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**June, 1905**

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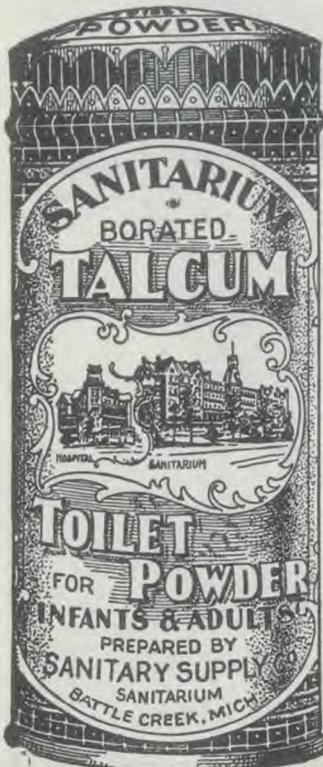
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SPRING FLOWERS

# GOOD HEALTH

*A Journal of Hygiene*

VOL. XI.

JUNE, 1905

No. 6

## THE MODERN CRUSADE AGAINST CONSUMPTION \*

BY PROF. IRVING FISHER,

New Haven, Conn.

(Concluded)

NEXT to the air cure comes the food cure. Air supplies only oxygen; food supplies more than a dozen other chemical elements. A consumptive needs abundance of food, and he needs to eat it with his stomach rested. Consequently the food cure consists first of all in going to one's meals rested. Patients in sanatoria are often required to lie down an hour before each meal. They are taught to eat slowly, to eat a moderate and well-selected variety, to eat especially nitrogenous foods, such as meat and eggs, and to take a great deal of milk. The quantity that can be consumed when the stomach is rested and the disease calls for the food to fight it is astonishing!

There is now, however, a strong reaction against forced feeding. The experience of Dr. Holden at the Agnes Memorial Sanatorium at Denver and of Dr. Lyman at the Gaylord Farm Sanatorium near New Haven, as well as of several English authorities, indicates that three good meals with appetite are better than five forced ones without it. The experience of Dr. Russell, of New York, and others also shows that meat may often, if not always, be dispensed with, probably with advantage. But

the last word has not yet been spoken on the best diet for consumptives. We need to know whether a specific diet can be found, as for scurvy, or whether, as Dettweiler believes, the problem is purely one of suiting individual needs.

Next, as to the rest cure. It used to be supposed that a consumptive needed exercise, and in the old days many a consumptive killed himself by horseback riding, rowing, or some other violent form of exercise. It is true that exercise is beneficial, but it should always be within the fatigue limit, and for the consumptive that limit is never far off. In numerous cases a relapse has been caused by a sudden overexertion. This is one of the chief reasons why, outside of sanatoria, consumptives so rarely get well. They lack the self-control to keep within their strength.

Finally, as to the mind cure. Consumptives can be quite as nervous as other people, popular opinion to the contrary notwithstanding. Mental depression is one of the worst foes they have to fight and overcome. Those I have known who have gotten well fastest have been precisely those who have thought least about themselves and who have been the most cheerful. The most remarkable case of cure I ever

\* Reprinted by permission from *The Outlook*.



PATIENTS AT A SANATORIUM IN NEW JERSEY SLEEPING OUT OF DOORS ON THE GRASS

saw was a man in the Adirondacks, who, after being there a short time, said that he had learned how to dispense with worry altogether. He used to go about and comfort others, and on a gloomy, wet day he would say, "This is the kind of day when you need to be twice as cheerful." That man was very ill, but he got well with prodigious rapidity. Many a consumptive has really recovered without knowing it, but kept in a state of nervous depression for months or even years, imagining always that it was his lungs that were at fault, when, as a matter of fact, it was simply his nerves, or rather his mind. A peaceful, trustful, care-free mind promotes digestion, guarantees sleep, and quickens all the functions of the body. Cheerful amusements, companionship, and reading are important aids. But the main thing is for the patient himself to acquire the knack of "dropping" his troubles.

These four features, then,—the air, food, rest, and mind cures,—combined with due use of sunlight, bathing, clothing, etc., constitute the modern sanatorium treatment, destined, I believe, to have far-reaching and profound influence not only in diminishing and ultimately

eradicating tuberculosis, but in likewise ridding us of other diseases, lengthening human life, and making it healthier and more worth living. Already the death-rate from tuberculosis is rapidly decreasing. In England it declined in seventy years from thirty-nine per ten thousand of population to thirteen. Although sanatoria did not exist in the early part of this period, England did have (and was the first country to introduce) consumptive hospitals, which served like isolation wards to prevent the spread of infection. These hospitals, together with the English love of out-of-door sports and the use of ventilating appliances and open fireplaces, are probably the explanation of their growing freedom from consumption. In France the conditions and results are both opposite. In Germany, during the past fifteen years, the death-rate has declined from thirty-one to nineteen and one-half—a full third less. In the United States the death-rate in 1900, in the area for which registration has been well kept, was nineteen, as against twenty-six in 1890, showing a decline of twenty-five per cent in ten years. In New York City, owing largely to the work of Waring and Biggs, the death-rate has diminished in

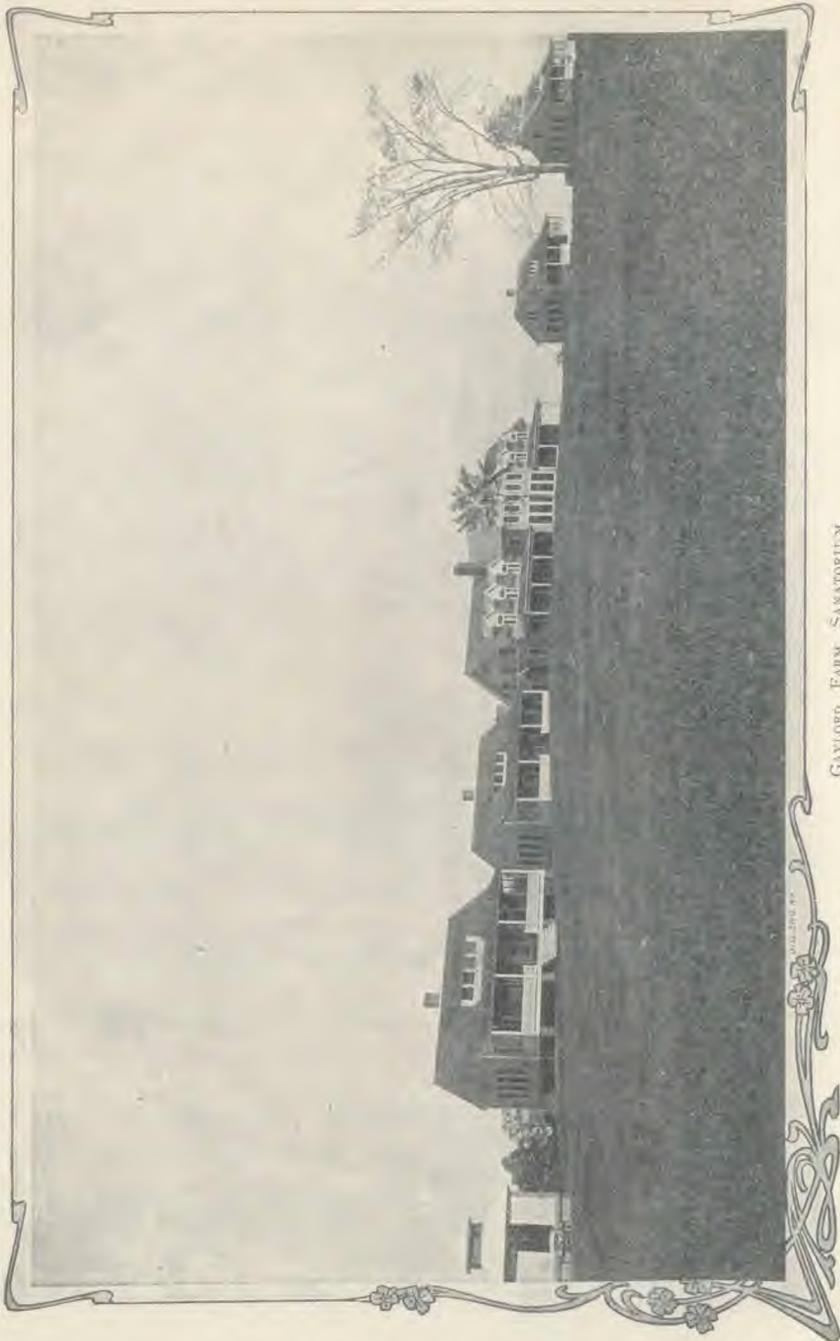
twenty years nearly forty per cent. It is no losing fight which is being made against the disease. Every blow tells, and it is a conservative prediction that the next three decades will each see more remarkable improvement. Many more sanatoria are needed. Any one institution can do but little, although a single sanatorium of Germany records two hundred and eight living graduates of three years' standing or more.

It must never be forgotten that a chief, I would like to say *the* chief, effect of the increasing number of sanatoria distributed throughout the world will be, not on their patients, but on their neighborhood. They will gradually effect a revolution in the habits of living of the community. This is my hope and belief. Nor is it a dream only. The effects are already plainly visible. As Dr. Knopf has pointed out, in Germany the deaths from consumption have enormously decreased in localities where consumptive sanatoria have long been established, for the reason that the sanatorium has been an object-lesson and its graduates unconscious missionaries. Such a sanatorium is not a menace to public health, as many foolishly fear, but, on the other hand, is an efficient means of improving sanitary and hygienic conditions and habits.

The methods of such an institution are not "specific" for tuberculosis; they are simply the methods of living which produce and maintain general health, and which all who wish to improve their vitality should adopt. In short, well-conducted consumptive sanatoria are today the greatest practical schools of hygiene in the world. Already their methods have been adopted in the treatment of nervous exhaustion and other chronic ailments. A wide observation also shows that people who keep well, live long, and have abundant working power are almost invariably persons who have followed, unconsciously it may be, some or all of the four cardinal principles of hygiene. Whole families that I know in California and Colorado do likewise and maintain an enviable level of good health. A few in New England follow the same methods and obtain the same results. I have examined the facts about many centenarians. Most of them follow out-of-door vocations, or, if not, have out-of-door avocations. Thus a banker centenarian was passionately devoted to gardening. Nor have they followed air-hygiene alone. Almost invariably they have avoided worry; that is, they have practised mind-hygiene. One attributes his longevity to thorough mastication,—food hygiene; another, to sound sleep,—rest-hygiene.



INDIVIDUAL SLEEPING SHACKS USED IN A MASSACHUSETTS SANATORIUM



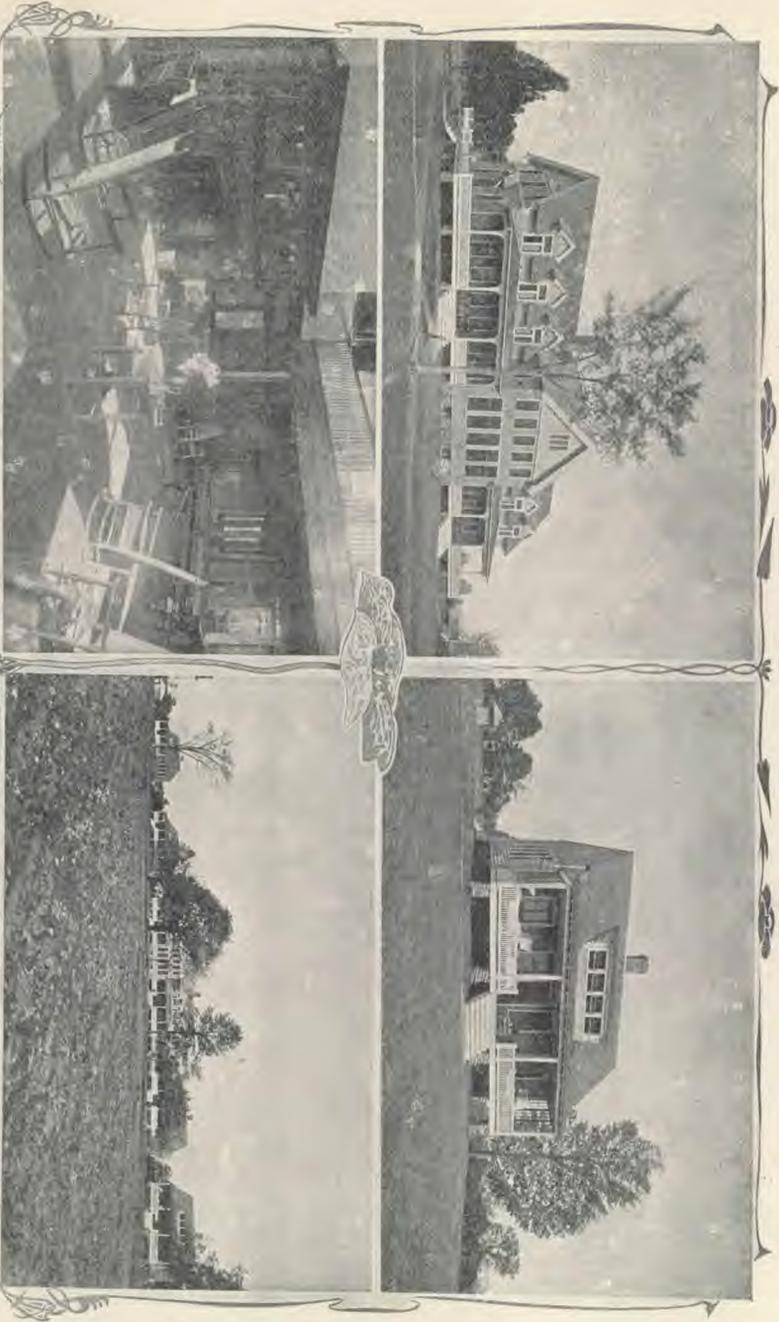
GAYLORD FARM SANATORIUM

Photograph by Phelps, New Haven, Conn.

General View from Southwest, Showing Central Main Building with Two Cottages on Either Side and Tent at Left

Just as long-lived people witness to the truth of the four cardinal rules of hygiene by their conformity to them, so short-lived people prove their truth by

breaking them. Who are the invalids who fill the health resorts of Colorado and California?—Invariably the victims of indoor life, of food-bolting, of



Photograph by Phelps, New Haven, Conn.

Main Building and Recreation Hall  
Interior of Recreation Hall

GAYLORD FARM SANATORIUM

Cottage Showing Patients and Beds Out of Doors  
General View from Southeast

Goodwin & Co.

overwork, and of worry. I have often wondered what would happen to the human race if it should suddenly adopt sleeping out of doors, ventilating dwell-

ings, factories, and schools, taking proper time for meals, learning the art of relaxation and the habit of equanimity. It is certain that life would be longer, and

also fuller. Professor Shaler, of Harvard, says that the normal duration of life for mammals is five times the growing period. Horned cattle take about four years to mature, and they live about twenty. Horses take five or six years, and live nearly thirty. Elephants mature in forty, and live two hundred years. Man, according to Professor Shaler's criteria, takes about thirty years to come to his full maturity, and by this calculation ought to live to be a hundred and fifty. This may never happen, and may be physiologically impossible, but we have wandered so far from nature that there is certainly room for much improvement between the forty-one years which is the average lifetime of an American and the hundred and fifty years just mentioned.

