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# FRESH AIR—MOST POWERFUL OF TONICS

**DOCTOR KELLOGG TELLS SANIARIUM PATIENTS HOW OUTDOOR LIFE VITALIZES THE BODY AND GIVES TONE TO THE SYSTEM**

SUNLIGHT and fresh air are Nature's most powerful tonics. A scrawny plant, struggling for existence in a dark corner of the house, and with only two or three little green leaves on it, when taken out of doors into the light and air becomes wonderfully transformed in a few days, putting forth buds and leaves, and blossoms soon following.

The same thing is true of human beings. They, as well as plants, are vital organisms, and, like plants, also require sunlight and air. It has been found by observation of hospital patients that those on the shady side of the ward do not progress so well as those on the sunny side. During the Civil War it was demonstrated that patients treated in hospital tents did better than those treated in houses. It is also well known that typhoid fever patients and smallpox patients improve more rapidly when living in tents than when treated in the best hospitals.

Thousands of people are losing health and growing thin and sickly because they live indoors. Cold, fresh air has special value because it stimulates the organs and all the functions of the body; it quickens the heart to the greatest activity, and increases the number of red corpuscles in the blood. Cold air also contains more oxygen to the cubic inch than does warm air. The volume of air is reduced one-five-hundredth part for each degree of reduction in temperature. Consider the difference between a hot summer day with a temperature of 100° and a winter day at 30°. Even a moderately cold winter day marks a difference of 70°. So the air has been reduced one-seventh of its volume, and in six breaths of cold air one gets as much oxygen as he would in seven breaths of warm air. Hence,

the body takes in one-seventh more oxygen in cold weather than in warm weather. This increased amount of oxygen taken into the body is a matter of great consequence. It explains why one feels better

in cold than in warm air. A brisk walk on a cold, crisp winter morning creates a splendid appetite for breakfast, for the same reason that the fire burns brighter on a cold winter night. When the fire burns with a particularly bright glow, people are wont to say, "Winter is coming; see how bright the fire burns!" This is due to the increased amount of oxygen in the air. The fire burns brighter and faster because it has one-seventh more fuel supplied.

So it is with the body—the vital fires burn brighter in cold weather. The whole tide of life moves with greater activity. The process of digestion is quickened because the

process of oxidation is quickened. The liver requires oxygen for making bile and performing all its varied functions, and the oxygen we breathe in cold air improves the functions of the liver, so it can do one-seventh more work than before. The muscles, also, depend for their activity upon oxygen. In an excess of carbonic acid gas the muscles are asphyxiated, and so one feels depressed in warm weather. A person does not get out of breath so easily in cold as in warm weather. The woodchopper can swing his axe with more energy on a cold day. Cold air aids in the elimination of the poisonous matters which are all the time forming within the body. When oxygen is not plentiful enough to make the vital fires burn sufficiently to consume the fuel and waste of the body, then much of the waste material is left behind in the form of imperfectly burned substances, which may be called the cinders of the body. Uric acid,



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for example, is one of these body-clogging cinders.

As the result of sedentary habits, there is not sufficient oxygen taken into the lungs. The lungs do not expand as they ought to, so enough air is not taken in. Then the over-heated air is diluted, and one must breathe seven times to get as much oxygen as he would get in breathing six times out of doors, and so, breathing only imperfectly and slowly, because he is not active, the amount of oxygen taken into the body is insufficient. One exercising vigorously in the cold air out of doors breathes more rapidly, obtains a larger supply of oxygen, and the rubbish of the body—the uric-acid cinders—is burned up, and the whole system is kept clear. This is why cold air is so beneficial to nervous people. The oxygen in the air burns up the poisons which irritate the nerves, and the system is relieved.

#### How Best to Rest

When one is tired, he gets rest quicker by breathing fresh, cold air; because weariness and exhaustion are due simply to an accumulation of poisons and other waste matters generated by work and retained in the body, and these are burned up by the oxygen taken in through cold air.

The cold-air cure is coming to be recognized as most effective for invalids. At Davos, up among the Alps, there is an establishment for cold-air treatment. Each patient is expected to take a treatment three times daily consisting of lying outdoors from half an hour to an hour, according to his strength. Every one is compelled to take the treatment during the night, also, for the windows are never allowed to be closed in that establishment, and yet the winters are severe. But with plenty of warm coverings, and a hood over the head and ears, the patients can bid defiance to Jack Frost while they inhale the life-giving oxygen of the cold, fresh air.

