salt, whip in the corn meal, stirring till it does not settle, then set the inner cup into the outer cup of the double boiler, which contains boiling water, and cook one hour. (This should be prepared the day before.) When it has cooled, turn the corn meal out of the bread tin, cut it into three-fourth-inch dice, dip the dice into beaten egg, then roll them in chopped nuts, and place on an oiled pan. Bake till they are well heated through.

Baked Rice and Olives

Follow the recipe for baked spaghetti and olives given in the July number of LIFE AND HEALTH, using boiled rice instead of spaghetti.

Grape Jelly

1¾ cups grape juice
3 tablespoons lemon juice
¾ cup sugar
¼ ounce vegetable gelatin, cooked in
1 cup hot water
A few grains salt

Prepare the gelatin as usual, by soaking it in three changes of hot water. After it is drained the last time, cook it in the one cup hot water till it dissolves, then strain it into the remaining ingredients, which have been mixed together. Turn it into a mold or into cups wet with cold water. When it is cold, turn it out of the mold, and serve with custard sauce or with apple whip.

First Day

DINNER

Tomato Bisque
Baked Rice and Olives [1] **Mashed Potatoes**
Tomato Mayonnaise **Graham Bread**
Grape Jelly [1] with Custard Sauce

BREAKFAST

Baked Mush Cubes [1] with Sirup
Baked Beans and Brown Bread
Pears Apple Sauce

SUPPER

Pop Corn and Milk
Orange and Coconut Buns [1]
Cantaloupes

Second Day

BREAKFAST

(Rolled Oats) Cream or Milk
Dried Olive Hash [Nut Puffs]
Peach Fritter [1]

SUPPER

Cream Gravy Toast
Graham Bread
Baked Sweet Apples

DINNER

Split Pea Soup
Mashed Sweet Potatoes Swiss Chard with Lemon
Graham Bread Queen of Puddings [1]

Orange and Coconut Buns

1 cup lukewarm water
1 cake compressed yeast dissolved in the water
¾ cup shredded coconut
¾ cup sliced candied orange peel
Yolk of 1 large egg
¾ cup sugar
½ teaspoon salt
¼ cup oil
1 pound entire wheat flour

In a bowl mix together the flour, salt, sugar, orange peel, and coconut. Put the water into another dish. Dissolve the yeast in the water, then mix with it the egg yolk and oil. Pour this liquid mixture into the flour mixture, and mix to a dough with the hands. Knead lightly till the dough is smooth, then put it into an oiled bowl, cover, and set it in a warm place to rise. When risen punch it down in the middle, fold in the sides, work it into a smooth ball, and turn it over. When risen again, take the dough out onto a floured bread board and divide it into one and one-half ounce pieces. Roll the pieces into balls. Lay them on an oiled pan and set in a warm place. Let rise till nice and light, then bake.

Like all other kinds of bread, these can be more conveniently mixed with a bread mixer.

Peach Fritter

Fill a bread tin half full of sliced fresh peaches. Sprinkle over them one-half cup sugar and a few grains salt. Put them into the oven to cook. While they are cooking, prepare the following batter: —

½ cup cream (milk will do, but will not make the crust so tender)
1 egg
A few grains salt
½ cup sifted bread flour

Separate the yolk from the white of the egg. Beat together the cream, salt, egg yolk, and flour, till the batter is smooth, then fold in the stiffly beaten white of the egg. Dip in this batter very thin slices of bread from which the crust has been cut, and lay these slices on top of the hot peaches, which should be cooked tender by the time the batter is prepared. Cut and fit the slices so as completely to cover the peaches. If there is any batter left, it may be poured over the slices of bread. Put on the bottom of the oven to bake till the top is nicely browned. Cut into squares, and serve plain or with cream.

Queen of Puddings

This is simply bread pudding over the top of which jelly is spread before putting on the meringue.

Peaches a la Conde

Cook one-half cup well-washed rice in three cups rich milk or cream with one-half teaspoon salt in a double boiler. This will need to be put to cook early because it will take two hours or more for the rice to swell sufficiently to take up all the milk. It should be creamy when done.

While the rice is cooking, prepare the peaches as follows: Pour boiling water over the peaches. Let them stand just long enough to loosen the skins. Pour off the water and pour cold water over them. Cut the peaches into halves. Remove the stones and peel the halves. Cook the peaches in scarcely enough water to cover them, with sugar to sweeten them a little, till tender. Carefully remove the peaches from the juice, and thicken the juice with cornstarch stirred smooth with cold water, using one level tablespoon cornstarch to each cup juice.

For each serving put a large spoonful of the rice in a sauce dish. Press two halves of peach, cut side in, against opposite sides of the rice, and pour some of the thickened juice over the rice.

Oatmeal Bread

Oatmeal bread is usually made by pouring boiling water over rolled oats, and allowing it to stand till cool, then

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Third Day

DINNER

Fresh Lima Beans
Creamed Potatoes **Mashed Squash**
Rye Bread **Peach Shortcake**

BREAKFAST

(Shredded Wheat) with Hot Cream or Milk
Baked Sweet Potatoes
Fresh Tomatoes [Graham Puffs]
Grapes

SUPPER

Boiled Rice **Cream or Milk**
Fresh Tomatoes
Whole Wheat Buns **Watermelon**

Fourth Day

BREAKFAST

(French Toast with Cranberry Jelly)
Walnuts
Browned Potatoes
[Corn Puffs] **Bananas**

SUPPER

Vegetable Bouillon **Croutons**
Cottage Cheese
Nut Buns **Baked Pears**

DINNER

Vegetable Soup
New Corn on the Cob **Beets with Lemon**
Rye Bread **(Cottage Cheese)**
[Brazil Nuts]
Peaches a la Conde

adding the other necessary ingredients, and flour to make a dough. By using fine oatmeal, as fine as Graham flour, the process is simplified and better bread is produced.

1 pound fine oatmeal
2½ pounds white flour (or 2¼ pounds whole wheat flour)
3½ cups lukewarm water
2 yeast cakes
1 teaspoon salt
2 tablespoons oil
½ cup molasses

Mix the oatmeal, flour, and salt in a mixing bowl. Dissolve the yeast in the water and mix with it the molasses and oil, then pour this liquid mixture into the flour and mix to a dough with the hands, kneading till smooth. Put the dough into an oiled bowl. Cover and allow to rise till double in size. Knead it down and allow to rise again. When light a second time, mold into loaves. Allow it to rise not quite so much as white bread, then bake.

Rye Bread

1 quart lukewarm water
2 cakes yeast
2 tablespoons oil
1 tablespoon salt
2½ pounds rye flour
¾ pound white flour

Mix to a dough and allow the dough to rise twice according to directions for making oatmeal bread. Instead of putting the loaves into bread tins, divide the dough into four equal parts, and with the hands roll each piece into a roll about one and one-fourth inches in diameter. Lay a towel on a baking pan and sprinkle flour over it. Lay the rolls about one-half inch apart on this floured towel, drawing the towel up between the rolls so they will not stick together, but leaving them close enough to one another so they will not flatten out. When about double in size, carefully roll them off from the towel onto an oiled baking pan. With a sharp knife cut three diagonal slits in each roll, brush them with water, and put into the oven to bake.