Before any great progress can be made, however, our change of habits must be radical, however gradually adopted. We must open our bedroom windows wider and at the tops rather than at the bottoms. We must substitute electric lights for oil and gas, one jet of which is the equivalent of three or four persons in its power to vitiate the air. We must learn anew what pure air is and insist on having it, not only at home, but in our offices, our clubs, theaters, churches, and sleeping-cars, and, above all, in our factories and our schools. We must lengthen our lunch hours and our hours of sleep and recreation. We shall find that our work will go better and faster, and more will be accomplished in the end. We must take up seriously, and religiously even, the

cultivation of healthy mental attitudes and the consequent elimination of fear, anger, depression, and other morbid states. We must be "born again." Such thorough change of heart must of necessity come slowly. An important force to bring it about is the desire of parents to bring up their children with the advantages of modern hygiene. But the parents themselves must first learn what that hygiene is. To show them is one of the tasks of the new sanatoria.

We see, then, that the modern crusade against consumption means more than appears on the surface. It means, to be sure, the saving of the lives of many afflicted with the "great white plague," but it means, further, a continual lessening in the numbers thus afflicted. It means the destruction of billions of our microscopic foes, and the strengthening of our physiological defenses against them. It means more attention by our medical schools and family physicians to hygiene and preventive medicine, and less to drugs. It means that tuberculosis will soon be dethroned from its position as chief of the diseases, and ultimately eradicated altogether. It means that other diseases will follow; that, as Pasteur has said, "it is in the power of man to rid himself of every parasitic disease." It means that human life will be longer, and, what is better, healthier, happier, and more useful. It means that together with physical health will come increased mental, moral, and spiritual health. It means, in short, that a long step will have been taken toward the regeneration of the world.

---

GARNER the beautiful as you go,  
 Wait not for a day of leisure,  
 The hours of toil may be long and slow,  
 And the moments few of pleasure;

But beauty strays by common ways,  
 And calls to the dullest being;  
 Then let not thine ear be deaf to hear  
 Or thine eye be slow in seeing.

—Sel.

# TRAINING THE CHRONIC INVALID BACK TO HEALTH

BY J. H. KELLOGG, M. D.

**I**T is the duty of every man and woman to be well, and to be just as well as it is possible for him to be. Disease is not



spontaneous. It must be cultivated in some way. We are subject to disease only when we violate the laws of nature. A chronic invalid has become such by a long process of training. He has gradually descended from a state of high health and vigor, with ability to resist the encroachments of disease, until he has reached the level where it can prey upon him. It requires years and years for a man to train himself into that condition where he has a liver two or three times its proper size, a saffron-colored skin, a dilated and prolapsed stomach, irritated nerves, and his whole system in a state of disorder.

But the process of getting well is a long, tedious one; it needs persevering effort just as certainly as does the process of

getting sick. If it takes a man twenty years to get sick, he can not expect to be well in twenty days. He may be relieved somewhat, perhaps of some particular symptom that is giving him inconvenience; but sickness is a plant that sends its roots into every nook and corner of the human flower garden.

Man's body is a unit. The stomach can not be sick and the head and liver well; neither can the liver be sick and the heart and lungs all right. For if one member suffers, all suffer. The whole body is in a state of infirmity whenever there is one sick member. If a railroad should allow its depots to be out of order,—windows broken, floors broken, the paint all off the woodwork, the doors off their hinges—that railroad would be set down as a weak corporation.

The body is a corporation. It will not permit one of its vital organs to get into a state of degeneration so long as it can possibly avoid it. The body repairs itself. So when one organ, like the stomach, is in a serious state of disorder, it is an indication that the entire body is



AN AUTOMOBILE OUTING



DINING-ROOM OF THE BATTLE CREEK SANITARIUM

out of order. A coated tongue does not mean that the stomach simply is out of order. It means that the whole body is in a state of disease. When a man has a habitually coated tongue, there are apt to be pimples on his face; if not there, they are probably on his back. With such a condition of the tongue, hemorrhoids are very likely to be present; also nasal catarrh, bronchial catarrh, and many other physical disturbances. The more you investigate that man, the more you find he is out of order. In fact, he is sound nowhere, because the coated tongue is indicative of the growth of germs in his mouth. The saliva has lost its power to kill germs, so those taken in with the breath are allowed to grow in the mouth. This is what makes a bad taste in the mouth. A little farther down will be found germs in the man's stomach. A recent test of stomach fluid

in the Sanitarium laboratory showed one million germs in every fifteen drops. That would mean one billion germs in an ordinary meal (one thousand million germs in the man's stomach), and every one of them manufacturing poisons. A moldy room has a bad odor, which is the poison manufactured by the mold—an aromatic, volatile poison. A coated tongue means a bad breath, due to aromatic poisons generated by the germs growing in the mouth. Different kinds of germs that grow in the mouth produce different odors. A physician used to keep in his office some sterilized potatoes, cut in halves, with white, clean surfaces. When a man came in with a coated tongue, the doctor would scrape off some of that coat, put it on a potato, and tell the man to come in again in two or three days, when he would find a bounteous crop of the same kind of

germs thriving on the potato. The smell of the germs on the potato was the same smell that was in the man's mouth.

Under the influence of such poisons, the whole body has lost its power of resistance. The skin allows the germs to get through, and pimples are formed; or it may be herpes; or it may be cold-sores about the lips. Cold-sores are a sign that one's resistance is low. The germs constantly present on the skin of the face finally bore below the skin, get a foothold there, and destroy a small patch of skin. These same germs a little farther in would make a boil; if they should bore still farther, they would produce an abscess. In the brain it would be an abscess of the brain; the liver, an abscess of that organ; in the lungs, they would form an abscess there. Wherever there is pus formation or suppuration, these germs are present; and that little sore on the lips, those pimples on the skin, announce that the resistance of the entire body is low; that the gates of the citadel are open, and the enemy is crowding in.

When by wrong training and habits a person has reached the state where his body becomes a prey to all these parasites, he must turn square about, and by a process of careful training return to a state

of health, where he will be able to resist these organisms. One requires training; so does the other. The training of the invalid out of sickness into health consists in living a perfectly natural, healthy life.

We become sick by living an unnatural life, by deserting the laws of nature, by turning away from the highway of life into byways and forbidden paths. Of these danger ways, tobacco using is one; smoking is one; tea and coffee using is another. There is more intoxication in a cupful of strong tea than in the same quantity of lager beer. Yet there are thousands who drink tea and consider it perfectly wholesome; but it is a mode of intoxication—a mild kind of inebriety. It is what Benjamin Ward Richardson called a method of producing artificial felicity. We have no right to borrow on the future. We have no right



LADIES' SWIMMING-POOL, BATTLE CREEK SANITARIUM



GYMNASTIC SLOYD

to felicity which we do not earn. Rest is delightful only because we labor. The sleep of the laboring man is sweet.

Another disease-inducing habit is gormandizing. It is very easy for one with a healthy stomach to digest a proper amount of food. It is just as natural to digest as it is to breathe. The digestive process goes on automatically. But when a man eats twice as much as he needs, he will sooner or later come to grief, for at length his stomach will be unable to do the enormous amount of extra work required.

Overeating is a common error in this country, because here food is cheap, and one can get for a small sum all he wants to eat, and more. Overeating is not so common in Germany among the peasants, or in France. Farther east it is still more uncommon. In India there is very little overeating.



There are said to be nearly three millions of people in that country who have but one meal a day, this consisting of rice and one or two other simple things. The people of Japan and China are a frugal people. But in America, and, to a large extent, in England, overeating is an exceedingly common practise. Pro-

fessor Chittenden, in his experiments last year at Yale, showed that the average soldier eats three times as much as he ought to. In experimenting upon twenty-five young soldiers, he found by reducing the amount of food little by little that he came down to one-third the ordinary army ration, and the men enjoyed better health, were able to do harder work; and although they continued this ration for an entire year, they were better off at the end of this time than in the beginning, and many of them gained in weight.

Wrong habits, all excesses, sedentary life, loss of sleep, lack of exercise, and shutting one's self away from the fresh, cold air, hiding away from the sunshine—all these things are productive of disease. Health comes by turning square about, and cultivating the very opposite.

## A DAY IN JUNE

WHITE daisies are beating their symbols  
All over the meadows, to-day,  
And clouds like the fleece of a lambkin  
Across the wide sky-ocean stray:  
The brooklets, those fair gypsy minstrels,  
Are singing low songs 'neath the trees,  
The green boughs are murmuring sweetly  
As they rock in the arms of the breeze.

The bees in their jackets of velvet,  
Jet black, with a girdle of gold,  
Wind their horns as they swing the red  
clover,—

The grasshoppers gossip and scold  
Like turbulent shrews. The brown sparrow,  
Now and then from her nest on the ground,

Blows a note on her flute, then is silent—  
From the hillside the thrushes redound.

An anthem in low, dreamy voices—  
Afar, on the rim of the lake,  
A gray loon keeps calling and calling,  
'Mid the sedges that tremble and shake.  
There's a scent in the air of wild roses,  
And the breeze from invisible wings,  
The odor of resinous pine trees  
Abroad o'er the wide valley flings.

O day, so delicious—entrancing!  
Words can not thy beauty display—  
No limner with hand howe'er cunning,  
A tittle of thy grace can portray.

—E. B. Lowe.

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## THE PROPHYLAXIS OF SCARLET FEVER

BY KATE LINDSAY, M. D.

AS scarlet fever is a contagious disease which affects principally children under ten years of age, and as most of the deaths from this disorder occur under this age, it being especially severe and deadly to children under five, the important question for every parent to consider is how the infection can be kept from contact with their children during this susceptible period of life.

The germ of scarlet fever has thus far eluded the researches of the bacteriologist, and so we have to depend upon clinical facts obtained by observation for what we may know about the methods by which the disease is propagated. This germ is perhaps more persistent than any other, unless it be that of smallpox, and may be retained in clothing, books, carpets, closets, or trunks for an indefinite period. The writer has personally known of several such cases. One was that of a servant girl who had worked during the winter in a family where three children had this fever in severe form,

one dying. In the spring, her employers leaving the place, she went into another family to work for the summer, packing away all her winter clothing before entering her new place. The next November, while unpacking her trunk to get out her cold-weather apparel, a little four-year-old girl in the room with her put on a shawl which had been worn and sometimes used around the children of her former employers while they were ill. In just four days the little one was taken sick with a severe form of scarlet fever, and inside of ten days all the children of the family were ill, one case ending fatally.

Another case was that of a house in which a family had scarlet fever during the winter. All the children recovered, and the family moved out the following April. The house was fumigated, repainted, and papered, and in May rented by another family with several children. All remained well until the next fall, when the stoves were set up. The father,

when putting up the sitting-room stove, found the pipe-hole covered with wall-paper, and behind, some obstruction, which proved to be an old shoulder shawl. Pulling it out, he threw it on the floor, and his little child picked it up and began playing with it. In two days she was taken violently ill; and all the children had the scarlet fever in a severe form, two cases proving fatal.

In another instance a boy of six years contracted scarlet fever at school. His sister, a few years younger, being taken to her grandmother's in the country, escaped the disease at that time. Next fall, the sturdy boy having outgrown his underwear, it was handed down to his sister, who, in a few days after putting on winter flannels, and without any other known source of infection, was taken ill with scarlet fever of a mild type. The germs had retained their vitality during the months of packing away, notwithstanding the fact that the flannels had been washed before packing, a moderate magnifying glass showing plenty of epithelial cells in the fabric.

In epidemics of this disease, milk is often a medium for carrying the infection, and thousands of cases have been traced to this source.

Grown people often have the disease in a mild form,—slight sore throat, rash, and scaling—never ill enough to go to bed. The milker goes on with his work, shedding scales and germs freely into the milk-pail and distributing disease and death to his chief patrons' children on his milk route.

A young man clerking in a village store came back from his Christmas vacation, during which the younger members of his family were ill of scarlet fever,—a slight sore throat, and fever a day or two, with a slight eruption and scaling. Four country schools had an outbreak

of scarlet fever at the same time shortly afterward, the young clerk distributing the germs in the calico, candy, and groceries he handled and wrapped in the store.

Cats, dogs, and other domestic animals are subject to the infection, or may carry the scales in their fur, hair, or feathers. The cat is the worst animal agent for spreading, not only scarlet fever infection, but also diphtheria and other contagious disorders. Children should be guarded from all stray cats, especially when an epidemic of such diseases prevails.

Schools are more or less centers of infection-distribution, so it is during the winter season that these eruptive disorders are most common. Every school-teacher should know the most common symptoms of infectious diseases, and whenever a child has sore throat and fever, it should be sent home, and also all the children of the family, until a physician is consulted and the character of the disorder determined.

Because one child in the family has developed scarlet fever, there is no reason why other members should be exposed. The hearty, strong ten- or twelve-year-old boy or girl may contract this disorder and go through it, being scarcely ill enough to keep in bed, while younger children may be seriously ill or die from taking scarlet fever from the same case, so mild as to go by the name of scarlet rash, and causing no one any anxiety.

The infection of scarlet fever, though very persistent, is not active a great distance from the patient before the rash appears; and the most contagious period is during the scaling time.

Whenever a child has been exposed to scarlatina at school or elsewhere, or shows any symptoms of the same, separate it from the other children at once

and completely. In warm weather the others should be taken out into a tent, or the patient taken out and some one in the family detailed as a nurse, or a trained nurse employed; and the nurse should also be shut away from the children. There must be no "go-betweens" between the patient and children.

The infection is in the blood, sputum, expectoration, urine, and all discharges, and may be carried from the sick-room on cups, spoons, or dishes, soiled clothing, bedding, sweepings, hair-combings, the nurse's clothing or hair, or possibly in her throat and nose; also in books, toys, letters; in fact, anything may become a medium of infection. Never, therefore, let any of these things out of the sick-room unless thoroughly disinfected by boiling.

Rags or paper should be used for handkerchiefs, and these with all wastes should be burned.

The clothing of the patient and the nurse, and also their bedding, should not be washed with that of the family.

No cats, dogs, or other pets should be allowed in the sick-room, and would best also be kept from the other children.

If the weather is too cold, or there is no way of taking the well children from the house, even then the disease may be limited to one case. If in a two-story house, it would be best to take two rooms on the upper floor, on the south, east, or west side. If possible, improvise an outside entrance. A window may be transformed without much trouble into a door, and a temporary stair put up, and all doors leading into the sick-room from other parts of the house closed and pasted up. The children not infected should be kept in the part of the house most remote from the sick-rooms, some one being detailed to sup-

ply the nurse with what she needs for herself and the invalid, carrying all things up and down on the outside stairs.

All discharges should be thoroughly disinfected by heat, as that is the only sure way of destroying them. Never throw them into a common water-closet, or, worse still, into an outdoor earth closet. In the country they may be poured on sawdust or straw and burned.

In warm weather, flies and other insects become very potent infection carriers. Therefore screens should be used, and every measure taken to shut off all sources of germs reaching the uninfected children, whose health and perhaps life may be in danger by reason of their tender age and increased susceptibility to the disorder.

Besides shutting off all infection-carrying agents, great care should be taken to keep the health of the children as nearly perfect as possible by cleanliness, outdoor life, plenty of fresh air in their sleeping rooms, and proper diet.

When it is remembered that in several scarlet fever epidemics as high as fifty per cent of children under six have died, it will not seem too much trouble for parents who care for the life and health of their children to take every preventive measure to limit the spread of the infection in the family, as well as to limit it in the community.