Fresh air is coming to be recognized as the first of all essentials in the treatment of consumption. Twenty years ago this disease was considered incurable, but it is now regarded as one of the most curable of diseases when taken in the early stage. Fully one-half of the patients suffering from tuberculosis, when placed in out-of-door hospitals, make a satisfactory recovery. It is reasonable, therefore, to suppose that if fresh air will cure the disease, it is likewise a preventive of it.

#### Many Garments Not Proof Against Cold

Many people delude themselves into the belief that an accumulation of garments will prevent their taking cold. I remember one gentleman who came to the Sanitarium for treatment. He had the appearance of being a large, portly man, but when his case came to be investigated in the examining office, it was discovered that he was not above ordinary proportions, but that he had a great deal of clothing on his body. He wore, outside of his clothing, a woolen blanket folded into four thicknesses; then he had a thick coat, trousers, vest, and a knit jacket, and under these, two thick, woolen undershirts; and underneath all these, he had a sheepskin garment with the wool on, and the wool was next to his body! He was disappointed when

## BY CURE OF DIGESTIVE DISORDERS SANITARIUM PERFORMS GREAT SERVICE, SAYS EMINENT DOCTOR

Dr. W. P. HILL, of St. Louis, Mo., who has been sojourning at the Sanitarium, gave an IDEA representative some interesting views concerning the Sanitarium methods and their relation to the habits of the American people. Said he, "I feel that I am very familiar with the Sanitarium ideas because I was a patient here just twenty years ago. I had a severe break-down then and spent the entire summer here. I was greatly benefited and since then have lived in accordance with the low-protein idea and have enjoyed fair health ever since. I have found that most Americans eat too much, and that they are especially prodigal in the use of meat; in fact, I should say that many Americans eat ten times as much meat as they require for the supply of a proper amount of protein. Of course, that is aside from the question of whether any meat is necessary. I believe the Sanitarium crusade against meat eating has been bearing fruit. I know that a great many physicians in St. Louis like myself advise their patients to eat little or no meat. As a man gets past forty-five, it is especially desirous that he cut down on his meat eating or give it up altogether.

"The Battle Creek Sanitarium meets a great need of the American people on account of its skill in combating stomach and liver troubles and the diseases which grow out of them. You might say that nine-tenths of the chronic diseases of the American people have their origin in the stomach and liver. Most

of us eat too much. In Europe people do not suffer so much from digestive troubles, because they eat more moderately. A Frenchman will have a light meal early in the morning, about eleven o'clock a light meal of perhaps an omelet and some vegetable, and then in the evening a heavier meal. We eat a great deal more butter in this country than they do abroad. Why, often butter is not served at a meal in Europe unless specially ordered.

"I believe that lime starvation is another source of evil to the American people. We eat a lot of food such as meat, butter, and candy which contain no lime. In consequence of this lime starvation America threatens to become a toothless land. The eating of soft breads is also bad for the teeth and we know how common this evil is in the United States."

Doctor Hill has been on a trip East with his daughter, and came to the Sanitarium for a little treatment and recreation. He is enthusiastic about the baths and applications of water as practiced at the Sanitarium. He thinks the hot and cold applications to the spine and to the liver are particularly valuable and means to make considerable use of the various treatments henceforth in his private practice.

Doctor Hill spent thirteen years abroad in the study of medicine, and for six years was head interne in the great Salpêtrière Hospital of Paris, which accommodates six thousand patients.

he came to the Sanitarium because his treatments were not all warm baths. He had been in the habit of cooking himself until he was parboiled, and had lost his power to resist cold. In order to train his body to better resistance, he was induced to dispense with one extra garment and then another, but it was difficult to get off the woolen blanket and the sheepskin. The efforts of the young man who was nursing him proved futile for a long time, as the patient was sure he would take cold without these protections. The nurse finally captured the blanket, but the sheepskin the young man thought he could not get off. However, he persevered, and one morning he came to the physician's office with sparkling eyes, and shouted out, "I've got his pelt off at last." By careful training the gentleman's skin became active and strong enough to react, and he finally went home cured of his trouble. Artificial clothing is necessary, but any more than is needed is objectionable.