The dough for rye bread is made stiffer than for ordinary white bread, so that the loaves will hold their shape. Caraway seed may be added to the dough if desired.

Rye meal bread is very nice made by using one third rye meal (not rye flour) and two thirds white, whole wheat, or Graham flour, and baking in loaves as bread is usually baked.

Gooseberry Pie

Filling: —

1 pint gooseberries, picked over and washed
⅝ cup sugar
2 tablespoons flour
A few grains salt

Proceed as in making other berry pies for which recipes have been given.

Rice and Egg Timbales

3½ cups boiled rice (1 cup raw)
1 pint milk
½ teaspoon salt
2 eggs, beaten

Mix the ingredients, pour into oiled cups, and bake in a pan of hot water. Remove from the cups, and serve with peas, parsley sauce, bread sauce, or tomato sauce.

Apple Tapioca

¾ quart peeled, quartered, and cored apples
2 teaspoons lemon juice
Grated yellow rind of ½ lemon
½ cup sugar
½ cup tapioca, cooked in
2 cups water
2 teaspoons sugar
A few grains salt

Soak the tapioca in the water one hour or

Fifth Day

DINNER

Olive Roast with Savory Tomato Sauce
Nut French Potatoes Fresh Celery
Oatmeal Bread[1] Gooseberry Pie[1]

BREAKFAST

(Rolled Wheat) Cream or Milk
Corn Griddle Cakes
White Bread
[Raised Doughnuts] Buttermilk
Plums

SUPPER

Cream Corn Soup Tomato Sandwiches
Nut Cake Apple Sauce

Sixth Day

BREAKFAST

Rice and Egg Timbales[1]
Hashed Brown Potatoes Rye Puffs
Watermelon

SUPPER

Cream of Wheat with Dates
Cream or Milk
Oatmeal Bread[1] Grape Sauce

DINNER

Cream Celery Soup
Shell Beans Savory Potatoes
Baked Eggplant Whole Wheat Bread
Apple Tapioca[1]

overnight. Put it into a double boiler, with the salt and the two teaspoons sugar, to cook. Stir it frequently and allow it to cook till transparent. This may require two hours, unless minute tapioca is used. While the tapioca is cooking, put the prepared apples into the pan in which the pudding is to be made, sprinkle over them the lemon juice, lemon rind, and sugar, and put them into the oven to bake slowly. By the time the tapioca is done, they should be beginning to turn pink. Then pour the tapioca over the apples, and allow the whole to bake long enough for the tapioca and apples to boil up together.

Fresh Peach Toast

Dip slices of zwieback in hot cream. Lay sliced fresh peaches over the toast and put spoonfuls of whipped cream over the peaches.

Peach Pie

Filling: —
1 pint sliced peaches
¾ cup sugar
1 tablespoon flour
A few grains salt

Mix the flour, sugar, and salt, and sprinkle over the peaches as they are put into the crust.

If desired, a few finely chopped walnuts may be sprinkled over the peaches before the top crust is put on. Chopped nuts may be sprinkled over apple pie also.

Whipped Cream Cake

Bake sponge cake in layers, and spread whipped cream, sweetened, and flavored with vanilla, between and on top of the cake.

Sabbath

BREAKFAST

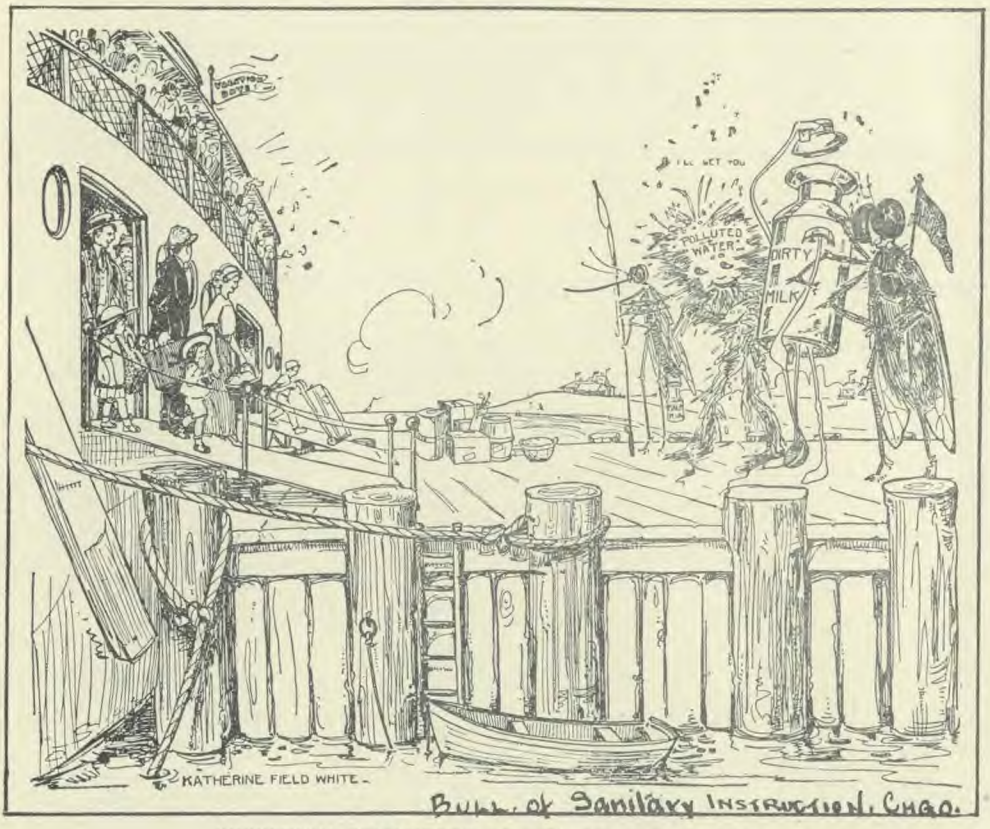
Farina with Figs Cream or Milk
Zwieback Nut Butter
Fresh Peach Toast with Whipped Cream

SUPPER

Fresh Celery White Bread
Whipped Cream Cake

DINNER

Succotash
Cauliflower Salad
Fruit Bread Peach Pie



RECEPTION COMMITTEE AT THE SUMMER RESORT

Recreation and vacations are excellent, if there are no after results — typhoid, malaria, and the like.

EDITORIAL

VACATIONS SHOULD RE-CREATE

ONE of the great money magnates — was it the late Russell Sage? — declared that vacations are unnecessary. Doubtless to him a vacation would have been an aggravation. No close-to-nature camp could have been so dear to him as his dingy, crowded, stuffy, down-town office; and even a few hours spent in "recreation" would probably have seemed to him a reckless and inexcusable waste of time and effort, and so doubtless it would have been; for his life was wrapped up in the operations of that office, and he could not understand how any of his employees could tear themselves away from their fascinating work for an outing.