It is indeed sad that with all our boasted progress in civilization few heads of families ever think of a household quarantine between the sick and well when dangerous infectious disorders enter the family.

In jails, reformatories, asylums, and other public institutions, and even on board emigrant and other passenger vessels, some effort is made to separate the sick from the infected. But the intelligent American fathers and mothers,

with the inertia of Eastern fatalism, expect contagion to go through the family, although the head of an orphanage or reform school would be expected to limit the spread of the same disorder by rigid attention to quarantine and

by the enforcement of other sanitary measures.

Truly, what is needed to stamp out infections is domestic hygiene and sanitary education and the creation of individual sanitary conscience.

## HEALTH NOTES FROM SWITZERLAND

BY P. A. DEFOREST, M. D.

SO much has been written of the beautiful Swiss scenery and of the increasing favor with which the country is regarded as an all-round health resort that it would be superfluous for me to try to add anything thereto. One can not live a decade in a land, however, without arriving at conclusions as to

what really constitutes its attractive features.

To those who love nature the whole earth furnishes lessons for the most profound study and meditation. In almost every land are to be found natural phenomena which justly merit admiration. In America the broad prairies and the inland seas excite our wonder, and Niagara leaves an impression of stupendous power that is never forgotten. The Yellowstone National Park with its hot springs, its paint bowls, and its curious rock formations; the Yosemite Valley with its precipices and giant trees, excite the wonder of visitors. Africa, also, can boast of inland seas, and of forests of gigantic trees which cover thousands of square miles of territory. It can boast of the Zambesi Falls, which are several times the size of Niagara; and the Ruwenzori Mountains are so picturesque that they remind the traveler of Swiss Alpine scenery. Do you wish to see mountains that are almost boundless in extent and really massive in proportions? Then you must visit the Himalayas or the Andes. If you wish to make an ocean voyage which will place you among mountains without the need of leaving the boat, then take a trip to the coast of Norway and Sweden. Thus I might speak of almost



CLIMBING A "SÉRAC"

every country; but there is one little country which seems to have had allotted is what makes the mountaineers such a hardy lot of people.



A TRIP ON BOBSLEIGH

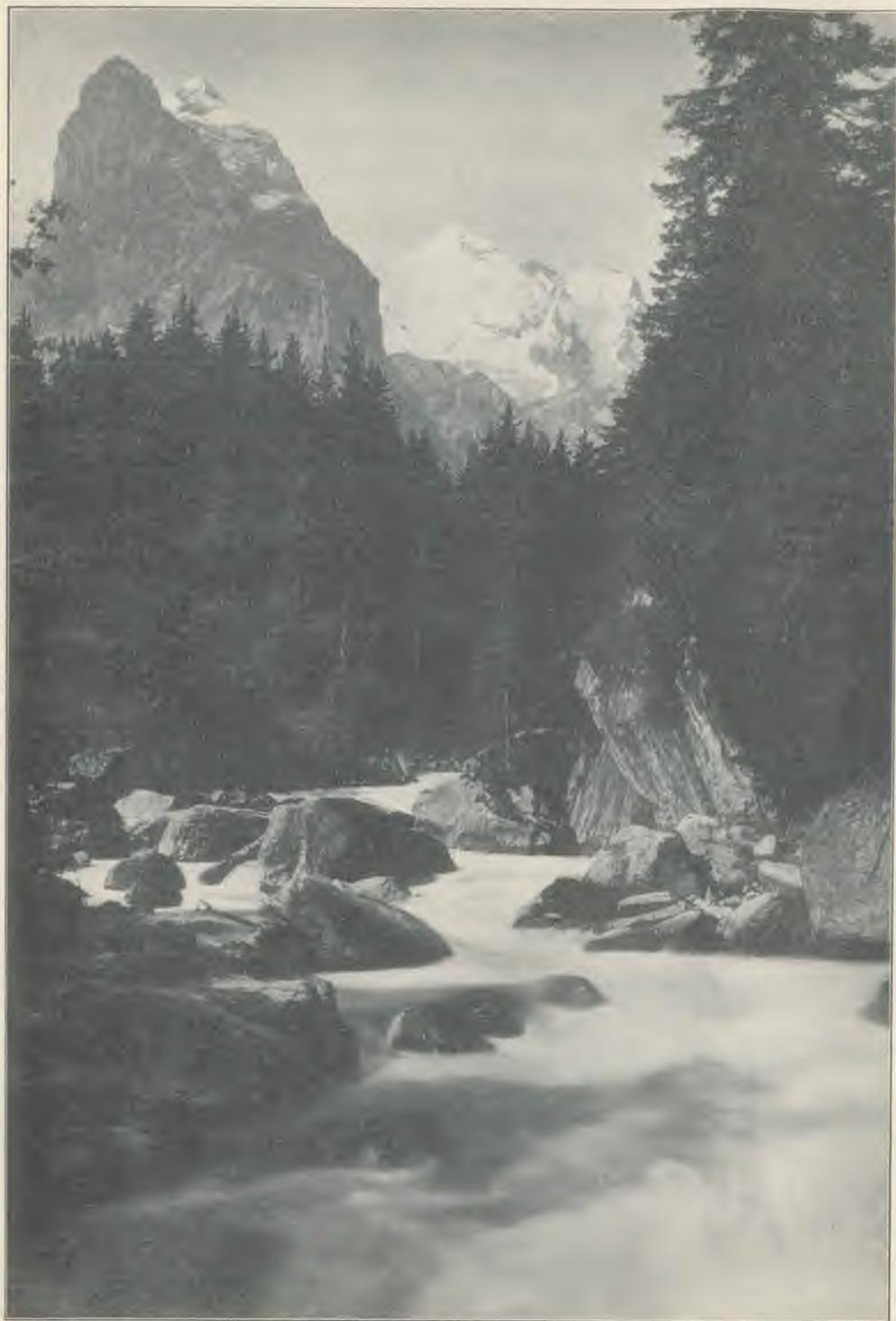
to it more than its share of mountains, hills, valleys, lakes, springs, cataracts, and water-falls, glaciers, and hot and cold mineral springs, and that country is Switzerland.

According to statistics, the hotels alone received forty million dollars from travelers last year. This gives an idea of the attractiveness of the country. The fact that by far the greatest number visit us in the warm months shows that real pleasure is not found in the heat and dust of crowded cities, but away up near the snow-line, far from the crowded centers of civilization. Yes, Switzerland is attractive, not only because one is introduced to beautiful and varied scenery, but because he is brought into close contact with the best of all tonics — cold air, snow, and ice.

The almost continual battle fought between the system and the elements — rain, cold winds, snow, frost, and ice —

Many of us know by experience the invigorating effect of a cold mitten friction or a plunge in the cold pool, or the waking up of the vital forces by the cold affusion, the Scotch douche, or the ice rub to the spine. This cold treatment that makes one exercise to keep warm is given *en gros* (wholesale) here without any other establishment than the blue dome of heaven, the mountain precipices for walls, and the glaciers and eternal snows furnish all the ice and cold water and air douches for the millions. These, with the scenery as a matter of consequence, constitute the wealth of attraction of Helvetia.

There are hundreds of glaciers in the upper Alpine regions, some of which are miles long and hundreds of feet in depth. These cool the air for hundreds of miles around, so that as soon as the sun's rays no longer warm the valley, a cool breath from the hills reminds one that



REICHENBACH RAPIDS

there is a refrigerator of no mean capacity not far away. This cool wave is not the natural result of altitude alone, but is felt for great distances around the Alps, down to within a few hundred feet of sea level. This alteration of heat and cold produces revulsive effects of the most exhilarating kind, and that without fomentation or ice compress. All one needs to do is to dress seasonably and live out of doors. The beautiful adaptation of Switzerland's topography and climate to the present needs of clothed and house-coddled humanity is understood when we remember that here among the mountains one must go either up hill or down dale to make progress; that the finest scenes are viewed from the tops of the mountains; that one is tempted sorely on account of the beautiful and ever-varying scenery to remain night and day out of doors; and that the warm days followed suddenly by cool nights keep one from becoming relaxed. Exercise, pure, fresh, cold air, and a simple fare are first-class hygienic agents which the ambitious tourist is compelled to adopt.

The cold-air treatment of disease is making rapid strides among the health resorts of Europe. Almost every little bathing establishment and "cure" has its outdoor gymnasium, where light and sun can waken life's dormant forces and bring health out of the chaos of disease. In these simple enclosures are found various games, croquet, tennis, nine pins, archery; and sun baths, where in some cases the rays of old Sol are concentrated by means of mirrors to secure in large measure the effect of a fomentation. Last, but not least, are the plunge baths and the douche, which render the outfit quite complete. In some cases a vegetable garden for the gentlemen patients and a flower garden for the fair sex

afford healthful exercise. There is no doubt that active exercise in the open air, with the smallest amount of clothing consistent with modesty and comfort, constitutes a most powerful tonic. The belief that the direct rays of the sun, or



"HURRAH FOR WINTER"

even light itself, exercise a powerful effect to cleanse the tissues by hastening the processes of disassimilation and excretion, has taken deep root in the minds of people everywhere. Karl Mann, the champion walker of Continental Europe, once remarked to the writer that he owed his endurance in large part to his habit of wearing a very small amount of extremely porous white clothing when making his famous world's record. He believes that he won the race not only because of his vegetarian principles, but



SKI-SPORT IN "HIGH ALPS"

because he let nothing come between him and a plentiful supply of light. He stated among other things that he distinctly felt the rejuvenating effect of the first rays of the sun, when, after a night of struggling with deluging rain, wind, and mud, the day broke fair and smiling, and he is sure that the sun's rays came as a sort of balm to tired muscles, and gave him a new impetus to make a world's record indeed.

Switzerland's popularity as a health resort in summer is shortly to receive a new impulse. The electric railway up the Jungfrau will soon be completed to Eismeer, above the line of perpetual snow, and it is proposed to establish an open-air skating rink, available the year round, and of course the other snow sports will be included. Think of it! It will then be possible to see and hear the skaters and experience the necessity of a warm overcoat on one side, and with a glass look down ten thousand feet into the valley below and see the harvest-

ers in the press of the season sweltering under the hot sun.

This is a luxury, however, which comparatively few will enjoy; but in winter, when the snow-line comes down to the lower plateau, and the valleys are filled more or less with fog and clouds, the mountains and the higher valleys are bathed in sunlight much the same as is seen during a North American winter. Each succeeding snow-storm clarifies the atmosphere, and dust and germs are carried to the ground, leaving the air pure, cold, and abounding in life-giving oxygen.

Sled riding down hill has been a favorite sport with Swiss children from time immemorial. School children living up on the mountains, three to five miles from the village school, are joyful indeed when snow appears, for with the sled the school is but a few minutes away. It is only of late that sportsmen have organized sled riding, but it has served to attract many thousands of people away

from indoor life, with its dust germs and vitiated atmosphere, to the exhilarating exercise which consists largely of drawing a bobsleigh up a long, steep, slippery road. The rest and the pleasure are of short duration, but concentrated, and flavored with a spice of danger in the descent at express speed, each "bob" trying to break all previous records.

Ski-running, introduced from Norway, is becoming quite a cherished form of exercise. The picture shows an expert arriving covered with snow from a dangerous journey down the mountain. It is possible when going at full speed to jump forty to forty-five yards, and one can judge of the amount of enthusiasm

evinced on these occasions from the long lines of people gathered to witness the race.

To those suffering from overwork and needing a change of scene as well as quiet repose, Switzerland offers numerous ideal places—out-of-the-way hamlets where the combination of beautiful scenery, quietude save for the soothing sounds of the gurgling brook or of the mountain waterfall, cool zephyrs, and the delicious chiming of the bells of the herds feeding on the slopes far away or near at hand,—all these and more, with a simple life at a reasonable cost, invite even those of moderate means to see the Alpine republic.



SKI RACES IN THE ALPS. + THE SPRINGER WHO HAS JUMPED FROM 6

THAT day is best wherein we give  
A thought to others' sorrows;  
Forgetting self, we learn to live,  
And blessings born of kindly deeds  
Make golden our to-morrows.

—Rose H. Thorpe.

## CARE OF THE TEETH

BY EURETTA D. METCALF

FOR some reason, known only to the Maker of nature's mysterious laws, the teeth are the first part of man to prove by their decay that the physical being is but dust, and to dust returneth.



USING FLOSS BETWEEN THE TEETH

Who does not admire regular and well-kept teeth? Yet few take the trouble to inform themselves on the cause of decay, or the crowded and misplaced condition of the permanent set which so often renders a tolerably well-shaped mouth repulsive.

Regular and intelligent care of the teeth should begin at birth. But the average parent regards the temporary set of teeth as a self-providing, self-caring-for institution. They are allowed to come in their own way, given anything and everything to chew upon, and, frequently, extracted at the first sign of decay. This is a twofold wrong. The

sudden jerk of a bungling-tied thread too often leaves a lasting dread in the mind of a sensitive, nervous child, who, fearing a repetition of the hurt, will conceal later suffering until the saving of a tooth is impossible. Premature extraction of the first teeth causes a contraction of the arch, making the second teeth irregular and crowded out of position. Expansion of the arch is caused by pressure, and the baby-teeth should be encouraged to stay until nature is ready to perform her own expulsion.

How often do we hear, "Yes, Johnny has lost his eye-tooth, but it doesn't matter. It is only his baby-tooth, you know."

Fond, ignorant parent, it does matter! Those baby-teeth are the foundation of Johnny's future teeth, and you should be as considerate of their needs as you are of his stomach in determining his diet.

In a normally healthy child the first tooth erupts, or, in common parlance, is "cut," at the age of from five to seven months. Teething is always a trying period, and the child's system should be strengthened by judicious care in clothing and food. Where there is excessive pain, with gums swollen and bright red, relief is often given by lancing the gums before the tooth erupts. The child should be encouraged to use his jaws and chew on any hard, smooth surface. Muscle and bone-producing foods should predominate.

Frequently cavities appear at from two to five years of age. These should not be neglected. Progressive dentists have a filling especially adapted for these crevices, which preserves the tooth until its successor is ready to replace it.



BRUSHING INSIDE UPPER TEETH



BRUSHING INSIDE LOWER TEETH



CLEANING THE TOP OF THE BACK TEETH



BRUSHING UP AND DOWN BETWEEN THE TEETH

Children of any age should be impressed with the necessity of cleanliness as a preservative. They should be supplied with a small, stiff brush, and not

only taught, but compelled to use it. Half the decayed teeth of adults are traceable to parental neglect of this one essential. When deemed expedient, a

child's teeth should be polished by a dentist. The little, whirling brush used by the trained operator penetrates every crevice, and dislodges all excretions that may have formed. Anything that tends to keep back the encroachment of foreign substances and tartar, tends to counteract decay. Particularly is it well to have one's teeth thoroughly cleaned after illness. But in many families a tooth-brush for each child under ten, with intelligent understanding and religious observance of its duty, is conspicuous by its absence.

Teeth require exercise. As early as possible, babies should be given food which requires mastication. The process of chewing promotes the flow of saliva, and when the saliva is plentiful, teeth are longer-lived. Sweets in moderation are not harmful, but an excessive starchy or saccharin diet simply assists the process of decay. Fruit and nuts should be liberally eaten.

The first permanent tooth arrives usually at about six years of age. This is a molar — the farthest back and weakest of the permanent set. The second molar is cut at about twelve years of age, and the third, the so-called "wisdom" tooth, at from eighteen to twenty-five. The molars are naturally the most active workers, being the principal masticators, and they should be given the greatest care. Children should be taught to chew evenly on both sides. This not only equalizes the wear on the molars, but preserves the contour of the cheeks. Decay is most active between fifteen and twenty-five years of age.