#### How Assimilation is Promoted

Out-of-door exercise and fresh air are most effectual means, not only of creating an appetite, but of encouraging assimilation. Food may be taken into the blood; and after it gets into the blood, it may be circulated and yet not be utilized by assimilation. Many people say, "I have a good appetite; I eat heartily, but I don't gain in flesh." This is because the food is not well assimilated. As-

similation is the process by which food materials are transformed into living, active, thinking, moving substance. Cold air, sunshine, and exercise are among the most effective means of stimulating this process of assimilation. Appetite is simply a demand for new material. It says, "The body has suffered loss, and that loss must be replaced."

It is important, too, that one have plenty of fresh, cool air at night when sleeping. If one sleeps in a warm room, he will wake in the morning unrefreshed and feeling miserable. If afraid of taking cold, raise the window and lie so that the air will blow on the face, protecting the back of the head and ears, if necessary.

#### A Sleeping Box

I know of a man who has a box, one end of which extends out through the window where a pane of glass has been removed. Over the outer end of the box is tacked some cheesecloth, so that the air will be filtered as it comes in through the end of the box. He takes pains to keep warmly covered and to protect his ears with a cap. By this ingenious method of sleeping outdoors while still in the house, he has cured himself of consumption. His apparatus was made more effective by connecting the box with the chimney, so as to provide a current of air. He always sleeps in a draft, and in consequence of this arrangement he does not take cold.



## Prominent Duluth Real Estate Dealer Praises Efficiency of Staff of Sanitarium Workers

Mr. C. P. CRAIG, of Duluth, was a happy man when he left the Battle Creek Sanitarium a few days ago. He had been a patient here for only eleven days, but he felt that he had gained a very great deal of benefit in that time, both in the way of improved health and of knowledge that will enable him to maintain his health in the future.

To an IDEA representative he said, "When I came here eleven days ago I certainly felt very wretched, and the transformation in that short time has been remarkable. I was glad to find that there was nothing organic the matter with me, but my system was simply clogged up with poisons due to injudicious eating and living. It did not take long for the diet and treatments here to set me straight again. Best of all is this: I have learned enough about the care of myself to be of great benefit to me as long as I live. I have been like a good many American business men, so intent on my occupation that I did not bother much about my health, and it was not until I was feeling pretty bad that I gave up my business cares to come to Battle Creek. I was more fortunate, however, than a good many patients whom I have seen around here, because so many of them kept at their task until their troubles were so serious that it will take a long time for them to get well.

"I mean to come to Battle Creek about once a year for a little rest and to have tests taken to show exactly what my condition is. I think every business man ought to do that once in a while; it is much better to take anything like that in time. When I was in college I was greatly interested in athletics. I pulled on the tug-of-war team, put the shot, etc., but had not done anything of the kind for a number of years. I was therefore a little ashamed that my strength tests were down where they were, although they showed that I have a total of about two hundred pounds more than the average man of my height. I shall live according to the diet here and continue to use the baths.

"One feature of the Sanitarium about which I cannot speak too highly is the efficiency of the workers; even in the most expensive hotels I have never seen a body of employes that compared with the Sanitarium staff in willingness to please and intelligence. You take a man in a big hotel who opens the front door and he doesn't know anything else, but the employes of the Sanitarium seem able to answer any question that you ask them, no matter if it is not in their department. They all seem imbued with the desire to be helpful to the patients, quite irrespective of any hope of getting a tip. In the big hotel you always think that kindness may have an ulterior motive."

Mr. Craig, who is a real estate man, owns a farm and is interested in agriculture. He went to visit the dairy farm from which the Sanitarium gets its milk, and was greatly pleased with the sanitary arrangements at the farm and with the high grade of stock that he found there.

## MENU FOR DINNER, SUNDAY, DEC. 22, 1912

### MENU

#### Soups

Cream of Barley Soup      Vegetable Soup—Noodles

#### Entrées

Protose Steak—Onions      Nuttolene—Hollandaise Sauce  
Egg Macaroni

#### Vegetables

Baked Potatoes      Creole Sauce  
Browned Potatoes      Beet Greens  
Mashed Squash

#### Relishes

Lettuce—Lemon      Celery Cabbage—French Dressing  
Cheese Balls      Malt Honey  
Malt Honey with Butter      Malt Sugar

#### Cooked Fruits

Pineapple Sauce      Blueberry Sauce

#### Dessert

Apple Tart      Oranges  
English Walnuts

#### Breads and Beverages

### RECIPES

#### Cream of Barley Soup

$\frac{1}{4}$  cup barley      3 cups water  
1 pt. milk and cream (one-third cream)

Soak barley, then cook in three cups water. Take out one-third of the barley and put the remainder through a colander. Add to it the one-third not put through the colander. Add milk and cream. Reheat, salt, and serve. This makes one quart.