Recreation in which one is not interested fails to re-create; and a vacation not enjoyed is worse than no vacation. The essential characteristic of a vacation is that it shall, by the new zest, the new interests, the new activities which it engenders, act as a tonic to the nervous system and the mind. Those persons who are so wedded to their occupations that a vacation trip would only bore them, are to be pitied; for sooner or later the fascination of the monotonous occupation will cease, and they, having unfitted themselves to find diversion in any other activity, will go stale. And it will be a staleness from which they can find no relief.

There are some at the other extreme, who play the recreation game too often and too well. Recreation has come to be their real life; and their regular occupation, which has become a drudgery, is slighted and neglected. What might have been a gentle tonic has become a stimulant, and then a habit-forming narcotic; and their powers for real, efficient work have become paralyzed.

The object of the vacation is re-creation; and any recreation which does not *re-create* the nervous system for the serious work of life, is not accomplishing its purpose. The vacation, then, in order to be useful, should be eminently enjoyable. It should afford a decided change from the ordinary routine of work. As far as possible, it should be spent near to nature; though if the farmer takes a vacation, he will prefer, perhaps, to visit the city. Living, as the writer does, in a wooded suburb, though he might enjoy a vacation in the wilderness or by the sea, yet nothing would please him better than to have a few days in which to saunter around the East Side of New York or London studying (Studying in vacation? — Yes, *studying*) the various types. Such study and observation would be a decided change, — an interesting change, — one from which he could return to his work better fitted for his duties.

Some for vacation need rest — simply rest — with change of scene, and perhaps isolation, they have nerves on edge from meeting too many persons. Others do not need isolation but relaxation, such as they may obtain on an ocean voyage; for if there is ever a time when one is content to let the days pass as lazily as they will, it is on a transatlantic trip.

Others again are benefited by an outing in which there is more or less social activity.

The test should be, Does the vacation return me to my work in better condition, more efficient, and better fitted to perform my duties?

Those who for one reason or another are unable to take a regular outing, or even a "week-end" in the country, may profit by the suggestions given in two of the articles in this issue, for small installment vacations.

And remember, much of the possibility for good from such outings, whether distant or near, extended or brief, will depend upon how sweetly we take the various vicissitudes. If we meet everything in a sour, disappointed, disgruntled mood, disgusted one day because it is raining, fretting the next day because it is hot and sultry, worried because we forgot to bring along a frying pan or a bunch of matches, stewing because some member of the party has planned something that does not fit into our program, the vacation will do more harm than good.

H. H. Heald.

Growing Narcotic Menace

NOT only physicians, but social workers, officers of the law, and judges have come to recognize the startling increase in the use of habit-forming drugs, which in certain sections and among certain classes has become a craze. In a recent issue of the *Medical Times* is an article on "The Growing Menace of the Narcotic Drug Habit, and the Efforts to Combat It," by Hon. Edward Swann, judge of the court of general sessions, New York. He begins:—

"The increase in the general use of habit-forming narcotic drugs has become so great in the past few years, and its effects are so far-reaching, that it has become an acute moral question.

"Those with ultraconservative views on individual liberty may ask, Why hasn't a man the constitutional right to dope himself if he desires? If that question does not answer itself in any thinking mind by the thought that the State has an interest in seeing to it that there is no deterioration of the race—of the national manhood—from the use of the soul- and body-destroying drugs, I will give an additional answer.

"Opium, generally speaking, merely destroys the usefulness of the victim himself, and leaves him comparatively harmless to others; but cocaine and heroin incite him to reckless acts of crime, and the public has a very keen interest in protecting itself from crime and in reducing the number of criminals, the narcotic drug habit and criminal tendencies having interpenetrating influences."

This is nothing less than an argument by a prominent jurist that the State has a right, on account of their effects in producing race deterioration and crime, to prohibit the sale of narcotic drugs. And as alcohol causes both race deterioration and crime, it is one of the narcotics of which the State has the right to control and limit the sale.

New Treatment for Alcoholism

ALL treatments recommended for alcoholism have been followed by so many failures that any treatment promising better success should be warmly welcomed.

Dr. B. L. Spitzig, of Cleveland, describes such a method in the *Journal A. M. A.* Of his method he says, after admitting that the study is too incomplete to determine the permanency of the treatment advocated, "The progress of the limited subjects treated is so unassailable that I consider this field for investigation worthy of proposal to others for more extended research."

He admits that the type of patient governs largely the success or failure of his treatment. That goes without saying. The derelict who has no ambition to overcome his habit and submit to inconvenience in order that he may be cured of his habit, is a poor subject for trial. It is among the better class who have sufficient interests at stake to make their recovery a matter of vital importance to society, that the best results are likely to be obtained.

Dr. Spitzig has long noticed that as the alcoholic habit is formed, the craving for sweets diminishes, and in alcoholism there is often a positive aversion to sugar. The alcoholic uses no sugar in coffee or tea, and cares little for pastry or starchy products. His mainstay consists of stimulating food and condiments, and these increase his appetite for alcohol. The body of the alcoholic receives a minimum of sugar, and makes use of alcohol to supply the place of the carbohydrate. As a basis of these observations, Dr. Spitzig has formulated the following treatment: —

"The supply of alcohol is diminished and the sugars increased. This renders the early weeks of treatment a time during which the perversion is easily remedied. Many former systems have failed in that alcohol was suddenly withheld and nothing substituted to satisfy the craving. Narcotics merely benumb the alcoholic desire, but seldom accomplish a permanent cure. The demand for alcohol in the perverted metabolic state of the alcoholic is not mental alone, but physical, or rather physiochemical. When the body calls are supplied with a physiologic balance of carbohydrates, there is no further demand for alcohol.

"At the inception of treatment the diet is modified to contain an abundance of sugar. Cereals with cane sugar, sweet fruits, pastries, chocolates, and ice cream are advised. In some cases, owing to a distaste for sugars, this change must be gradual to prevent rebellion. Here lactose is used, a dram every two hours, given in the form of a medicinal powder to encourage the psychic effect. Later, as the demand for alcohol is palliated, ordinary sugars are taken with avidity.

"The use of alcohol is generally interrupted by degrees. Cathartics and diuretics are advised to remove the accumulated poison and prevent an acute intoxication. The weaning from alcohol is accomplished by the substitution of highly sugared liquors, which are rapidly reduced in quantity. Toddies, juleps, and sweet wines yield the best results. A sweetened liquor relieves excessive craving in from one to four weeks. The average alcoholic omits alcohol after from three to five days, but a premature withdrawal is to be avoided.

"Combinations of capsicum and nux vomica are sometimes necessary during the first week to allay the gastritis. Soporifics are used to soothe the nervous manifestations. After self-confidence is reestablished, all medication is interrupted and the sugars gradually increased. With care in studying the carbohydrate tolerance, glycosuria can usually be avoided."

Certainly this treatment is worthy of a careful trial in selected cases.