Adults who possess well-preserved teeth can not be too careful of them. They should express their thanks in a vigorous brushing night and morning — not the hurried scrub and rinse which so often is a mechanical farce. A small, stiff brush is preferable, as it reaches into

the crevices, and should be introduced to every part of the tooth — outside, behind, and between the teeth. If the brush is suspected of shirking any interstice, dental floss should be drawn around and between the teeth. Any antiseptic mouth wash that leaves a fresh, pungent taste helps to make one feel clean and happy.

The proper use of a tooth-brush is a science. It should never be used crosswise of the mouth, but up on the lower teeth, and down on the upper, with a rotary movement, not too vigorous, on the gums. The point of the brush applied to the back of the teeth helps to prevent the formation of tartar; a crosswise movement is injurious to the gums.

The formation of tartar on the teeth is largely constitutional, and always injurious if allowed to accumulate. Tartar is caused by an excess of lime in the system, thrown off through various glands under the tongue and in the cheeks. Every one should make at least an annual visit to a dentist.

The preservation of the teeth depends, of course, upon the individual. A healthy, robust person can abuse his teeth with more impunity than can one physically delicate. But the teeth do not belong to the "long-trodden worm" family, and they soon retaliate for misuse. To insure their tractability they must be given rational treatment. One whining, complaining tooth will soon play havoc with the strongest system.

That polishing the teeth with dental machinery destroys the enamel, is a popular fallacy equal to the heredity of bad teeth. Both should be exploded. The enamel on a tooth is a substance so hard that it can be broken only with a drill of the finest temper. Anything that will scour the surface *clean* will prevent decay. Hardtack is at once one of the

best polishers and preservatives; for a tooth that is used will not be lost so quickly as one that is not used. A person who lives on soft foods and liquids will find his teeth decay far more quickly than one who exercises his teeth by masticating resisting foods.

Bad teeth are not hereditary, but congenital. A child's teeth may resemble its parents' in shape or color, but in formation they are individual. It is quite as ridiculous to account for a child's decaying teeth because its mother lost her teeth when young, as it is to look for hereditary ingrown toenails. Both are the result of abnormal conditions.

Poets are fond of likening teeth to pearls, and the universal mission of the dentifrice is to "whiten," and the general public hopefully changes from one preparation to another, forgetting that there are as many variations in the color of teeth as there are in eyes. The color of one's teeth always matches the complexion. Blondes have whiter teeth than brunettes, and an Ethiopian's ivories glisten by the law of contrast.

Therefore, the object of the daily grooming should be to keep the mouth clean, the teeth healthy, and the breath sweet, and the color will take care of itself.

## A TEMPERANCE BANQUET

BY DAVID PAULSON, M. D.,

Superintendent Hinsdale (Ill.) Sanitarium

**I**N our Chicago Life Boat work, men have repeatedly come under our observation who for months or years have made the most pathetic struggles to resist the cruel appetite for liquor, and who have had this craving leave them entirely within forty-eight hours after adopting a simple, non-irritating, and non-stimulating dietary, prepared from wholesome grains, nutritious nuts, luscious fruits, and tasty vegetables.

Temperance reformers and other Christian workers are beginning to recognize that the nation's wretched eating has something to do with the nation's vicious drinking. It was for this reason that the Battle Creek Sanitarium was asked to prepare the annual banquet for the last National Woman's Christian Temperance Union Convention in Philadelphia, and the writer and Mrs. Paulson went there to serve this temperance object-lesson.

The Lulu Temple banquet hall, the

largest in Philadelphia, was secured, and covers were laid for eight hundred and



LULU TEMPLE

sixty persons. A few minutes after the doors were opened, every chair was filled, and extra seats were provided, and yet many others sought in vain to secure admission. It was a magnificent sight. Around these tables were seated many of those whose splendid work in the temperance movement has made



their names household words. Nearly a hundred waiters rendered prompt service, so that the eight-course menu was served most satisfactorily. It was a revelation to many that such a tasty and palatable banquet could be prepared without the use of any of those customary substances that are so prone to create a whisky appetite.

## RATIONAL TREATMENT OF TUBERCULOSIS OF THE LUNGS

BY HERBERT OSSIG

(Continued)

IV. SENSIBLE clothing. Most people, when confronted with the problem of choosing between pure, cold air and shivering on the one hand, and comfortable temperature and foul air on the other, invariably choose the latter. Prof. Dr. Niemeyer, of Germany, states that more harm results from impure air than from a cold skin and subsequent internal congestion. I will not undertake to prove or disprove the correctness of Dr. Niemeyer's view. It is idle to speculate on this question. It is like asking: "Which is more wicked, to kill a German or a Frenchman, a Chinese or a Japanese?" All we need to know is that both impure air and shivering are injurious. Speaking generally, it may be stated that as little clothing should be worn as is compatible with comfort. If ten garments are required to keep the body warm,

don't use nine or eleven; and if one garment keeps the skin warm, don't use two. When the thermometer is in the neighborhood of 32° F., be careful to protect the hands and feet, and when it falls to zero or thirty below zero, the ears and the brow and chin must be covered too.

Linen mesh underwear, for instance Deimel underwear, is superior to any woolen underwear. Wool is non-absorbent, irritates the skin, and debilitates it by shutting off all air. It is important to change the underwear frequently. That worn during Monday may be used again on Wednesday, Friday, and Sunday. The linen used during the night, from Monday to Tuesday, can be worn again during the night from Wednesday to Thursday and Friday to Saturday, etc. Three pairs of socks should be worn,—one pair in the forenoon, one

in the afternoon, and one during the night. Do not forget this. It means dry and warm feet, and greater ability to withstand cold weather.

V. Nutritious, clean, non-stimulating diet of reasonable quantity. Hard and fast rules can not be set down as suitable to every consumptive. Both quantity and quality must be modified according to the individual case and in the same person according to the temporary condition. But there are some underlying principles which must be observed in all cases:—

First, all flesh foods and stimulants are harmful and dangerous. Second, the food must be of such character as to be easily digested by the individual patient. Third, the amount must be reasonable and always within the digestive capacity of the individual. Fourth, a sufficient supply of proteids is of paramount importance; yet to push the nitrogenous supply very much beyond the needs of the system works great havoc. Fifth, having after a few weeks' experimentation found the most suitable diet, this may be followed quite closely during the following months and years.

(a) Much superstition exists as to the necessity of flesh foods in tuberculosis of the lungs. Although it is generally admitted that a vegetarian athlete has far greater endurance than a meat-eating athlete, the public still clings to the ridiculous belief that in consumption, flesh foods are indicated. Time and again it has been proved in numerous races, both in Europe and America, that vegetarian athletes can march, run, climb, swim, and work swifter, and, above all, longer than meat eaters. Why is it that these strong-looking beef eaters are beaten by flesh abstainers?—Because their system is surcharged with poisons and with nitrogenous waste products which compel them to slacken or

discontinue their race. And whereas the vegetarian victors arrive at the goal in first-class condition, their flesh-eating brothers who have fallen by the wayside are in a pitiable physical state, full of aches and pains, utterly exhausted.

Now not much wit should be required to understand that if flesh foods will cause decided defeat among sturdy athletes, the eating of animals must be a great stumbling-block to the consumptive who runs a race against death. The kidneys of the tubercular patient are already overworked by the elimination of the toxins of his own body, and to add to them the poisons of a dead animal, is certainly sheer craziness.

Those who advocate the use of flesh foods on the ground that they contain a "specific" value in tuberculosis forget that there is nothing in meat that is not also contained in grains and nuts and legumes, except those cadaverous poisons that occasion the athlete's humiliating defeat. On the other hand, there are glorious "specific" qualities in the grains and nuts and fruits that are entirely wanting in flesh foods.

To be sure, it is possible to become cured of consumption on a meat diet, but it stands to reason that this happens, not because of it, but in spite of it. It is possible, of course, for a man dressed in heavy boots and clothing to save himself from drowning, but a man without such encumbrance will have less difficulty in reaching safe ground. Similarly, the man who eats clean food will recover quicker than the one who defiles himself with impure things.

A diet of grains, nuts, dried fruits, and fresh fruits is ideal. If more is desired, vegetables and legumes, milk, butter, and eggs may be added.

(b) In regard to the quantity, much mischief is done by overfeeding. Of



THE WRITER, FEBRUARY, 1905, RETURNING FROM HIS DAILY THREE-MILE MORNING RUN. TEMPERATURE, MINUS 14° F.

what earthly use is it to force upon the poor patient three or four or five times as much food as he can possibly utilize? His body calls for a given amount of food. If this is supplied, the patient is strengthened, but if several times that quantity is ingested, he is weakened, because his digestion soon becomes entirely deranged. Every consumptive is a dyspeptic; in fact one doctor calls dyspepsia "incipient consumption." Therefore, to insist upon forcing incredible quantities down the patient's throat is very unwise, and defeats the very object of feeding.

If anybody has a reason for being careful as to the quantity, I think it is the tubercular patient, for the less distended the stomach and intestines are, the deeper the diaphragm descends, the deeper he is able to breathe, the more thoroughly his blood is oxygenated, the more quickly he recovers. Strength it is that we must work for, not fatness and puffiness. Just

as a greyhound, with his big healthy lungs and small abdomen is superior to the overfed, fat, short-of-breath pug-dog, so is the reasonably fed consumptive better off than the one who gormandizes as if he were eating for wages.

(c) The diet must be sufficiently rich in proteids. Grains and nuts answer this requirement admirably. I consider flaked grains, such as granose biscuits, toasted wheat flakes, corn flakes, plus pecans or almonds or pine-nuts,

especially adapted for tuberculosis. The flakes contain about ten per cent of proteids, pecans ten per cent, almonds twenty per cent, pine-nuts thirty per cent. So, if a very high percentage of proteids is required, the flakes may be combined with pine-nuts. If a moderate percentage of proteids is wanted, almonds and pecans must take the place of pine-nuts. Nuts and raisins and well-dextrinized grains are indeed a delicacy, and are, if well chewed, easily digested, and improve the nutrition speedily, giving a healthy color to the cheeks that is certainly more indicative of pure blood than the feverish, bloated face caused by flesh foods. Grains and nuts and raisins are also especially adapted for tuberculosis of the lungs, because they take up but a small space in the alimentary canal and thus give the lungs a chance to expand. Choice fruits, such as large apples, sweet

pineapples, sweet grapes, and navel oranges, offer a delicious distilled water, the equal to which can not be found anywhere on earth, save in the young coconuts in the tropics. Any one who has subsisted on this paradisiacal diet, a true gift from heaven, for any length of time, as I have, and has noticed its good effects, can not but smile at the assertion that cadavers are a necessary "specific" in tuberculosis.

(d) Let us assume the patient to be blessed with a good appetite, caused by living out of doors in a cold climate. Suppose his system calls for eight ounces of granose biscuits (ten per cent proteids, seventy per cent carbohydrates, no fats), six ounces of pine-nuts (thirty per cent proteids, no carbohydrates, fifty per cent fats), four ounces of raisins (two per cent proteids, seventy per cent carbohydrates, no fats), for solids, and eight ounces of apples (one-half per cent proteids, eight per cent carbohydrates, no fats) and thirty-six ounces of oranges (one-half per cent proteids, eight per cent carbohydrates, no fats) for liquids. Then we have the diet list given below:—

Instead of dividing the daily ration into two solid and three fruit meals, three solid and two fruit meals may be given. If the patient still loses in weight on three ounces of proteids, the nitrogenous supply must be pushed cautiously by increasing the amount of nuts, milk, and eggs.

(e) Fresh fruits are to man what grass is to the horse; they should take the place of drinking water to a large degree. They are splendid refrigerants, lowering the fever, lessening the thirst, and reviving the patient's flagging strength almost immediately; besides, they keep the alimentary canal in a more aseptic or rather a less septic condition, doing away, to a certain extent, with the coated tongue, the foul breath, constipation, and flatulence. They also increase the alkalinity of the blood and thus hasten the elimination of waste products through the kidneys.

Ordinary bread is not to be recommended, as its starch is difficult of digestion. Wheat flakes are much superior.

Legumes, if well cooked and served without the skin, are a suitable source of

	6 A. M.	8 A. M.	12 M.	4 P. M.	8 P. M.	Total	Proteids	Sugars	Fats	Total	
	OZ.	OZ.	OZ.	OZ.	OZ.	OZ.	OZ.	OZ.	OZ.		
Granose Biscuit		4		4		8	0.80	5.60			
Pine-Nuts		3		3		6	1.80		3.00		
Raisins		2		2		4	0.08	2.80			
Apples		4		4		8	0.04	0.64			
Oranges	12	4	12	4	12	44	0.22	3.42			
	12	17	12	17	12	70	2.94	12.56	3.00	18.50 oz. water-free food	
		Or in grams					91.00	391	94		576 grams water-free food
		Multiplied by					4.1	4.1	9		
		In calories					373	1,603	846		2,822 calories

If the patient finds a milk (four per cent proteids, four per cent carbohydrates, four per cent fats) and yolk of eggs (fifteen per cent proteids, no carbohydrates, thirty-three per cent fats) diet agreeable, he may try the following plan (see next page):—

proteids. Vegetables are also useful, but inferior to fresh fruits.

Nuttolene, protose, malted nuts, contain twelve per cent, twenty per cent, and twenty-three per cent of proteids, respectively. If combined with fruits and grains and not eaten in excess, they are

easily digested and cause a steady gain in muscle.

Salt, pepper, vinegar, mustard, and all other spices are very harmful. A good appetite is the only spice allowable.

Cod-liver oil is totally unfit for food, though it may be an excellent lubricant for leather shoes.

(f) If the patient has committed some indiscretion, either in quality or quantity,

	6 A. M.	8 A. M.	12 M.	4 P. M.	8 P. M.	Total	Proteids	Sugars	Fats	Total
	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	oz.	
Milk, warm from cow		16		16		32	1.28	1.28	1.25	
Yolk of eggs		6		6		12	1.80		3.06	
Raisins, seeded		3		3		6	0.12	4.20		
Apples	8		8		8	24	0.12	1.62		
Oranges	8		8		8	24	0.12	1.92		
	16	25	16	25	16	98	3.44	9.32	5.24	18.00 oz. water-free food
	Or in grams						106.00	200.00	162.00	558.00 grams water-free food
	Multiplied by						4.1	4.1	9	
	In calories						434	1,180	1,458	3,081 calories

Milk, as ordinarily handled, is dangerous. One drop of milk contains more germs than one drop of sewage, and one drop of cream contains three hundred times as many germs as one drop of milk. Milk gives good results if it is drunk warm from a healthy cow, the udder, legs, and abdomen of which are washed before each milking, the tail being tied to the leg during the procedure. Used under these precautions, milk is a good food for tubercular patients.

Eggs, when fresh, are good and easy of digestion, but stale eggs are poisonous.

let him skip a meal or two, or even fast for a whole day. It is of no use to eat when the stomach rebels, when no digestive juices are secreted to welcome and play upon the food, for instead of becoming a source of strength, the food ferments and putrefies, and poisons the nerve centers. Unfortunately, but few patients learn this lesson. Even though they have no appetite, they eat, and eat, and eat, forgetting that it is not what is ingested that gives strength and builds up new tissue, but what the system is able to digest and assimilate.