#### Vegetable Soup

1 cup diced carrots       $\frac{1}{4}$  cup rice  
1 cup diced turnips      4 tablespoons butter  
1 cup chopped cabbage      2 cups diced potatoes  
 $\frac{1}{2}$  cup chopped onion      Noodles

Water to make four quarts soup

Cook the carrots, turnips, cabbage, and onion until they begin to get tender. Then add the rice, diced potatoes, butter and noodles; also salt and cook until the potatoes and noodles are tender.

### Noodles

1 egg yolk      salt  
 $\frac{1}{4}$  cup flour

Beat the egg yolk and add flour to make a stiff dough. Roll very thin, fold one half over the other side and roll like a jelly roll. Then cut in very thin slices crosswise, and unroll, folding in long slender strips. Add to the boiling soup.

### Broiled Nuttolene—Hollandaise Sauce

Slice the nuttolene into half-inch slices and place under the broiling flame until nicely toasted. Serve with Hollandaise sauce, as follows:

$\frac{1}{2}$  cup butter       $\frac{1}{4}$  teaspoon salt  
2 yolks of eggs       $\frac{1}{3}$  cup boiling water  
1 tablespoon lemon juice

Put butter in a bowl with water enough to cover. Wash thoroughly to remove salt. Divide into three pieces.

Put one piece into sauce pan with egg yolks and lemon juice. Place pan in boiling water and stir constantly with wire whip until butter is melted. Add second piece of butter and as it thickens the third. Add water, cook one minute. Season with salt.

### Egg Macaroni

$\frac{3}{4}$  cup milk      2 eggs  
 $\frac{3}{4}$  cup cream      1 teaspoon salt  
1 pt. raw macaroni, broken into one inch lengths

Cook the macaroni in boiling salted water (3 cups water) until tender and drain. Beat the eggs slightly and add the cream, milk and salt. Pour this over the macaroni and bake in a moderate oven until set.

### Cabbage and Celery Salad

1 cup chopped celery      2 cups chopped cabbage

Serve with a dressing made by using

1 cup sour cream      1 scant tablespoon sugar  
1 tablespoon lemon juice      1 teaspoon salt

Beat the cream with Dover egg beater until smooth. Gradually add lemon juice, then the seasoning. Beat thoroughly. This may be served in a cabbage head prepared by removing center and scalloping the edge. At the base of each scallop put a piece of parsley and arrange sprigs of parsley about the base of the head.

## SANTA CLAUS, IN GYMNASIUM CHRISTMAS ENTERTAINMENT PROVES HIMSELF AS POPULAR AS EVER

"SAY, mister, is there a Santa Claus?"

Two little boys who were playing with a sled in front of the Sanitarium a few days before Christmas, disagreed on this subject and one of them put the question to a man who happened to pass.

If the doubting Tommy had been in the gymnasium on Christmas eve, he would certainly have been convinced of his error, for there was Santa Claus himself, as big as life, and twice as natural. The old gentleman must be up-to-date enough to make his aerial journeys in a big dirigible balloon, for it doesn't seem possible that he could have brought all those gifts in that old sleigh of his, which used to be drawn by Donner, Blitzen and the rest of the redoubtable team of reindeer. Half a dozen tables groaned under their weight of pretty things and the Haskell Home children had a whole houseful of toys and useful articles to themselves.