* * *

The Norman Kerr Lecture

THE Norman Kerr Memorial Lectureship was founded to commemorate the life work of the founder of the (British) Society for the Study of Inebriety, the late Norman Kerr. These lectures have always been given by some eminent physician scientist. The fifth of this series of lectures was given Nov. 3, 1913, in the Hall of the Royal College of Physicians, Edinburgh, Scotland, by Sir Thomas Clouston, M. D., LL. D., who has had a lifelong experience in caring for the mentally unsound, and who is the author of a number of well-known books on the mind and mental disease. The title of his lecture was "Some of the Psychological and Clinical Aspects of Alcohol." The doctor has been careful in his lecture to assert only those things that have been scientifically proved in regard to the effects of alcohol, and to some his statements might seem a little

mild. The following paragraph, however, should be taken to heart by every young man: —

"My studies and experience of the psychology and social effects of alcohol, and of the clinical symptoms it produces, have led me to one conclusion which I cannot sufficiently accentuate. It is this: That there is an extraordinary want of knowledge among the public, and especially among young men of all classes, as to its real effects. There is a lack of that effective realization as to its risks which would make men careful about it, and thoughtful as to its use in their daily lives. I have elsewhere written about the importance of a "health conscience" being created in all men and women at an early period in their lives. One effect of this would be to implant a regard for health as a moral duty on the part of men in regard to alcohol and its effects, just as honesty and virtue are part of the ethics of mankind. One practical difficulty is that alcohol is so common a part of our diet. I am constantly impressed, in my medical and social experience, with the fact that the use of alcohol at certain times and under certain circumstances is not thought about at all in most cases. You ask a young man if he thinks it quite safe to take a whisky and soda so often, and find that he knows nothing whatever about the scientific facts as to its potency or seductiveness. He is entirely ignorant of the effects of such a habit on his future life. To a large extent he runs risks through sheer ignorance. Because he feels strong and healthy, and because alcoholic drinks are pleasant and no immediate effects result at the beginning of their use, he will not really believe that there is any danger. Long before the alcoholic habit has been formed, or the mere desire has become a craving, is the time when such knowledge and such an alcoholic health conscience as I am speaking of would come in with good effect."

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Use of Picric Acid

WILCOX contributes an article to *Archives of Pediatrics*, November, 1913, in which he speaks highly of picric acid as a local application. In calling attention to this remedy, I must not omit to warn readers that this lemon-yellow crystalline salt is more or less poisonous, and should not be used carelessly.

Wilcox finds that picric acid is an excellent antiseptic, a one-per-cent solution being fifty times as powerful as a one-per-cent solution of carbolic acid as against the blue pus germ and the golden pus germ.

It is also anesthetic and coagulant. These three qualities make it a superb application for wounds and for certain skin disorders. He uses it in solution, painted on, or with wet dressings, or in an ointment.

He finds it excellent in acute eczema and in burns, even over large surfaces, also in some cases of erysipelas, in the irritation of skin on babies, and in cold sores.

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Artificial Kidney

THE almost sensational process reported within the past year, of circulating part of the blood in tubes outside of the body and returning it again, without injury, seems destined to be useful in various ways.

The method in brief is to connect an artery and vein by a tube filled with a normal salt solution. This tube is of celloidin, or other material, through the walls of which solutions will dialyze, and is in an appropriate solution. As the blood passes through this tube, certain of the dialyzable materials pass through the tube walls into the outer liquid.

An anesthetized dog has been kept alive for sixteen hours with one third of its blood outside of its body in tubes. The method, properly performed, is harmless to the animal.

This process may be made to serve various purposes. In case of poisoning, where the poison has been absorbed from the intestinal tract, it can be dialyzed out by this method. Probably in cases of uremic poisoning, where the kidneys are inadequate, this "artificial kidney" device would afford at least temporary relief. In investigations on the composition of the blood, some constituents which are present in too minute quantities to be determined by the old methods, can be recovered in measurable quantities by this method. It is even conceivable that eventually in cases of permanent crippling of the kidneys, this measure may be made to serve more than a temporary use. But that is in the future.

CAVEAT EMPTOR!

(Let the purchaser beware)

HOW THE NEWSPAPERS HELP THE NOSTRUM VENDERS

The above, clipped from one issue of a Washington, D. C., evening paper, is an example of how the advertising manager of a newspaper helps to deceive the patrons of his paper — in order to make his department show up well. This same paper occasionally publishes a whole-page beer ad.

THE MEDICAL MISSIONARY AT WORK

NEEDS OF ECUADOR

A FEW years ago our Mission Board sent out to Ecuador two trained nurses. They located at Quito, and have since been conducting an evangelistic medical mission at that high altitude in that needy field where the true gospel is but little known. These missionaries, Brother John Osborne and wife, were recently visited by James M. Taylor, a missionary evangelist from Knoxville, Tenn. Of this experience Mr. Taylor writes:—

"When we inquired of the American consul about the missionaries in the country, he told us of John Osborne and wife in Quito, who were doing medical missionary work. He complimented their work there highly, and said they were working under the Seventh-day Adventists.

"With my interpreter I went to Quito, and both of us arrived there sick. After two nights my interpreter was confined to his bed with a high temperature. His disease proved to be yellow fever.

"On inquiry we found there was no hospital to which we could go. In this trying hour, Brother Osborne, seeing the condition we were in, came to our rescue. He took us to his home, where he cared for us as he would have done for his own parents, and thanks to him and our Master, we are well again. We went with him to visit an American who was in the government hospital. This man was not contented at this place, and gave us an insight into the manner in which he was being treated. This hospital conducts its work under a governmental name, but is controlled by the prevailing religionists of Ecuador.

"No greater and more Christlike gospel work could be done than to help provide Brother and Sister Osborne with a suitable place for carrying on their gospel medical missionary work. They give treatments in the very best homes in the city, the president's included. Their hands are tied, however, by not having better facilities. The writer is not a member of Brother Osborne's church, but he feels like urging his readers to help Brother Osborne open a modest institution where he can reach the souls of these people by helping their bodies. Some Christian man could invest $10,000 in a piece of property here and keep the title in his own name, allowing it to be used as a little sanitarium, and the increase in the value would pay pretty good interest. If the above cannot be done, why not furnish our brother a special gift of fifty to one hundred dollars a month for the rent on a building for this purpose?

"Our readers should thank God for the representation they have in our brother and sister, and should stand by them, helping them that they may make a real success here. We are indeed thankful that they are in Quito, for there is a great deal of yellow fever in this hot climate, and many die. We are told by the people of Quito that it is seldom that a case recovers from it here, perhaps one in a hundred. In the case of my interpreter, Brother and Sister Osborne used water treatments, fresh air, regulation of the food according to the condition, in fact, the remedies that God has provided, and with God's blessing the patient was well again in ten days."

TREATING THE SICK IN THE JUNGLES OF INDIA

Mr. and Mrs. R. H. Leech

WE came to Jagadishpur last May, to open up work in new territory. This is a little station right in the jungles, on a branch of the East Indian Railway. Our work is mostly in the district round about, which is thickly dotted with villages in among the jungles, with little footpaths leading to them.