(To be concluded)

## THE STREAM

FAR in a forest's ferny fastnesses  
 It bursts from under-earth, brims a dim pool,  
 Leaps down a ledge, then glinting clear and cool,  
 Darts from the shrouding shadows of the trees.  
 It cleaves both marsh and mead, by slow degrees  
 Widening and deepening; owns the sway and rule  
 Of curbing circumstance, though not its tool,  
 Joining the calm of the unplumbed seas.

—Sel.

## A SEASONABLE BILL OF FARE

BY MRS. MINNIE HERBOLTZHEIMER

Vegetable Bouillon

Nut Cream Roast

Protose Croquettes with Tomato Cream Gravy

Shredded Potatoes

Bean Salad

Persian Cream

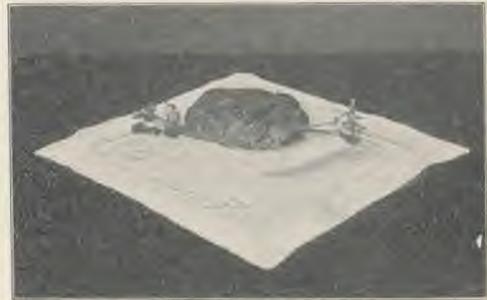
*Vegetable Bouillon.*—1 lb. protose; 1 pt. strained tomatoes (or fresh tomatoes); 1 qt. fresh asparagus (cut into small pieces);  $\frac{1}{2}$  pt. celery (cut in small pieces); four large bay leaves; medium-sized onion; salt to taste; 1 can green peas.

Put the asparagus on and cook until tender; then put the rest of the ingredients in, adding plenty of water. Let it boil for one hour, then simmer for two hours. Strain and serve in cup.

*Nut Cream Roast.*—To 1 pint stewed Lima beans add 1 lb. protose and six hard-boiled eggs. Put all this through a meat chopper, add 1 cup toasted bread-crumbs, and salt and sage to taste. Moisten with thin cream, and put in an oiled pan and bake from thirty to forty minutes.

*Bean Salad.*—Wash  $\frac{3}{4}$  cup of navy beans, and soak overnight. Wash again the next morning, and put on in cold water and parboil. Then put in boiling water and let boil until tender. When

tender, put in a pan and pour over them 1 qt. strained stewed tomatoes and stew until the liquor is absorbed; set away to cool. Add a cupful of seeded olives cut into rings, and a few sprigs of parsley



PROTOSE CROQUETTE

cut fine. Make a dressing of the juice of two lemons and the beaten yolks of four eggs: let the lemon juice come to a boil, add the beaten yolks, and stir constantly until thickened. Remove from the stove and add one-half teaspoonful salt and one-half teaspoonful celery salt. Cool the dressing on ice. Whip half a cup of cream until it is quite thick, and add to the dressing just before serving; pour over the beans, mix all together, and serve on a lettuce leaf.

*Protose Croquettes.*—Mince fine 1 lb. of protose, and add salt and sage to taste; then to this add 1 cup of cream sauce, made quite stiff, and let cool. Form into small cakes and roll in beaten egg and bread-crumbs. Put in an oiled pan and



BEAN SALAD

bake about thirty minutes. Serve with tomato cream gravy.

*Tomato Cream Gravy.*—1 tablespoonful butter, 1 heaping tablespoonful flour,



SHREDDED POTATOES

$\frac{3}{4}$  cup rich milk,  $\frac{1}{2}$  cup strained tomatoes, salt to taste.

Put the butter, flour, and salt together in a saucepan and brown lightly. Add the milk, stirring constantly to prevent lumping. Then add the tomatoes, which should be hot. Let boil until it thickens.

If too thick, more milk or tomatoes may be added. Serve with the croquettes.

*Shredded Potatoes.*—Peel from one to two quarts of potatoes and steam until tender; then add salt, and mash to get the salt distributed evenly, after which put through a vegetable press. Use care in putting the potatoes in a vegetable dish so they will remain flaky. Serve hot.

*Persian Cream.*—Soak  $\frac{1}{2}$  oz. vegetable gelatin in 1 qt. of hot water for one hour. Put on in one pint of water and let boil until it is dissolved; stir occasionally to prevent sticking. Heat 1 qt. of rich milk, and stir into the gelatin; add the well-beaten yolks of four eggs. Strain all through a cheese-cloth, then heat again, and add sugar and flavoring to taste. Pour into sherbet cups and let stand where cool for two hours, or until it hardens. Serve with whipped cream, with particles of jelly on top.

### Proper Amount of Food.

The amount of food required depends primarily upon the amount of skin surface, as food is principally needed to maintain animal heat, the loss of which is for the most part through the skin. A child has a much larger skin surface in proportion to its weight than has a larger person. For example, a child weighing ten pounds has a skin surface of three square feet, while a man weighing 180 pounds, or eighteen times as much, has a skin area of nearly 21 square feet, only seven times greater. The child of 10 pounds requires, then, at least *one-seventh* as much food as a man weighing 180 pounds, instead of only one-eighth as much.

The amount of energy required by the body varies, of course, with the season,

with the weather, and with the amount and kind of work done. Hard, physical work and exposure to low temperature demand the largest food supply. The observations which were made upon this subject by M. Maurel indicate that a person engaged in hard muscular labor requires from twenty-five to thirty per cent more food than one who is idle, or whose occupation is chiefly mental. Exposure to the cold of winter requires an equal increase in the amount of food-stuffs. It should be stated, however, that a person whose occupation is indoors in an atmosphere the temperature of which is practically the same as that of an average summer temperature, does not require more food than in the summer season, since his loss of heat is no greater.

# *Chautauqua School of Health*

## HYDROTHERAPY AND HOT WEATHER

BY J. H. KELLOGG, M. D.

COLD is a universal antidote for heat, as heat is for cold. We use water to put out fire, and fire to warm cold water. There are no disorders or morbid conditions which so readily respond to the use of water, and which are so radically and readily benefited by hydropathic applications, as those especially incident to hot weather. The public generally have found this out, and hence it is a custom in many countries, even in lands where the remedial use of water is not well understood, to make a summer trip to the seaside to get the benefit of the hydrotherapy of the sea.

Sea bathing, which from the most ancient times has been considered a great health promoter, is wonderfully beneficial to thousands. And what is true of sea bathing, is also true of lake bathing, river bathing, and bathing in natural sources of water of all kinds. We must remember, however, that what is good for one person is not always good for another, and many are injured by sea bathing, through ignorance.

Very frequently people are made sick at the seashore by too long bathing. Some spend hours in the surf, and become completely exhausted. If one is unaccustomed to sea bathing, the duration of the bath should at first be not longer than two or three minutes; the next time it may be a little longer, and may gradu-

ally be lengthened to ten or fifteen minutes. If the water is rather cold, one should not remain in more than five or ten minutes; if it is very cold, not more than three or four seconds,—just long enough to get the impression of cold upon the skin. Fleshy people can remain in the water longer than thin people, and adults longer than the very young.

The benefit to be derived from sea bathing is due, first of all, to the low temperature of the water, the temperature of sea water seldom being above 70° or 75° F. Water at this temperature very rapidly extracts heat from the body, so that if a person remains in water at that temperature a very great length of time, he loses considerable heat. So large an amount of heat may be carried off in this manner that one will suffer from shock, and the next day he may feel great depression as the result. Fresh water is usually warmer than salt water; but in salt water, reaction occurs more quickly than in fresh water, so that one may remain in it a little longer. The reaction after a cold bath should always be prompt and complete.

Cold has the marvelous property of increasing vital work of all kinds. When cold water is applied to the skin, impulses are sent inward that awaken every organ of the body. Let us see what takes place: When a person dashes into cold water,

the first thing he does is to draw a deep breath; the lungs swell out, a deep inspiration is taken, and the heart begins to beat with wonderfully increased vigor and strength. This deep breathing is purely involuntary, just as is the jerking of the leg when the bottom of the foot is titillated; it is one of the organic functions carried on by the bodily forces entirely independent of the will.

This deep breathing increases lung activity, thus bringing in more oxygen; it increases heart activity, so that the blood is circulated with greater force; hence we have more blood and purer blood carried into every tissue of the body. The result is a stirring up of the bodily forces, and a distribution throughout the system of a larger amount of highly vitalized and oxygenated blood. The blood-making powers of the body are increased by cold water applications.

Another very important activity which is increased by the application of cold or by cold bathing is the digestive function, by which the food is absorbed and taken into the blood. The application of cold water to the skin has the effect to stimulate the secretion of gastric juice. Every one knows the effect of taking a walk on a cool morning, or of sea bathing—what an appetite it gives. Digestion, as well as appetite, is wonderfully stimulated by cold. That is why the Eskimo can live on blubber and other food, the digestion of which would be quite impossible to the ordinary stomach.

Cold air stimulates the formation of gastric juice by the peptic glands. The liver and the salivary glands are stimulated in the same way.

All the functions of the body are stimulated by a general application of cold water or cold air.

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## FOOT HEALTH\*

BY LENNA F. COOPER

**D**OUBTLESS few people realize that the foot has health or ill health, so distant it seems from the center of the body. Unfortunately, very few people of modern civilized nations know what real foot health is. Health of the whole or any part of the body is "that state in which all the natural functions are performed freely, without pain or disease." So deformed is the adult foot of civilized nations that artists can rarely find a model, and generally resort to the antique models.

Deformity or ill health can not exist without a cause, for nature, unhampered, always tends toward the beauti-

ful and the perfect. It is evident, therefore, that anything which interferes with the natural functions of the foot must produce an abnormal condition, or ill health.

One might wonder what functions the foot has to perform. Of course all would say, "It is to stand upon," but few realize what an important function it is or how much it involves. The feet must bear the entire weight of the body, which in adults usually ranges from one hundred to two hundred pounds, for several hours each day. And kind mother Nature has given us a structure equal to the task if she is not interfered with. The skeleton of the foot longitudinally forms a perfect arch, with

\* The cuts on page 306 are used by permission of Dr. P. Kahler & Sons, Chiropodists, 928 & 930 Broadway, New York City.

two main bases of support,—the heel and the ball of the foot,—the greater arch being the inner two-thirds of the foot. Since the arch forms the strongest support in nature, we must conclude that the greatest weight is to be borne equally between the heel and the ball, on the inner two-thirds of the foot, the outer third forming mainly a “buttness to the inner arch” (Gerrish). It should be noticed, also, that the widest part is that formed by the heads of the metatarsal bones, or what is more commonly called the “ball” of the foot. This, of course, is for the purpose of forming a substantial base. We see this principle exemplified in a more exaggerated form in chickens and various birds, also in the monkey and the cat, and all animals having toes. The farther apart the toes are spread, the firmer the base, and the more stable the support. Undoubtedly in primitive man the toes were spread much farther apart than ordinarily to-day, though this condition is yet seen in some uncivilized peoples.

But fashion has decreed that man shall be deprived of this firm body support, and, instead, shall have a narrow, pinched base with as little stability as possible. The footgear, instead of being made to fit the natural shape of the foot, is fashioned according to man's idea of beauty, and the foot must be made to conform to it, thus impairing its most important function, producing fatigue and aching feet when these conditions ought not to exist.

But the foot has still another very important function. “The sole of the foot is one of the most important vasomotor areas in the body, having *very direct connection* with the nerve centers which control the circulation of the pelvic and abdominal viscera. The brain circulation may also be influenced by stimulation of the rich vasomotor nerve supply of

the plantar region” (the sole of the foot). This fact is made use of in the treatment of various disordered conditions of the body. It is for this reason that the hot foot bath relieves the severe headache from congestion of the circulation of the brain. For the same reason it relieves congestion of the lungs and also of the abdominal organs, and when taken in time prevents a threatened cold.

Whatever affects the circulation of the feet, very materially affects the circulation of the internal organs. Cold, clammy feet, which are due to disordered circulation, are extremely detrimental to the general health. The circulation in the feet may be impaired by tight shoes or by such restrictions as garters about the limbs; also by the feet and legs being too thinly clad. Poor circulation in the feet may also be the result of a disordered condition of the general circulation.

Whatever the cause, it should be corrected. One of the best means of curing cold and sweating feet is the cold foot bath. The feet should first be thoroughly warmed by immersing them in hot water or by “toasting” them before an open fire. They should then be dipped in a vessel containing three or four inches of cold water, and allowed to remain from one to five minutes, the feet being vigorously rubbed, the one with the other. This should be repeated daily, and in severe cases two or three times daily.

The footgear probably has more to do with the health of the foot than any other one factor. In the first place the foot and leg should be warmly clad. The extremities are farther removed from the centers of circulation, and naturally need more clothing than the trunk of the body, which contains so much more blood. In winter warm overshoes and leggings should be worn on going out.

The shoe and stocking should be

changed frequently. The stocking, especially, should be changed as soon as it becomes at all moist, for leather does not permit of the escape of the moisture due to perspiration. The stocking, becoming



THE FOOT BEAUTIFUL

moist, is chilled by the atmosphere about, thus making a continuous cold application to the feet, which materially affects the entire circulation, producing colds, etc. In summer the heat and the moisture due to excessive perspiration cause the feet to become tender, and the flesh about the toes to separate or crack, and a very distressing condition ensues. A good remedy for this is to dust the parts with burnt alum after the cold bath previously mentioned. Patent leather shoes are particularly conducive to this condition. They are very harmful, especially when worn every day.

From the standpoint of economy, as well as health, it is a good plan to have

two or three pairs of shoes and several pairs of stockings, and to change frequently. Shoes which are worn continually, soon wear out, or rather rot out, from the moisture and excretions of the foot; likewise the stockings.

Fatigue of the feet is often relieved by a change. Whenever possible, the foot should be freed of its shoe and allowed to rest; for shoes, at best, deprive the feet of a certain amount of freedom. Clerks, teachers, and others who have to stand a great deal would find it well worth their time to change the shoe for a soft slipper during the noon hour if possible.

Several distressing deformities and conditions exist from ill-shaped shoes. "Bunions, corns, and callousness are nature's protection against bad shoe leather," says one writer on the subject. We might add also ingrown nails, though this condition may be caused by improper pedicuring.

Corns and callosities are produced by the rubbing of the shoe. A bunion is an enlargement of the second joint of the great toe, due to irritation. For either of these conditions the pressure must be removed, and for bunions, gentle rubbing or massage is very beneficial. Although these conditions are very annoying, they are better than the extreme irritation we



CORNS



BUNION



CALLOSITIES

should suffer if they did not form. They are indeed a protection to the soft, delicate tissues.

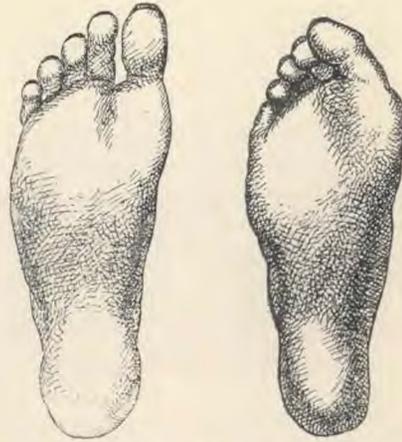
Ingrown nails are usually the result of too short or too narrow a shoe, the end of the shoe pressing upon the soft flesh of the toe, thus directing the nail into the flesh. When such a condition exists, the inflammation should be allayed by soaking the foot in hot water two or three times daily. The nail should be carefully trimmed, and the pressure relieved by placing a bit of absorbent cotton under it. Sometimes it becomes necessary to have the nail removed. In aggravated cases a physician should be consulted.