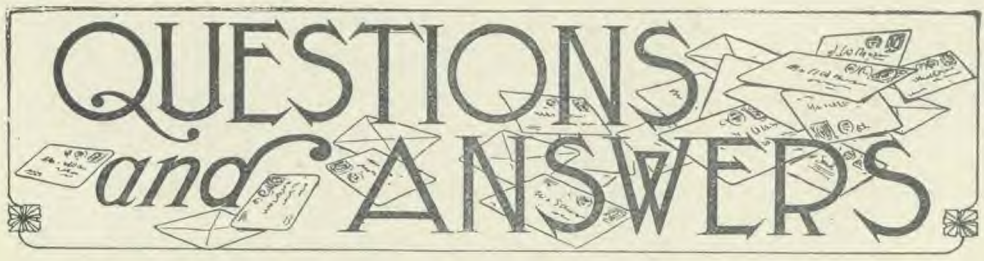
We secured a small bungalow; but as our work has grown, we find it much too small. Our eight girls are living, sleeping, cooking, and eating in a room ten by twelve feet, and until the last few months it has also been used as a schoolroom.

Our dispensary work, which we began in October, is carried on in a room eight by nine feet. In this little room 1,125 patients have been treated in the past five months. We have a box stocked with a good supply of all the simple drugs, which we call the medical box. This we take with us on all our trips, whether it is to inspect a school or to give a Bible lesson. In this way we reach many who are too timid to come to the dispensary. Wherever we go in the cart, the people come running from the villages, begging us to go to see some sick person. By the time we have prescribed for the patient and returned to the cart, there is a big crowd waiting for us. After treating fifteen or twenty more and giving a Bible lesson, we pass on.

About two months ago we were called to attend the wife of an Indian rajah (king), who was here for a change. Upon our first visit we were informed that they were orthodox Hindus. After a few visits we were told that we need not announce our arrival, but could come and go as we liked. The ladies were also allowed to call on us. We made daily visits to this home for about two months, giving the wife thorough treatments; and we were allowed to hold lantern lectures with the women in the zenana.

This is new territory, and the people at first were very hard to reach, but by God's blessing prejudice is breaking down. Remember this needy field in your prayers.

MR. AND MRS. LEECH ATTENDING PATIENTS AT A MELA (FESTIVAL) IN WEST BENGAL



Conducted by H. W. Miller, M. D., Superintendent Washington Sanitarium
Takoma Park, Washington, D. C.

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.

Fruits and Vegetables.—"Why are fruits and vegetables not a good combination? Are subacid fruits, especially the banana, an exception to the rule?"

Of the several explanations why fruits and vegetables do not combine well, none have appealed to me as scientifically sound. A good many years ago I performed some experiments which led me to the belief that possibly the reason for "disagreement" of fruits and vegetables is that the mixtures form a better medium for the growth of germs than either fruits or vegetables alone. For instance, a culture of germs taken from a stomach grew much more rapidly and rankly on a mixture of apple sauce and boiled beans than on either of these foods alone, and the mixture soon became more offensive than either of the single foods. This I do not give as a conclusive proof, but as a suggestion of what may be the reason for the disagreement. The principal fact that confronts us is that for *some* reason these foods, when combined, *do disagree* in many cases. I would not say that they disagree in all cases, or that persons with sound normal digestions would be affected by such mixtures. But as a rule, patients who have stomach trouble seem to do better without such mixtures; and they do better when there are not too many varieties at a meal.

Just what foods will disagree is a matter that differs with different individuals. I should say, however, that for the person inclined to digestive disturbance, it is better to take fruits, say at breakfast, vegetables at dinner, and possibly a milk lunch at night. But this must be a matter of experiment with the individual.

The response to the second question is that here, again, it is an individual matter, and what one person might learn by experience would be entirely inapplicable to another person. I have seen cases where bananas eaten with, say potato, might cause trouble, when the banana alone or the potato alone would not. I have no theory to explain such things. It is possible that there is a little difference in the chemical condition of the secretions of different persons, and that, dependent partly on this difference, one person has habitually a certain type of bacterial growth in the intestinal canal, and another person another type. And possibly these different types of bacterial growth, acting differently on different foods, would be a sufficient explanation why a food or combination that is wholesome to one person is harmful to another.

Prescribing From Symptoms.—"What diet should you prescribe for a woman seventy-four years of age, who for many years has at times had the following symptoms: loss of appetite and flesh, bitter taste, constipation, melancholy? Her diet is Graham bread, grains, sweet fruit, and a little milk in the morning; for dinner, bread and vegetables; for supper, bread and fruit. No hot drinks at any meal. Does not have so much bitterness if she abstains from potato. She has not always been so careful of her diet."

Suggestions made on the basis of a lot of symptoms reported can at best be but a guess. Symptoms tell very little as to what the matter is. A careful personal examination of the patient is necessary to a knowledge of the case. If this lady were to go to a sanitarium, the physicians would give her an examination, physical and chemical, that might require two or three days to complete. Then with careful and repeated questioning of the patient, they would have a basis for treatment; and even then they would have to watch the effect of the treatment and diet and be ready to make changes from time to time. There is no short-cut way from illness to health.

It would seem rational in this case to do away with the potatoes. Evidently they do not agree with her. It is possible that her appetite can be coaxed by the use of some of the foods she used to use. What the body has been used to for many years, is often the best under the circumstances, notwithstanding that theoretically it might not be a proper food.

The digestive habits of a lifetime cannot be disregarded with impunity.

It is possible that the teeth are bad, and if so, not much can be done for the improvement of the digestion until the teeth are attended to. It is also important, by diversion, games, company, or whatever succeeds best, to keep her cheerful, and her mind diverted from herself and her troubles.

Smallpox and Vaccination.—" We have a case of smallpox in our town, and a great many have been exposed. Should like information regarding the disease. 1. Does pure vaccine make one very sick? 2. Is the disease caused by vaccination contagious? 3. Is asafetida a protection against smallpox? 4. How long will smallpox germs live, and how long should a person be kept in quarantine for the disease?"

1. The reaction to vaccination varies. In many cases it is very mild. Sometimes it is more severe. But where there are bad permanent results, as there have been at times, we can be sure that there has been contamination or fault in the method of vaccination.

2. Vaccinia is not contagious. The only way the virus can be transmitted is through the broken skin.

3. Asafetida would have about as much effect as a protection against smallpox as it would have against a house catching fire. Such a report is pure fiction, born in the fertile imagination of some person who knows nothing of the nature of disease transmission and its prevention.

4. It is not known how long smallpox germs will live. We know little about the organism that causes smallpox. Its life history has not been worked out. If everybody were vaccinated, even after the beginning of an epidemic, there would be little if any need for quarantine. We go through the expensive routine of quarantine as a concession to those who do not think it worth while to get vaccinated. As to the length of time quarantine should be in force, I should say, leave that with your health officer. He will attend to it.

Indigestion.—" Two doctors say I am suffering with indigestion, but their medicines do me no good. In 1910 I had what a doctor called neurasthenia. A month or two afterward I felt a pain all over my stomach. The doctor said I had " painful indigestion." I have had pains in heart and behind shoulders. Am using hip bath and special exercises, which seem to relieve the neurasthenia; but pains, weight in stomach, acidity, and flatulence still bother me. Teeth were bad, but have had them all extracted, and shall soon have a new set. I promise you £10 in case your kind suggestions prove the means of curing me of such a horrible disease."

You certainly pay me a high compliment in thinking that I at a distance of several thousand miles can do what your physicians right at hand, who have the opportunity to examine you and question you and watch your case from day to day, have failed to do. Too many physicians do what their patients expect them to do; they give the patient a brief examination, say half a dollar's worth, and write out a prescription. My advice to you would be to go to some physician who will charge you say £2 ($10) for an examination, and then pay him the other £8 or more for some good, conscientious treatment. I do not mean to advise you to go to any one who happens to charge a high price, for there are quacks who have the nerve to charge the highest prices; but go to a man who has done successful work in a legitimate way, and who has been accomplishing results,—one who will refuse to give advice till he knows what is the matter with you.

It is possible that, now you have your bad teeth out, your digestion will take care of itself. Not infrequently people with plates get over their old digestive troubles, for the reason that they have got out of their mouths the festering, disease-breeding roots and pockets which infected all the food they ate.

Bladder Inflammation.—" I am nineteen years old, and have had what our family physician calls 'inflammation of the bladder' for about a year. Medicine seems to do me no permanent good. Do you think it would do me any good to take swamp root? If not, what should you advise?"

To your first query the reply is a decided NO.

It might be well for you to see a physician who specializes in female troubles. I mean a gynecologist, not one of the advertising quacks. Or you might go to a near-by sanitarium, where you would probably get help in a comparatively short time, provided it is a simple cystitis.

It is important to know just what has been operating to cause your bladder trouble, and you should not hesitate to tell your physician everything that may have any bearing on it. You will find him sympathetic, and you can trust that he will never reveal anything that you tell him. It is important that the physician should know everything, even more than your mother knows, that you may not go along in life with something that may possibly cripple you as a wife and a mother.

Sometimes bladder trouble can be treated by irrigation, that is, by injection with, say, a solution of potassium permanganate, seven grains to a quart of water as hot as can be comfortably borne. The injection should be through a catheter that is absolutely clean. It should not be one that some one else has used. The bladder should be filled and emptied several times at one treatment, and these treatments should be repeated daily or every other day. You will perceive that this is too serious a treatment to attempt at home unless one is experienced. It is possible by injudicious treatment to make the trouble worse.

NOTE.—Answers in this issue are by the editor.

WHAT TO DO FIRST

Prevention of Poisoning

First, have all medicines locked up, with none having access to the key except the older responsible members of the family. As a matter of fact, it is not necessary to have very many poisonous drugs in the house.

Second, if necessary to have a poison, have it in a specially shaped bottle that can be immediately distinguished in the dark, and have it distinctly labeled, POISON. If the labels on any bottles become defaced, the contents should be discarded. Never use any remedy when there is the least doubt as to what it is.

Ptomaine Poisoning

If you use canned foods, be sure never to use the food out of cans with swell heads or cans in which there are two solder drops. It is the custom to seal cans before sterilizing, and to leave a hole in the can for the escape of the steam, the hole being soldered after removal from the sterilizer. If decay afterward sets in, the can will begin to swell. Some firms make a practice of punching a hole in the can, resterilizing, and then soldering the second hole. Such foods are dangerous, as they may contain poisonous ptomaines which are not destroyed by sterilizing. Never accept or use canned goods with two solder drops in the head.

If all the contents of the can are not immediately used, they should be removed to another dish, as they are likely to take up an injurious amount of tin if they are left in the can after the air has had access to the food.

Symptoms of Poisoning

These vary according to the poison. The first symptom is usually collapse. The patient becomes cold, lifeless, may be covered with a cold sweat, and in case of corrosive poisoning, there will be a burn on the lips or in the mouth.

The commonest form of unconsciousness is what is known as a faint, from which the patient will usually recover if given air and kept in a horizontal position. If there are constricting bands, corsets, etc., they should be loosened. A dash of cold water on the face will sometimes hasten the return to consciousness, although as a rule it is not necessary.

Unconsciousness may arise from apoplexy, or from the use of opium or alcohol. In apoplexy the pupils are large and may be unequal in size; the pulse is rapid, the breathing is noisy, and one cheek may puff out with the breath, the other remaining quiet. In alcoholic unconsciousness there will always be, of course, the odor; there may be a noisy breathing, but it would be especially difficult for a lay person to distinguish between an apoplectic and an alcoholic attack in case the patient had been using alcohol at the time he was taken with apoplexy; and it is quite important to distinguish between the two, for a remedy, such as mustard water, that might be beneficial for alcoholic poisoning, might take the life of the apoplectic patient.

TREATMENT OF POISONING

First, send for a doctor.

Second, get rid of the poison by means of an emetic.

Neutralize the poison.

Use some healing and soothing remedy.

Use stimulant.

Carbolic Acid

The best antidote is alcohol, and one should be sure to give enough, and give it quickly, for carbolic acid is a very rapid poison. Another remedy is Epsom salts, which may be given in case there is no alcohol at hand.

Opium Poisoning

First an emetic, then strong coffee, with six or eight hours' walking the patient on his feet to keep him from going to sleep. If taken in time, tannic acid or tea steeped a long time, will help to neutralize the effect of the opium. The best emetic is the finger inserted in the throat. Next to this may be mentioned a thick soapsuds. This is very apt to come up quite promptly. Other things are sirup of ipecac and mustard water, but the most efficient, probably, is the finger. The stimulants which should be used in opium poisoning are aromatic spirits of ammonia and the application of hot or cold to the extremities.

Insect Bites

The best remedy is ammonia applied to the bite.

Mushrooms

To determine between poisonous and edible mushrooms, be sure to avoid all plants having—

A little cup at the base of the stem.

Little warts on the cap.

Milky juice on breaking the plant.

A little veil-like cobweb over the whole plant.

Gills close together and brittle.

The Care and Feeding of Children, by John Lovett Morse, M. D. 50 cents. Harvard University Press, publishers, Cambridge, Mass.

This is one of the Harvard Health Talks, a series of books which is being prepared in order to present the substance of public health lectures delivered at the Harvard Medical School. The purpose is to provide in accessible form authoritative information on health topics.

The books are being edited by a committee of men — Bradford, Ernst, Cannon — whose names ought to add weight to the authority of every volume of the series.

In general, the teaching of the present volume is sound and the advice excellent. It would be hard to condense so much genuine information in so little space. The author, however, seems to have overlooked the opportunity to instruct parents regarding the teaching of sex hygiene to children, though he has thought it necessary to give advice regarding how to answer questions of the children about religion.

There is one point on which the writer would have to disagree emphatically with the author of the book; that is the statement that meat is necessary after the second year. There is ample experience to show that meat is not necessary to human nutrition, and by that I mean that it is not necessary to the development of the highest that is in man. The observations which lead the author and others to their conclusion are probably based on the fact that in most cases where meat is omitted from the dietary it is not because of an intelligent study of the subject, but because of the poverty of the parents, and there are in such cases other factors which tend to cause malnutrition. There are abundant examples of sound physical health where no meat has been given; and, moreover, there is no theoretical argument in favor of the meat dietary that will appeal to an unprejudiced person. But this is not the first instance where the "authorities" have been in grievous error. The history of medicine is full of similar instances.