Since so many evils result from ill-fitting shoes, it is very important that a proper selection be made. One should study the shape of the foot and also the shoe, and these, of course, should coincide as far as possible. It should be noticed that the foot does not taper to a point along the median line, but is rounded from the great or second toe to the last. The ordinary shoe is so constructed as to twist the great toe toward the median line and to crush the others together, many times one upon another. Such a condition is little better than that of our Chinese sisters, which we so deeply deplore. Some manufacturers, in trying to correct this difficulty, i. e., by making a broad sole, have made an equally bad mistake by not enlarging the upper, which, on account of the greater width over which it is stretched, is tight, and presses hard upon the toes, causing corns.

Another important consideration is the heel. This should be quite broad, and

not more than three-fourths to one inch in height.

The high French heel has done an untold amount of harm by throwing the



OUTLINE OF SOLE OF EFFECT OF WEARING NARROW-TOED SHOE  
NORMAL FOOT

body out of poise, unequally distributing the weight upon limited areas of the foot, and seriously injuring the spine by throwing an additional strain upon it.

Rubber heels are the most hygienic. Being elastic, they tend to lessen the shock to the nervous system which comes from missteps, jumping, or from ordinary walking. In other words, the rubber heel is more like the soft cushion Nature has placed upon our foot than the hard leather heel. Rubber heels can be obtained from any large shoe dealer.

Says one, "My shoes hurt my feet, but what shall I do with them?" Throw them away. It is cheaper to buy new shoes than perhaps permanently to injure the soft, tender foot and hobble through life a semicripple.

HEALTH is not a luxury and a fortunate possession: it is the main factor in the whole business of life. With health

the way is open to any success of which mind and heart are capable; without health the way is absolutely barred.—*Sel.*

## TREATMENT IN CASE OF DROWNING

**I**N the treatment of persons in whom life seems to be extinct in consequence of drowning, the two most essential measures are, the restoration of breathing and of heat. Life can not be

shelter, stimulants, etc., at this moment are nothing. Artificial breathing is the one remedy; all others are secondary.

Do not stop to remove wet clothing before efforts are made to restore breath-



FIG. 1

long sustained without respiration, neither can the vital forces long continue their functions when the temperature of the body is very greatly lowered. When respiration is suspended, the greatest source of production of heat is cut off, so that the patient may die from the depressing influence of cold, although respiration might be fully restored by the use of proper means. The restoration of breathing must of course be considered as the first essential; but attention should be given to the restoration of heat with almost equal promptness and thoroughness.

Avoid delay. *A moment* may turn the scale for life or death. Dry ground,

ing. Precious time is wasted, and the patient may be fatally chilled by exposure of the naked body, even in summer. If the breathing has just ceased, a smart slap on the face, or a vigorous twist of the hair, will sometimes start it again, and may be tried incidentally, as may also pressing the finger upon the root of the tongue.

*Remove all obstructions to breathing.* Instantly loosen or cut apart all neck and waist bands; turn the patient on his face, with the head down hill; stand astride the hips with your face toward his head, and, locking your fingers together under his body, raise the body as high as you can without lifting the forehead off the

ground (Fig. 1), and give the body a smart jerk to remove the mucus from the throat and water from the windpipe; hold the body suspended long enough to count five slowly, repeating the jerk more gently two or three times.

After clearing the mouth of dirt and saliva, and drawing the tongue forward, the patient is laid upon the back with the forehead and head slightly raised. The operator then kneels behind his head, grasps the arms just above the elbows, and draws them steadily upward until they meet above the head (Fig. 2). By this means the ribs are elevated, and inspiration is produced. The arms are then brought down to the sides of the chest, the ribs being compressed against the chest (Fig. 3) so as to produce expiration. These movements are to be repeated twelve to sixteen times a minute.

The application of electricity and the use of alternate hot and cold applications to the spine are of service in cases in which they can be used efficiently, but

they should not be allowed to interfere with the artificial respiration, which is the most important of all measures.

Rhythmical percussion of the tongue is a method for restoring respiration which has been very highly recommended.

If several persons are present, one may hold the head steady, keeping the neck nearly straight; others may remove wet clothing, substituting at once clothing which is dry and warm; they may also chafe the limbs, and thus promote the circulation.

*Do not give up too soon.* You are working for life. Any time within two hours you may be on the very threshold of success without there being any sign of it.

After breathing has commenced, restore the animal heat. Wrap the patient in warm blankets, apply bottles of hot water, hot bricks, or anything to restore heat. Warm the head nearly as fast as the body, lest convulsions come on.



FIG. 2



FIG. 3

Rubbing the body with warm cloths or the hand and slapping the fleshy parts, may assist to restore warmth and the

breathing also. Place the patient in a warm bed, give him plenty of fresh air, and keep him quiet. J. H. K.

## SCHOOL OF HEALTH SEARCH QUESTIONS

### HYDROTHERAPY AND HOT WEATHER

1. To what is the benefit derived from sea bathing chiefly due?
2. Describe the effect upon the body when one dashes into cold water.
3. How is the digestive function affected by the application of cold to the skin?

### FOOT HEALTH

1. What is indicated by the arched form of the inner two-thirds of the foot?
2. How is the circulation in the internal organs affected by the condition of the feet?
3. Describe the best means of curing cold and sweating feet.

4. What is the advantage of frequently changing the shoes and stockings?
5. What kind of shoe heels are most hygienic, and why?

### TREATMENT IN CASE OF DROWNING

1. What are the two most essential measures in the treatment of the drowned?
2. If the breathing has only just ceased, how may it sometimes be started again?
3. Describe the method of artificial respiration.
4. What measures should be taken to restore the animal heat?

# Health Chats with Little Folks

## OUR FRIENDS, THE ANIMALS

"MAY brings flocks of little lambs  
Skipping by their fleecy dams."

**D**URING the past month you have seen the lambs, happy and joyous, at play in the meadows. Is it not a pretty sight?

Every country boy and girl knows what it is to have a pet lamb, which is loved and cared for and played with, until at last it goes the way of all lamb's flesh — to the butchers!

Do you know what is all that some people think of when they see the lambs in the fields? They are glad they will soon be able to have lamb and green peas for dinner. Dear little downy, fluffy chickens mean to such people nothing more than a wing or a leg or a nice cut out of the breast to please their appetite.

Life is a precious gift from the Creator to all his creatures. Some people think so little of this sacred gift that they even look upon it as "sport" to hunt and kill their fellow-creatures.

"Take not away the life you can not give,  
For all things have an equal right to live."

We have no more right to take the lives of the lower animals than they have to take ours.

A girl who was sent out by her mistress to wring the neck of a fowl that was to be cooked for dinner, came back in a little while and told the lady that "the fowl didn't want its neck wrung." She

thought the fowl had a right to be consulted in the matter of taking its life.

An old farmer once said that he "could not eat anything that had looked out of eyes." The eyes are the mark of intelligence, and conscious life like our own.

A writer of delightful animal stories tells of a hunter who for weeks and months followed the trail of a stag that he meant to kill. But when at last he came in sight of the splendid animal, "so grand, so charged with life," he seemed a precious, sacred thing, and the hunter could not shoot. While he was trying to get over this weakness, as he thought it, the stag turned and looked full at him with a clear, steady gaze. The hunter trembled, and found that he could not look a wild beast in the eyes when he was trying to take its life. The stag's eyes seemed to tell him that it was a sharer of the same life that throbbed in his own pulses. He could not slay one whom he saw to be "a brother" — a fellow-being.

A man who went with a party of friends to hunt a beautiful doe, saw tears in her soft eyes when they were preparing to cut her throat. This sight troubled him so that he could not touch any of the venison, and he never hunted again. If every one had to kill for himself the animal that he wanted to eat, there are very many who would never touch flesh food again.



*By permission of the Life Boat*

A HAPPY FAMILY

We sometimes hear people say that it is *necessary* to take the lives of animals in order to live ourselves. This is not true, for the Creator never planned that

one living creature should live by the death of another. He gave man for his bill of fare the grains and fruits of the earth. Besides, it is a fact that more than

two-thirds of the people of the world do live without eating any animal food.

The Japanese, who are now fighting and conquering the Russians and showing themselves to be very strong and enduring, live almost wholly upon rice; so, also, do the Chinese and the Hindus.

Mother Earth is well able to provide food for her children without their feeding upon each other. Those who eat the flesh of animals are only taking second hand the nourishment which these creatures have already got from the earth. At the same time they are taking in poison—uric acid—which is made in the bodies of all animals.

People are really shortening their own lives by taking the lives of animals and living on their flesh. The pains which they make the animals suffer come back upon themselves in the headaches, rheumatism, and all sorts of diseases from which meat eaters suffer. For ourselves, even more than for the animals, it is a very bad thing for us to eat them.

Taking the lives of animals and eating their flesh, takes away that tender sympathy and love for all living things which the Creator has put in the human heart.

"The Rhyme of the Ancient Mariner" is a parable in which the poet teaches what is the effect upon the heart and life of cruelty to any of God's creatures, or, on the other hand, of love and kindly feeling toward them all.

The mariner shot an albatross, the confiding bird that followed the ship,—

"And every day, for food or play,  
Came to the mariner's hollo."

From that time the bird seemed to hang like a dead weight round his neck, and trouble and misfortune followed him.

"I looked to heaven, and tried to pray,  
But or ever a prayer had gushed,  
A wicked whisper came, and made  
My heart as dry as dust."

At last, one day he was watching some beautiful water snakes that "moved in tracks of shining white" by the side of the ship.

"Blue, glossy green, and velvet black,  
They coiled and swam, and every track  
Was a flash of golden fire."

As he watched them and admired their beauty, a feeling of love for them touched his heart.

"A spring of love gushed from my heart,  
And I blessed them unaware."

The first effect of this spring of love for his fellow-creatures that rose in his heart, he describes as follows:—

"The self-same moment I could pray,  
And from my neck so free,  
The albatross fell off, and sank  
Like lead into the sea."

He ends the story of his experience with this beautiful lesson:—

"He prayeth well who loveth well  
Both man, and bird, and beast.  
"He prayeth best who loveth best  
All things both great and small,  
For the dear God who loveth us,  
He made and loveth all."

E. E. A.





.. *By the Editor* ..

### CONGESTION OF THE LIVER

THE doctors of the old school attributed many aches, pains, and miseries to congestion of the liver. Portal congestion was the most frequent diagnosis of the old physician, and a dose of calomel to "unload the liver" was his most frequent prescription. In the great attention which has been given to germs within the past quarter-century, the liver has been perhaps too much forgotten. Medical ideas go largely in cycles. Just now we are getting back again to some notions which for a time have been regarded as superannuated, and we are beginning to think more about hepatic congestion and the unloading of the portal circulation; but this does not mean necessarily a return to the old doses of blue mass, blue pill, jalap, calomel, powders, and drastic purgatives.

Hepatic congestion can be much more readily and perfectly relieved by other means. For example, the liver is always congested after a meal, especially after a very hearty meal; hence, going without a meal, or even fasting for a day or two, is one of the most certain and positive methods of unloading a congested liver. The diameter of an enlarged liver may be diminished half an inch or an inch by one or two days' fasting.

A still more ready method of relief to portal congestion, and perhaps one equally effective, is deep respiration. It is only necessary to lift the chest high, as a singer does in expanding the chest, then to breathe very deep, to so compress the liver between the diaphragm and the abdominal walls as to force all the surplus blood out

of it. Thus one may unload his liver, when congested, in ten seconds, or even less, and may repeat the process as many times a day as he likes.

The most common cause of portal congestion is, without doubt, a weak state of the abdominal muscles, which prevents the compression of the liver and other viscera that normally occurs with each descent of the diaphragm. In persons who habitually sit in a stooped or relaxed position, as leaning forward over a desk or reclining in a rocking chair, the abdominal muscles become very weak, so that they no longer exercise the compression necessary to support the walls of the abdominal vessels. As a result the vessels become overdistended, and hepatic or portal congestion is the consequence. By the daily practise of exercises which strengthen the abdominal muscles, they may be gradually strengthened, and the proper support of the vessels may thus be restored, so that as the diaphragm descends with each inspiration, the blood is squeezed out of the liver and other abdominal organs, and hence congestion is prevented, or, if present, cured.

The average person breathes about one thousand times an hour, so when the abdominal muscles are tense and well set-up, the liver and other viscera are gently squeezed one thousand times an hour, or twenty-four thousand times every twenty-four hours, and thus harmful congestion can not possibly occur. Here are a few exercises which are of the greatest service in strengthening the abdominal muscles:—

*Exercise 1.*— Lie on the back with the

hands clasped over the head; holding the legs straight and rigid, raise the legs as high as possible. Fill the lungs well before raising the legs. By this means the liver and other organs will be strongly compressed, and the blood forced out as one may force water out of a sponge or a towel by wringing it. This is one of the most effective of all possible means of unloading the portal circulation or relieving portal congestion, and is infinitely better than salts, purgatives, liver tonics, or any other medicinal means.

*Exercise 2.*—Lying on a couch with some one holding the limbs rigid, with hands or arms folded across the chest or clasped at the top of the head, raise the trunk to an upright position. In raising the trunk the muscles of the back and neck should be held rigid, so that flexion will occur only at the hips. Take a deep breath before executing the movement.

*Exercise 3.*—Standing against the wall, with the heels, hips, shoulders, and head

touching the wall, lift the chest as high as possible and breathe deep eight or ten times.

*Exercise 4.*—Standing against the wall, as in Exercise 3, rise on tiptoe, and repeat the same movements.

These exercises are far more effective as a means of strengthening the abdominal muscles than the complicated movements of any of the scientific gymnastic systems in vogue. The movements described are so simple that they are easily understood, and they are easily adapted to the strength of the very feeblest patient. The lying, trunk-raising exercise may be graduated, for example, by placing a pillow under the head and shoulders at first, so that the distance through which the trunk must be raised will be less. The leg-raising exercise may be graduated by bending the knees at first, thus drawing the feet nearer the body, so that the labor required to raise them to a vertical position is less, and also by the number of times the exercise is repeated.

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## THE OUT-OF-DOOR SANITARIUM

THOUSANDS of people are consuming fortunes in traveling about from one mineral spring to another, and from one sanitarium to another, always seeking health, and never finding it, while good health and abounding vigor may be had at home without money and without price,—just for the taking.

The experience of the medical profession within the past twenty years in the treatment of tuberculosis by the outdoor method has demonstrated beyond a shadow of doubt that simply good feeding and living outdoors, without other treatment, will cure nearly half of the sufferers from consumption, or pulmonary tuberculosis, provided the method is employed at an early stage of the disease, before the vitality is reduced so much that the recuperative powers of the body are exhausted.

The curative power of the great out-of-doors which is demonstrated by the cure

of thousands of victims of consumption, is rapidly becoming known to the great public as well as to the medical profession, and an increasing number of persons are availing themselves of the curative and hygienic advantages of the outdoor life.

Without doubt cold air is possessed of the greatest virtue as a curative agent, but fresh air and that combination of subtle influences and cosmic forces which the outdoor life affords an opportunity for free play upon the body, unquestionably constitute one of the most powerful of all therapeutic means.

The present is a favorable time for getting used to the outdoor life. A tent pitched in the yard, or a screened porch, is a far better sleeping place for the present season than an ordinary bedroom. To get the greatest possible benefit from the outdoor life, one needs to live out continuously, both day and night. The average man

spends one-third of his life in sleep. The conditions which surround the body during sleep must necessarily exercise a powerful influence upon life and health. If this time is spent outdoors in contact with the fresh air and the invigorating influence of the open air, a result in the highest degree beneficial must certainly be experienced. One who is accustomed to sleeping outdoors can hardly endure the atmosphere of the house. Even with windows wide open, there seems something lacking. A sense of depression

or oppression is felt,—a sort of cloud, which is lifted when one again gets under the open sky.

Man is naturally an outdoor creature. The house is one of the innovations of our artificial life, and is without doubt responsible for many of our maladies. Every one will profit by living outdoors during the summer at least, and many of those who try the experiment will be glad to keep it up, especially sleeping out of doors, during the colder months.

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## THE PROMOTION OF THE HORSE

A SPECIAL cable to the New York *Herald* from Paris tells the story of a great banquet recently held in that city, in which horse flesh under various guises composed the greater part of the bill of fare. The banquet was presided over by M. Pelletan, the minister of marine, and was given to celebrate the opening of a great abattoir for butchering horses to be consumed as food. At the banquet the fact was made known that more than thirty-five thousand horses, mules, and donkeys are annually consumed as food in the city of Paris alone. It is now proposed to erect a statue in honor of the veterinary surgeon, M. de Croix, who first advocated the use of horse flesh as food.

A picturesque theological writer, in presenting his mistaken notion of the divine order of things, describes the transformation of earth into grass, grass into ox, and ox into man as a sort of triumphal progress, declaring that the grass is heaven to the soil, the ox heaven to the grass, the man heaven to the ox. So, according to this philosophy, the horse has at last attained a state of felicity equal to that which heretofore has been monopolized by the

ox and kindred creatures. One can quite easily picture to himself the humble dust rejoicing as it waves in a glistening grass blade in the sunshine, and one can appreciate a philosophic harmony with the promotion idea in the transformation of grass into ox; but, according to Holy Writ, the progression ceases here, for "all flesh is grass."

Certainly one can scarcely picture the ox gazing with beaming satisfaction and delight upon the man who is about to strike him down, flay and devour him, thrilled with joy by the thought that through the transmutation processes of digestion and assimilation he will himself soon have the pleasure of slaying his brother ox.

Really, if the Frenchman delights in nibbling the bones of worn-out old bus horses; mules, which, after having kicked everything else, have at last kicked the bucket; and tough jackasses, which, after innumerable beatings, have finally died under the lash because their obstinacy would not permit them to move on any longer,—why should the privilege be denied him? "As a man eateth, so is he." As a man is, so he eateth.

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### Preeminently Useful.

IF there is any woman in the United States who has rendered more practical

service to the people of this great country than Mrs. Sarah Tyson Rorer, of Washington, D. C., we have not had the pleasure

of making her acquaintance. For more than thirty years Mrs. Rorer has been studying, experimenting, teaching, and lecturing in behalf of food reform. In her studies she has sought to reach the very root of things, and with consummate tact she has sought to inculcate the fundamental principles of reform in the culinary art and in dietetics in the instruction of the largest constituency that any writer has ever addressed. In the columns of the *Ladies' Home Journal* Mrs. Rorer is giving every month practical instruction about foods and their preparation which would produce a veritable moral and social evolution if faithfully and conscientiously adopted.

The people of Battle Creek recently had the pleasure of listening to this wonderfully talented woman, who, while a guest of the Battle Creek Sanitarium, twice addressed an audience of guests and citizens. Her lectures were stenographically reported, and portions will appear in our columns from time to time.

### A Happy Family.

A RECENT publication tells of a sculptor, Prince Troubetski, who has adopted the natural dietary, and, after following it for nine years, finds himself enjoying vigorous health as a result. The Prince has a studio in which he has a bear, two wolves, nine dogs, and one rabbit, all of which, like himself, abstain from flesh eating and live together in peace and harmony.

Who can doubt that the enormous consumption of flesh food has much to do with the turmoil and discord which exists in our modern society. The slaughterhouse is a veritable training-school for assassins. And the nervous irritability and brain degeneration naturally resulting from the general uric-acid poisoning which is a necessary consequence of flesh eating, are in a large degree responsible for the increase of crime and the decadence of morals so apparent in these modern times. In the picture which Socrates, the great Grecian

philosopher, drew of a health city, the slaughterhouse and flesh meats were left out.

### The Increase of Insanity.

ACCORDING to a recent report of the Secretary of the State Board of Charities of Indiana, that State contains five thousand insane and one thousand epileptics. The population of the State of Indiana is 2,500,000. If the number of insane and epileptics found in the other States is in the same proportion as in Indiana, the total number of such degenerates in this country at the present time must be approximately more than 190,000.

This fact is a terrible indictment of our modern civilization. Every result must have a cause, and it is apparent that there must be some highly destructive causes in operation to produce such a terrific result in race degeneracy. Tobacco, whisky, and immorality are among the most easily recognizable of these causes; yet there are others far more subtle, but perhaps not less far-reaching, which are helping on the physical and mental declination that is leading us rapidly toward race extinction. Our civilization, proud as we are of it, is greatly in need of reformation.

### The Conversion of a Countess.

THE Countess of Essex some time ago visited for the first time the American slaughterhouse. As a result she lost her appetite for flesh foods, and has eaten none since. Describing her visit, she stated:—

"I can't tell you how everything was stained deep with blood; how there arose from the drenched, dark floors the peculiar odor of blood.

"As I was hurrying away, three beautiful lambs were led in by a man who had a long, shining knife. Filled with pity and indignation, I said:—

"How can you be so cruel as to put those innocent little lambs to death?"

"Why, madam," said the man, "you wouldn't eat them alive, would you?"

## ... Question Box ...

**10,196. Albumen in the Urine.**—J. C. P. asks: "1. Does nervousness cause occasional traces of albumin in the urine? 2. Suggest treatment. 3. Also diet."

*Ans.*—1. It is very improbable.

2. You should have a most careful examination by a skilled physician.

3. Eat wholesome foods, avoid meats of all kinds, condiments, and everything of an unwholesome character. Any of the Battle Creek Sanitarium foods can be recommended. Nut products, are not to be eaten in large quantities.

**10,197. Charcoal Tablets.**—A Kansas subscriber: "1. Should charcoal tablets be taken regularly for any length of time to get the best results? 2. Is there any danger of serious results from taking charcoal?"

*Ans.*—1. In certain cases in which the stomach and colon are dilated, the continued use of charcoal may be advantageous.

2. No, not if charcoal of the proper quality is used.

**10,198. Ventilation.**—R. L. C.: "In building a small house, is there any way to secure ventilation, aside from the opening of windows, which will incur no great expense? Furnace heat will be used."

*Ans.*—Yes, there are several ways. Here is one very good way: Put a good large fireplace in the main living room, and see that all the rooms in the house are connected with this room in such a way that the warm air which has been used and has been vitiated, may find its way down through the fireplace and out through the chimney. Another way is to put ventilated ducts for each room in the inside wall. In an ordinary sleeping room, the ducts should be at least six by twelve inches. In arranging a furnace, always see that the fresh air is brought to it directly from out of doors.

**10,199. Peritonitis—Infected Knee Joint.**—R. B. W., New York, wishes advice in the case of a woman of thirty-two who had peritonitis two years ago, resulting in an infected knee joint. The diseased tissue was removed, leaving only one-third of the synovial membrane intact; the surgeon stating that the remaining good membrane would produce more, and thus bring about a normal condition in time. The whole leg remains stiff after having been "massaged," "vibratory treated," "hot air," etc. The patient walks some, but limps. Kindly give suggestions for treatment, including bandaging, if necessary.

*Ans.*—There is probably very little to be done in this case except to build up the patient's general health and to improve the condition of the knee by fomentations twice a day and the application of heating compresses day and night. Massage and applications of electricity may be used with advantage, but it is scarcely probable that the emaciated knee would be restored.

**10,200. Electric-Light Bath—Delicate Infant.**—Mrs. H. V. W., Illinois: "1. How often should a person take an electric-light bath or other sweating bath? 2. Would any harm result from taking one every week if followed by a cold spray or other cold treatment? 3. Prescribe diet for a rather delicate child of twenty months. Weaned at ten months, her diet is bread and milk, granose, potatoes, eggs, fruit, etc. Recently she has had fainting spells and a spasm. She is very thin. 4. Would you recommend 'Maltine'?"

*Ans.*—1. This depends upon the occupation. A person who perspires in his work would not be especially benefited by a sweat bath of this sort more than once a week, while a person of sedentary habits may take a sweat bath two or three times a week with great advantage.

2. No.

3. Sanitarium infant food, Sanitarium 20-per-cent gluten, Sanitas malted nuts, baked

potatoes well mashed, bread sliced and well toasted, corn flakes, granose flakes; in fact, any Sanitarium or Sanitas health foods. Baked sweet apples and stewed fruits may be added.

4. We know nothing of this product.

**10,201. La Grippe.**—J. A. W., sixty years old: "After the grippe, my feet swell. Is this dropsy?"

*Ans.*—Yes. You ought to visit a sanitarium at once. You may have an affection of the heart or kidneys and require immediate attention. The case should be carefully investigated. It would not be safe to undertake the management of your case at home.

**10,202. Pain under Shoulder Blades—Soreness in Chest.**—I. D., Michigan: "1. What causes pain under and between the shoulder blades; also pain and soreness in the upper part of the chest, seemingly the lungs? The patient is a woman of forty-five. There is pain in the lower part of spine when lying down, and on rising in the morning. Has a bad cough and vomits when coughing, and pains are quite severe. 2. Does this indicate that the lungs are affected? 3. What treatment would you advise?"

*Ans.*—1. Pain between the shoulder blades is usually due to an irritation of the solar plexus. You will probably find tenderness at the pit of the stomach and also upon pressure in the neighborhood of the umbilicus, or irritation of the sympathetic ganglia.

2. There is doubtless an affection of the lungs and respiratory vessels.

3. Temporary relief will be obtained by fomentations applied over the chest and stomach and over the spine. Fomentations should be followed by a cool sponge bath, and a heating compress consisting of a towel wrung out of cold water and applied over the chest and stomach, then covered with mackintosh and a towel, and retained for the night. The body should be rubbed with cold water on rising in the morning. The heating compress should be worn during the day. You ought to visit a sanitarium.

**10,203. To Reduce Flesh.**—N. P., Minnesota: "1. What can be done to reduce flesh in a woman of fifty? She continues to grow larger and yet avoids all starchy foods. 2. What treatment is best for one with chronic stomach trouble?"

*Ans.*—1. The four most effective means of reducing flesh are the following:—

(1) Reduce the food to a minimum amount on which strength can be obtained. If you have a good appetite, eat about one-half as much as you want. If you will give us your height, together with your age again, we will give you a sample bill of fare. Eat fats very moderately, eschew sugar altogether, and eat very little bread, potatoes, and other starchy foods. (2) Exercise to the amount of walking from three to nine miles daily, according to your strength. Swimming is one of the very best of exercises. (3) If there is no affection of the heart, a sweat bath may be taken daily for ten or fifteen minutes or until profuse perspiration has been induced. Keep the head cool and a cold compress over the heart. Hot baths must be taken carefully, to avoid too great depression, especially to the heart. Avoid a hot bath. Take a cold bath at 76°. Fill the bath half full of water and remain in the bath twenty or thirty minutes, rubbing vigorously the while. Assume a horizontal position every minute or two for half a minute, rubbing the chest and spine vigorously. This is a sort of substitute for swimming. (4) Swimming in moderately cool water is perhaps the best of all forms of exercise for reducing flesh.

2. This depends upon the nature of the difficulty. A more lengthy description will be necessary to enable us to give intelligent advice.

**10,204. Red Spots under the Skin—Perspiring Feet.**—Mrs. M. F. B., California:

"1. What causes small red spots, like blood, to settle under the skin? The woman is in poor health and suffers with aching all over the body. 2. What is the cause of a boy's feet perspiring so that water can be wrung out of his socks? His feet become sore."

1. Rupture of the blood vessels from degeneration of the vessel walls. The case must be a very serious one, and the patient should be placed under the most skilled medical care immediately.

2. The whole nervous system is probably affected. As soon as possible, he should be placed under more favorable conditions for health culture. A few months in a sanitarium would be of great advantage to him. He should live out of doors, and his diet should consist of only the most wholesome of foods.

**10,205. Pain under the Left Arm.**—H. C., Minnesota, has suffered on three occasions, at lengthy intervals, a pain under the left arm, about the top of the ribs, which descends at times almost to hip, and sometimes affects the left breast. The pain usually lasts two or three days, and resembles a stifled feeling rather than acute pain. Suffers while taking deep breathing exercises; also after eating a hearty meal. Otherwise in good health. Kindly advise. 2. What is the effect of wearing a moist girdle?"

*Ans.*—1. You are probably suffering from intercostal neuralgia. Apply fomentations at night, followed by the heating compress, consisting of a towel wrung dry out of water, applied to the part and covered with mackintosh and flannel enough to cause it to warm up quickly and remain warm. Keep it on over night.

2. It stimulates the activity of the skin and of the internal organs which are related with the skin. Both the circulation and the nerve centers are quickened. It is a most favorable means of relieving all kidney and intestinal disorders.

**10,206. Cataract.**—E. G., New York: "For two years an incipient cataract has been forming in each eye. Please advise."

*Ans.*—You should consult a first-class oculist at once.

**10,207. Canning Fruit.**—"1. Should cane-sugar be used in canning fruit? 2. What is the proper way to preserve fruit?"

*Ans.*—1. It is better to dispense with cane-sugar.

2. The best way to preserve fruit is to can it. It can be canned without the use of cane-sugar; and malt honey may be added for sweetening when it is served on the table. The flavor is better when the malt honey is not cooked with the fruit.

**10,208. Ice-Cream—Fruits.**—W. S. L., District of Columbia: "1. Is ice-cream a wholesome food? 2. Would fermentation arise from eating cooked fruits with legumes or with vegetables? 3. Do fruits and nuts make a good food combination? 4. What fruits are acid? 5. Should milk be used on cereals cooked with raisins, dates, or any acid fruit?"

*Ans.*—1. No.

2. Not necessarily. If care is taken to masticate the food thoroughly enough to reduce it

to a liquid state in the mouth before swallowing, and to eradicate all portions of the food which can not be so reduced, there will be little difficulty in the matter of combinations. Persons who have a dilated stomach and very slow digestion should avoid the use of vegetables, and especially the use of milk with vegetables.

3. Yes.

4. There is some acid in oranges, in most varieties of fruits, in sweet cherries and some other sweet fruits, but the amount is very small. Most sour fruits are acid.

5. Used in the manner suggested, milk is often the cause of indigestion. A dressing of fruit juice is much preferable, but mushes are themselves objectionable.

**10,209. Rheumatism—Itch.**—A subscriber asks: "1. Please outline treatment for one who has rheumatism. 2. Of what should his diet principally consist? 3. Prescribe treatment for the itch."