Teaching Sex Hygiene in the Public Schools, by E. B. Lowry, M. D. 50 cents. Forbes and Company, publishers, Chicago.

At the recent International Congress of Hygiene, attended by hundreds of educators, no subject called forth more interest than that of sex education, and probably none is now causing more controversy than the teaching of sex hygiene in the public schools. We seem to have emerged from the darkness of prudery, and have recognized that the "conspiracy of silence" on the sex question is a grievously mistaken policy. But we hesitate to jump from the frying pan of silence into the fire of unwise and overzealous publicity. Many of us have come to the conclusion that the child has a right to proper information regarding the most sacred part of his physiology, but we are far from agreeing as to how that instruction should be given.

Of course, there is no question but that the ideal method is instruction by the parents, especially by the mother; but then, how many mothers know how to teach this subject intelligently? Only in exceptional cases is she qualified for this most important function; and perhaps in many instances parents are wise to remain silent on the subject. How are we to educate the coming mothers and fathers? Why can they not be given adequate instruction in the last years of school, so that they will know how to deal with their children, a few years later, on sexual subjects?

Dr. Lowry, who has written a number of excellent books on sex, gives in this book excellent advice to both parents and teachers on the subject of instructing children in personal purity. It is certainly a very helpful book for all who are interested in child welfare.

The Fundamental Basis of Nutrition, by Graham Lusk, Professor of Physiology, Cornell University. Postpaid, 54 cents. Yale University Press, publishers, New Haven, Conn.

This lecture, delivered November, 1913, as the anniversary address of the New York Academy of Medicine, is published in this form in order that people with ordinary education may be able better to understand the principles of nutrition.

Professor Lusk, who is an authority on nutrition, has produced a very useful little book, although there are some who may think he has laid too much stress on the caloric value of food, and too little on the mineral constituents.

Among the chapters of the book are, The Constant Need of Fuel, The Constant Need of Protein, Habits of Diet, The Curious Disease Beriberi, Criteria of the Monetary Value of Foods.

Professor Lusk shows how a poor family of five can obtain sufficient food to supply all the needs of the body for from fifty to seventy cents a day, or for from ten to fourteen cents a day for each person.

Athletics at Panama-Pacific Exposition.— International athletic events of wide scope are being prepared for the Panama-Pacific Exposition. Some of the world's leading athletes are expected to participate, and many world's records will be attacked.

Reforming Criminals by Surgery.— At the instance of Judge Bridgeman of the Circuit Court of St. Joseph, Mich., four patients were recently operated on in Chicago in the hope that the operation would remove their criminal tendencies. The judge has stated that hereafter he will not sentence any one in his court because of moral crime until surgical relief has been tested.

Panama-Pacific Toyland.— Among the interesting amusement concessions to be presented on the "midway" at the Panama-Pacific Exposition will be "Toyland Grown Up," a walled city in which the buildings will be enlarged reproductions of children's toys. The concession will be presented by Frederick Thompson, the famous creator of Luna Park at Coney Island. Toyland Grown Up will be almost an exposition in itself, covering twelve acres and costing more than $1,000,000.

Intestinal Autointoxication.— Roos, in the Berlin *Medizinische Klinik*, discussing intestinal autointoxication, says that acid fruits or vegetables or milk containing lactic acid bacilli, has been found particularly wholesome for ages in all parts of the world. According to Roos, people who consume much milk are generally robust and long-lived. Milk becomes acid during lactic acid fermentation, while meat in the same condition putrefies. Sugar protects organic substances against putrefaction. White cheese has a marked effect in reducing putrefaction in the intestine. Pure casein does not have this property. The white cheese probably takes the milk sugar with it into the lower parts of the bowels.

Disadvantage of White Flour.— At a recent meeting of the French Society of Therapeutics, Dr. Monteuuis read a paper in which he showed the superiority of the old-process flour to patent flour. The old flour, which is ground fine, and has 20 per cent of the envelope (or bran) removed, makes the fine, natural, old fashioned farm bread; but in the patent process there is also removed the fine bran and the germ, the richest part of the wheat being fed to the cattle. The second layer is used for brown bread and the inner portion goes to make white bread. In this way about one half of the grain, or eight million dollars a year, is fed to cattle. The doctor believes that the old-fashioned flour is more nutritious and better digested.

Alcohol Prescriptions.— The Asheville (N. C.) police have been inspecting physicians' prescriptions in order to determine to what extent alcohol is being prescribed. They find during fifteen months more than 12,000 prescriptions running from a few ounces of brandy to a barrel of beer!

Hickory Nuts and Nut Oils.— Two authors in *Jour. Indust. and Engin. Chem.*, 1913, page 739, as a result of an analysis of hickory nuts, state that the food value of hickory nuts is high. The oils from two species examined were found to retain the flavor of the nut, and to be practically equal to olive oil.

"Family Entrance" Closed.— Last summer a survey was made of conditions demoralizing to women and girls in the saloons of Chicago, and as a result of the publicity following this survey, the city council passed an ordinance forbidding the use of such signs as "Family Entrance," "Ladies' Entrance," "Private Entrance," or any other designation intended to indicate that such entrance is intended for the use of women. The woman who made the investigation found that the back rooms with special entrances were largely responsible for the downfall of girls and young women.

Digestibility of Various Nuts.— Experiments with fats on laboratory animals seem to show that nonemulsified fats of a higher melting point pass out of the stomach more rapidly than those of a low melting point; and nonemulsified fats pass out more slowly than emulsified fats. This would seem to indicate that the rate of passage from the stomach would be in about the following order, the first being the most rapid: cream, butter, olive oil. It would seem from these experiments that there might be some wisdom in the use of some of the artificial lard-like fats in preference to, say, cottonseed oil.

The Value of Seasoning in the Diet.— A. Gigon (quoted in *Experiment Station Record*, November, 1913) attempts to summarize the effects of spices and condiments in the dietary. In addition to the psychic effect, by increasing the pleasure of taking food, "certain of them, for instance pepper, salt, and bitter substances, exercise an effect upon the secretion of saliva and the gastric and intestinal juices. The principal effect of onions, mustard, garlic, and related plants is found in the influence they exercise on the intestinal flora; salt, pepper, and chocolate are regarded as having an effect on intermediary metabolism; while coffee, tea, cocoa, alcohol, and vanilla exercise an effect upon the nervous system after absorption."

Antisnuff Act Declared Constitutional.— The Antisnuff Act of 1913, which makes it unlawful to import, manufacture, distribute, or give away snuff or substitute therefor, has been declared constitutional by the North Dakota Supreme Court, which says: "The courts can certainly take judicial notice that the use of tobacco in any form is uncleanly, and that its excessive use is injurious. They can take judicial notice of the fact that its use by the young is especially so."

The Clam a Menace.— Oysters are usually grown in clean beds, and are not likely to be contaminated except in the process of "fattening," which has in times past been often accomplished in water containing sewage; but, "unlike the oyster, which requires rather a firm, clean bed, the hard clam grows well on a muddy bottom. Sewage sludge is not unfavorable to it. It is not unusual to see persons digging hard clams close to the mouths of sewers. After a very short period in market, this form of shellfish is often eaten raw. . . . It would not be at all surprising if many outbreaks of diarrheal disease at seaside summer resorts were traceable to hard clams. . . . Heavily polluted shores are among the most prolific sources of soft clams, and large quantities are annually taken from situations of this kind." The above quotation is taken from a discussion of the shellfish question in the International Hygiene Congress, held in Washington.