*Ans.*—1. Chronic rheumatism and acute rheumatism are two entirely different disorders. Presuming the query has reference to chronic rheumatism, we recommend the avoidance of all flesh foods, because they contain uric acid, and increase the production of uric acid in the body. Uric acid and like products are, without doubt, at least one of the factors in the production of rheumatism; hence great pains must be taken to avoid these toxic substances. Take a warm bath of from ten to fifteen minutes' duration, at least two or three times a week, to be followed by a short cold rub. Live out of doors as much as possible, spending at least ten or twelve hours in the open air daily, sleeping with the windows wide open. It is better still to live in a tent or on a porch so as to get all the benefit possible from the open air. The affected joints should be fomented from fifteen to twenty minutes three times a day. All the affected joints should be covered with a towel wrung dry out of very cold water. This should be covered with mackintosh and then with several thicknesses of flannel, so as to make it warm up quickly and remain warm.

2. Fruits, cereals, potatoes, nuts, corn flakes, granose flakes, malted nuts, spinach, peas, beans, lentils, and everything included in the Battle Creek Sanitarium dietary.

3. A soap and water bath followed by an application of ordinary salve ointment is as effective as anything. This must be repeated

daily for at least two days, then the clothing must be changed. The treatment should then be suspended for a few weeks, then repeated if necessary.

**10,210. Nervousness — Hypopepsia — Hay-Fever.**—Mrs. M. T., Idaho: "1. Why should a nervous person feel chilly when the body is perfectly warm? 2. Give treatment for such a condition. 3. Can the moist abdominal bandage do good if one feels chilly all night when wearing it? 4. What can be done to prevent it? 5. Give treatment for hay-fever. 6. Which is best to drink—cold or hot water—in the morning in case of hypopepsia? 7. Should one suffering with constipation drink Sanitas Cocoa?"

*Ans.*—1. The cause is a disturbance of the thermic nerves.

2. Improvement of the general nervous tone is required. Hot and cold applications to the spine, massage, sun baths, out-of-door life, improve the general health.

3. No.

4. Make the moist compress smaller, thinner, and wring it drier, cover with mackintosh, and then cover well with several layers of flannel. Rub the parts with cold water until red, before applying the bandage.

5. Change of climate is usually necessary. Improvement of the general health and local applications allay the irritation of the nerves.

6. One-fourth of a glass of cold water is preferable.

7. We have never observed a constipating effect following the use of Sanitas Cocoa.

**10,211. Books.**—Mrs. S. W., Kansas, wishes to know of some book treating of all diseases, with water treatments. 2. Also how to rearrange the heating of a house for bath convenience.

*Ans.*—The "Home Hand-Book of Domestic Hygiene and Rational Medicine," Modern Medicine Publishing Company.

2. If you have the city water supply and sewerage system, you have only to call upon your city water department, or some local plumber, who will be able to instal the bath for you properly. If you have not the advantage of this public convenience, you may arrange a fine bathroom by placing a tank in the attic of your house, into which water may

be pumped by a wind-mill or a hand pump. The waste water of the bath may be conducted out upon the ground into the yard or into a cesspool. It will do no harm unless you have a dug-well on the premises. If you have a dug-well, you should discard it at once, and the deep-driven or drove well should be substituted. The water for the bath may be heated by an instantaneous water heater. There are several concerns manufacturing bath arrangements of this kind which are very fine.

**10,212. Bunches under Arms.**—Mrs. F. R., Michigan: "Have been troubled with bunches which at first appeared under both arms, then left the arms and went to right hand on top at wrist; left that and appeared on left hand, on top at center. At first pains shot up the arms. The bunches are soft, and about as large as a dollar. Did not cause any sickness. What do you think it is?"

*Ans.*—A more accurate description of your case is necessary. How long do the bunches remain, and what is their appearance?

**10,213. Cod-Liver Oil.**—C. S., Maine: "What preparation can you recommend as a substitute for cod-liver oil in case of tendency toward tubercular trouble or other wasting disease?"

*Ans.*—Sterilized cream, Sanitas malted nuts, nuts of all kinds, olive-oil, fresh sterilized butter. All these are in every way better than cod-liver oil.

**10,214. Phthisis.**—C. C. C., Pennsylvania: "1. What is phthisis? 2. What home treatment would you recommend in case of a man of twenty-three who has recently had the disease in a light form?"

*Ans.*—1. Tubercular disease of the lungs, or what is commonly known as consumption.

2. Live out of doors, sleep out of doors. Do not spend a minute more than is necessary in the house. Follow the Sanitarium system of diet. Use such fat as you can digest easily until the natural weight is recovered. Have a short cold towel rub administered once or twice a day. Take deep breathing exercises for five or ten minutes every hour.

## LITERARY NOTES

The Grand Canyon of the Colorado has been photographed in its aspects of grandeur and picturesqueness by Dwight L. Elmendorf. From his remarkable series of pictures an article in the May *Scribner's* is illustrated with eight full pages, printed in tint. Benjamin Brooks writes a short impressionistic article about the canyon.

And yet, poor as are the poor in our great cities, and hungry as they are, it is not so much the waste of money spent on flowers that they would deplore as the waste of the flowers themselves. If the rich realized how the poor love flowers, how they long for flowers, I am sure they would make better use of the blooms they buy in such profusion or gather from their greenhouses; they would see to it that others enjoyed them also, not merely the withered roses and drooping lilies, the crushed crumbs of their abundance, but sweet, fresh flowers, just a few from their great store, a few of the best and most beautiful for the poor, especially poor children.—From "*The Shameful Misuse of Wealth*," by Cleveland Moffett, in *May Success*.

There is much to stimulate thought, as well as attract the eye, in the May issue of *Good Housekeeping*. The magazine opens with an outspoken paper on A Girl's Reading, by Elizabeth Knight Tompkins, illustrated with beautiful photographs by F. Colburn Clarke. Dr. John D. Quackenbos, Professor Emeritus of Columbia University, writes of Psychic Influence in the Home, and Malcolm McGregor Jamieson, Jr., of The Punishment of Children, this essay having won a first prize in a contest. Astonishing facts concerning Poisonous Plants of Our Fields and Gardens are set forth by Alice Morse Earle. An Object Lesson in Pure Milk describes a remarkable dairy farm and its process, the text by Joseph H. Adams, amply illustrated from photographs. The "Discoveries" and other departments constitute, as usual, the larger half of the magazine in space and value.

A woman whose health was breaking from monotony, and who was resigning herself to the flatness and flavorless insipidity of a stag-

nant life, resolved to study some branch of the life about her. She chose the life of the birds. Patiently, minutely, and lovingly, opera-glass in hand, she watched the little creatures who make nests in the trees and sing about the eaves. She grew five years younger in a single season. She noted the comings and goings of the birds, when they arrived, and when they departed in the spring and autumn, and as she entered into their realm of wings and songs, her life took on a new brightness and zest. People began to say, "What a charming woman is Mrs. ———. How much she knows! Why, she can tell me the most extraordinary things about the birds!"

Of course she could. She was using her eyes.—Margaret E. Sangster, in *Woman's Home Companion for May*.

The friends of the *New England Magazine* will be pleased with the May number, which is quite up to its traditional standard, as an illustrator of the best of the past and present in its especial field.

*The Pilgrim* for May contains, as a special feature, a double page of portraits of "Living American Composers," the men and women who are breathing the American spirit into music and creating a distinct American school of composition. Such a portrait feature as *The Pilgrim* for May affords has never been published by any magazine, and the seemingly endless work of collecting the one hundred and seventy-five portraits of living American composers has at last resulted in a group picture that, we venture the assertion, will be preserved in every home the magazine enters.

Better and better, is the motto, evidently, of *The American Boy*. Nothing ever attempted in the line of literature for boys quite equals this sterling, high-class monthly. What will interest boys most, perhaps, is the announcement of the celebration of American Boy Day at the Portland Exposition, July 5; at Chautauqua, N. Y., July 22, and at Boston, date not given. It would be difficult to conceive of a boys' paper of more general interest than the paper before us.

PUBLISHERS' DEPARTMENT

# GOOD HEALTH

A Journal of Hygiene

J. H. KELLOGG, M. D., EDITOR

Subscription Price, \$1.00 a Year Single Copies 10 cents

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To aid its students and also other young people who may be desirous of finding suitable fields for missionary work, a permanent Labor Bureau has been organized by the Faculty and Board of Union College. The committee consists of seven persons, representing different nationalities, as follows: English, C. C. Lewis, R. A. Morrison, M. E. Kern;

German, A. Kunze, G. A. Grauer; Swedish, August Anderson; Danish, P. E. Berthelsen. Those who are interested are invited to write to any member of the committee at any time.

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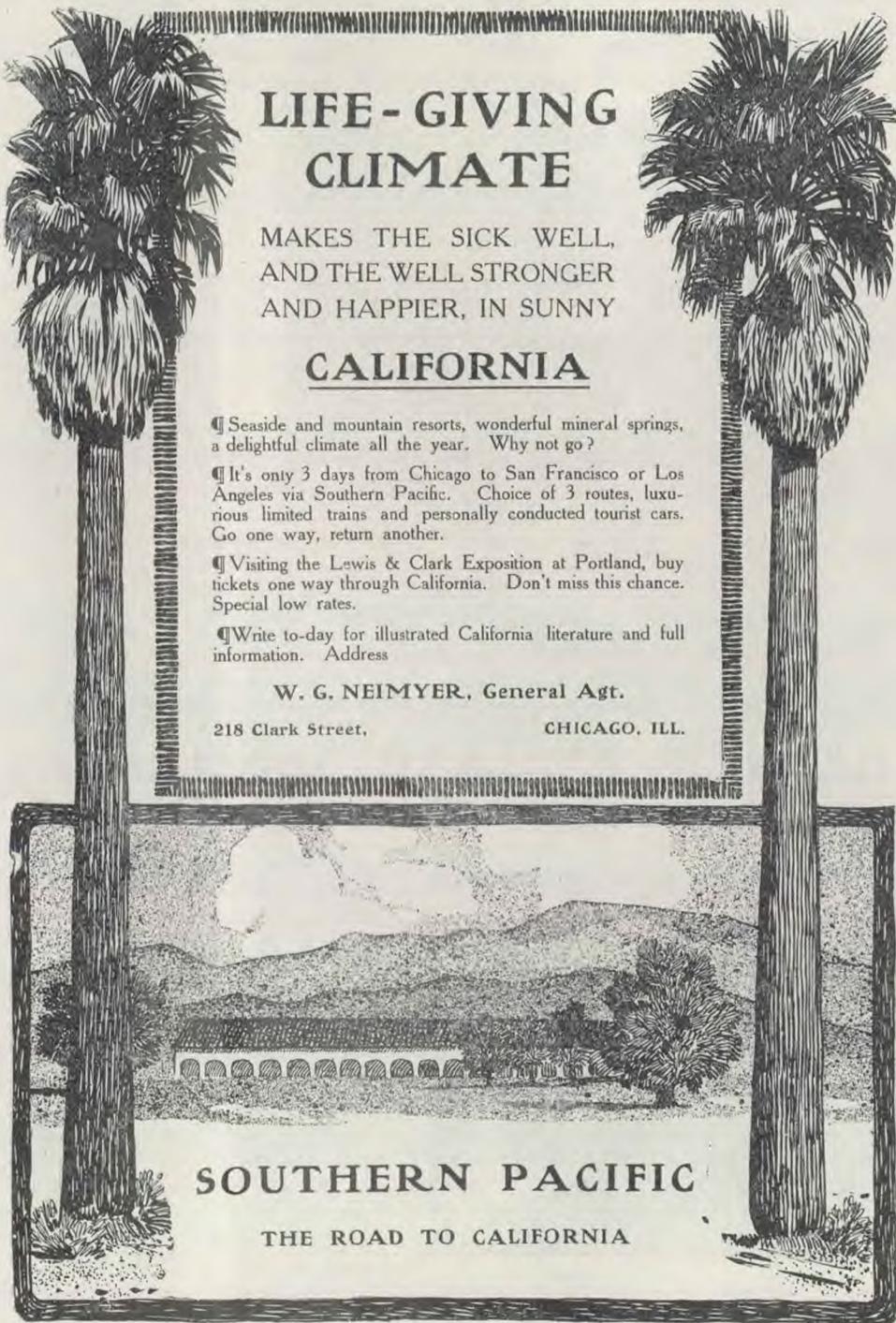
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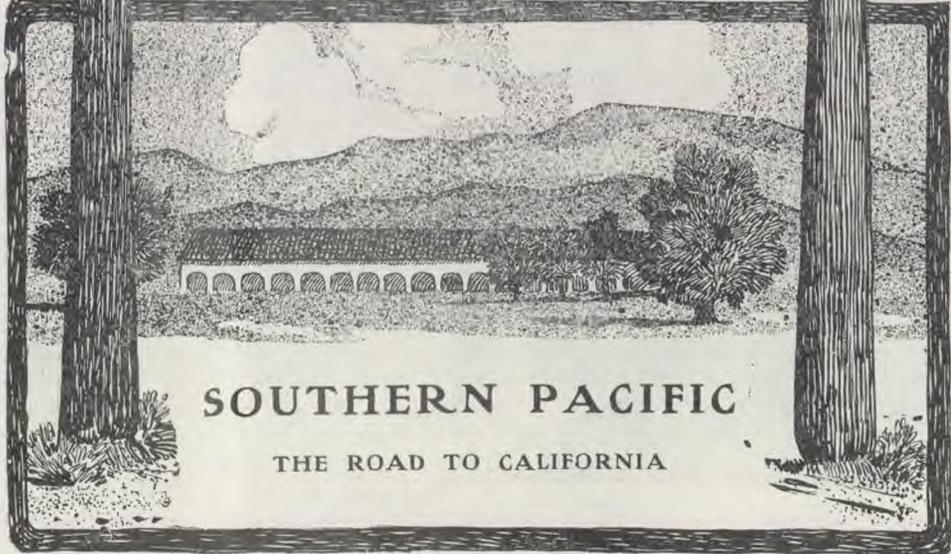
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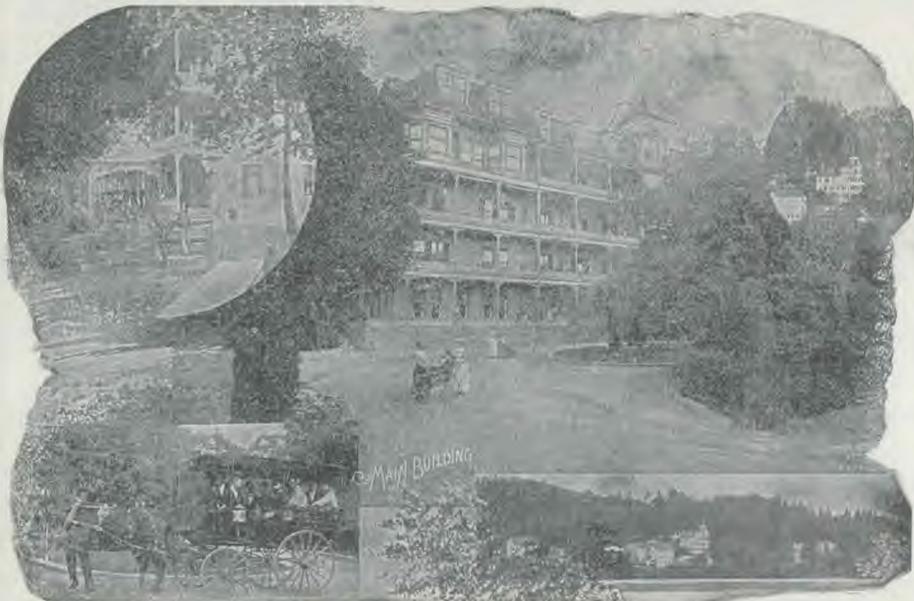
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