Food Poisoning From Meats.— W. G. Savage, in the Report of the Local Government Board (Great Britain), discusses various kinds of food poisoning. He finds that certain outbreaks are associated with actual disease of the animals whose flesh is eaten. In other cases, it seems probable that food is infected from the intestinal contents or tissues of animals in which bacterial invasion was present. The spreading of disease by bacterial infection may be due to lack of care and cleanliness in handling, storing, and preparing foods.

Important Constituent in Certain Animal Fats.— McCollum and Davis (quoted in *Experiment Station Record,* November, 1913) state that "a normal rate of growth was maintained for periods of from seventy to one hundred and twenty days in the case of young rats which were fed upon diets consisting of pure casein, pure carbohydrates, and salt mixtures made up of pure reagents. Although this diet was unable to produce growth for a longer period, it maintained the animals in an apparently well-nourished condition for several weeks. Growth at about the normal rate was resumed when the ether extract of butter or of egg was added to the ration. This was not the case, however, when lard or olive oil was added without the ether extract." This would indicate that the fats of butter and eggs contain some element necessary for growth that may be lacking in some other fats.

Pure Ad. Bill.— The St. Louis Municipal Assembly has passed a "pure ad. bill," which prohibits with severe penalties the publication of fraudulent advertisements. The bill was opposed by the optometrists, certain retail merchants, and a wildcat "medical" journal.

No Dead Birds.— At the meeting of the secretaries of the antituberculosis associations in Washington, at which there was a goodly number of women, there was an almost entire absence of feathers, and especially of parts of dead birds, on the hats. These are women of large activities, who dress well, but in good taste. And it will be recognized some day that feathers, or at least parts of dead birds, are not in good taste as an attempt at ornamentation of the human form.

Tango Foot.— A New York physician reports a number of cases of what he calls "tango foot." The patients all complain of similar symptoms, such as pain in the lower leg on awaking, which they suppose to be the result of a bruise or "rheumatism." There is considerable stiffness, and the patient complains of pain on going up and down stairs. There is usually a slight limp. The doctor in all cases traced the trouble to the new dances, in which there is excessive and intricate movement — extension, flexion, abduction, and adduction — of the foot. He found that a necessary part of the cure in all cases was *rest*, that is, cessation from dancing, together with local applications, massage, dry heat, etc.

Childhood Infection.— Physicians now recognize the fact that many of the diseases which take men and women off in the prime of life are due to childhood infection, the results, perhaps, of an attack of scarlet fever or measles, rheumatism with heart complications, or of tonsillitis. Either of these diseases and some other affections supposedly innocent, leave conditions which may later determine an early death, just at the period when the victim should be doing his best work. It is for this reason that the old notion that children should be permitted to "take" the various diseases of childhood is a miserable and dangerous fallacy. No doubt every attack of infectious disease with which a child has to cope leaves more or less permanent and damaging effects.

Child Hygiene.— It is becoming more and more apparent that the government owes to the growing generation, not only an opportunity for a practical education, but also an opportunity to reach manhood and womanhood unhandicapped by disease. Since it is known to what an extent adenoids, bad teeth, and imperfect visual conditions cripple the child not only as to bodily health, but also as to efficiency; and since it is realized that this multiple crippling of the children by defects which might be remedied, causes a marked lowering in the general efficiency of the citizenship of the country, the fact stands out clearly that a most important, if not the most important, function of the public schools is to make up for the lack and the ignorance of the parents, in securing to the children freedom from crippling defects.

Luncheon for Women Clerks in Bank of England.— Evidence presented before the Royal Commission on the Civil Service shows that there has been a marked improvement in the physical condition of the women clerks of the Bank of England as a result of the custom of serving them with a free luncheon. Formerly there were numerous cases of neuritis and other forms of nerve trouble, but complaints of this kind are now very rare.

Reason for Inability to Control Measles. — Of all the diseases with which we have to contend, measles and whooping cough go merrily along, and no amount of vigilance seems to prevent epidemics. The reasons suggested are: We are not well acquainted with the cause of measles; the disease is in a contagious stage for from twenty-four to forty-eight hours before the eruption; and many, even among physicians, do not realize the seriousness of measles.

New York Drug Bill.— The Boylan bill, restricting the sale of cocaine and other habit-forming drugs, has been signed by the governor. The intent of the bill is to punish those who sell drugs to victims. It also provides that in case more than a certain minimal amount of the drug is called for, the authority of the prescriber must be verified. Each package must have the name and address of the physician prescribing, and of the person receiving the prescription.

Importance of Water Drinking.— Observations made during an experimental march, in which the metabolism of the men was studied, show that when the tissues are dehydrated by thirst, the water that is imbibed after the period of thirst does not go immediately to restore the loss in the tissues, but increases the urinary excretion. These men believe, therefore, that it is extremely important to regulate the supply not only from day to day, but also in the course of every day. According to this, it is much better to drink small amounts frequently than to take large drinks at long intervals.

Salt and Sugar in Bread Making.— Isabel Brevier, in the Univ. Ill. Bull. No. 10, says: "Salt prevents a flat taste, retards fermentation, and used to excess causes loss of color in crust and of tenderness in crumb. Sugar darkens the color of the crust. Within certain limits, it increases the volume of the loaf. Salt and sugar combined in the proportion of 1:2, respectively, improve both flavor and volume." Freed, in *Oper. Miller*, 1913, page 794, says: "With an increase of salt, the color was improved, the texture and grain were greatly benefited, the volume and size were increased, and the crust of the bread was softened. The more salt, the longer it takes the dough to rise; and the less salt, the faster the dough rises. . . . The safest amount of salt for [white] bread . . . is three pounds to a barrel [1 ounce salt to 4 pounds flour]. . . . Any amount above this, say 3½ pounds, will not only work to retard fermentation, but will also impair the quality. A bread that has no salt or insufficient salt, is tasteless and insipid." He believes that in extremely hot weather a little more salt is beneficial.

(*Concluded from page 406*)

condenser pipes, the ammonia is restored to its original liquid state, ready to resume its heat-gathering mission through the congealer coils of the freezing tank as before.

The time required to convert the water into ice varies from twenty-two to forty-eight hours, depending upon the size of mold, relative temperature of water and brine, and amount of ammonia expanded into the congealer coils. As the blocks of ice form in the molds, they are lifted from the tank by means of a traveling hand crane, and taken to a thawing device, where, by an application of warm water, the ice is removed from the cans and slid into a small anteroom, to await delivery to the customer through the agency of the iceman.

Idolatry of "The Mass"

Is the Chief Topic of the September Number. Now Ready!

Other leading articles: "Allegiance to a Foreign Pope," "History of Religious Toleration in Maryland," and the latest reliable news concerning Rome's determined effort "TO MAKE AMERICA CATHOLIC."

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