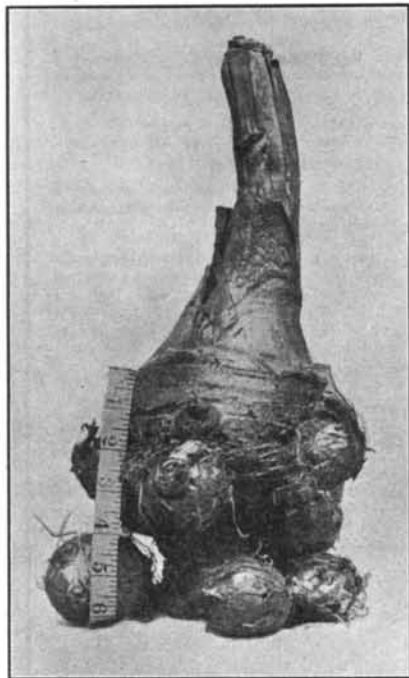
The gymnasium looked a fit place for

Santa Claus' headquarters. At the rear end was a big mother Christmas tree, aglow with tinsel ornaments and tiny electric bulbs of many colors. It was flanked on either side by a half-grown member of the tree family, while from the balcony railing leaned a score of youngster Christmas trees. Above the centre tree was a bouquet of oak leaves and ruscus, brilliantly dyed, and from this radiated a semi-circle of long star-spangled banners. These streamers formed a dome-like background for the trees. There were holly wreaths, and ropes of holly and clusters of wild smilax and bay trees and boxwood trees, and yards and yards of bunting, until you couldn't see much of the original material of the gymnasium.

Of course there was a large crowd of guests, patients and helpers. Dr. A. J. Read was extremely happy in his remarks as master of ceremonies. Elder McCoy offered prayer, Mrs. Rice sang two appropriate songs, Dr.

## Dasheen a New Addition to Our Dietary

THE Sanitarium has recently received a shipment of dasheens from the government experiment station at Brooksville, Florida, and another, a carload lot, will arrive soon. This is the entire output of the experiment station, and the government has sent it to the institution with the understanding that experiments will be made with the new vegetable. It was first served Christmas day,



BASE OF DASHEEN PLANT, SHOWING TUBERS ARRANGED AROUND THE CORM

leading novelty to the menu as did celeriac and casawba melons to that of Thanksgiving.

Dasheens are a new root crop especially adaptable to southern soil and climate, having been introduced from the tropics, though they have been successfully grown with a fair yield as far north as central New York. It is the intention of the government to make them one of the staple products of this coun-

try, experiments having proved that they can be raised in greater quantities to the acre than can potatoes, and at less expense. Under perfect cultivation and climatic conditions their yield is enormous, sometimes reaching 600 bushels to the acre. Then, too, there are other reasons that favor the production of the vegetable in this country: dasheens thrive in soils that are too wet for other root crops; they grow rapidly in a fairly rich soil with a fair amount of moisture; they resist attacks of insect and fungus pests; their keeping qualities are excellent whether in the ground or in a dry place indoors.

Dasheens, too, may be put to many uses. They may be baked, boiled, fried, mashed or otherwise cooked, like potatoes. The tubers are similar to the potato in composition, but are drier and contain from 35 to 75 per cent more protein. The flavor of the cooked tubers is suggestive of boiled chestnuts, and appeals to most tastes. The shoots above ground are also edible when cooked, but on account of their acidity should never be tasted in the raw state. The petioles, or leaf stems, cooked separately from the leaf blades, can be eaten like asparagus and are more delicately flavored than mushrooms. The leaves make an excellent substitute for spinach and other greens. They may be ground into meal, dasheen flour being exceedingly good in invalid cookery, since it is extremely easy to digest. The dasheens comprise stock-food tubers as well as starch roots.

The dasheen is one of the staple food plants of the tropics. Many forms of it have been cultivated in China and Japan for thousands of years. The aroid family, to which the dasheen belongs, has been the staff of life for millions of people, supporting them at a cost of five cents or less per day. Aroid tubers are the foundation for the malanga of the Cubans, the poi of the Hawaiians, and the oto in the Panamas. In Japan the leaves and petioles of the dasheen are dried and preserved with salt. The aroids probably support as many people as do rice and wheat.

There are now hundreds of varieties of dasheen. Most of them never produce

flowers and none of the cultivated forms have been observed to produce seed under any circumstances, the plants being propagated by planting out portions of the tubers and tops of the old rootstocks. They grow in abundance in Malaysia, equatorial Africa, Central and South America, and the West Indies. In general appearance the plants resemble the "elephant's ear," which has become so popular in lawn ornamentation.

A distinct type of dasheen, the hasu-imo of Japan, has a leaf stalk varying in color from a pale green to a purplish bronze. This variety is so free from acidity that it may

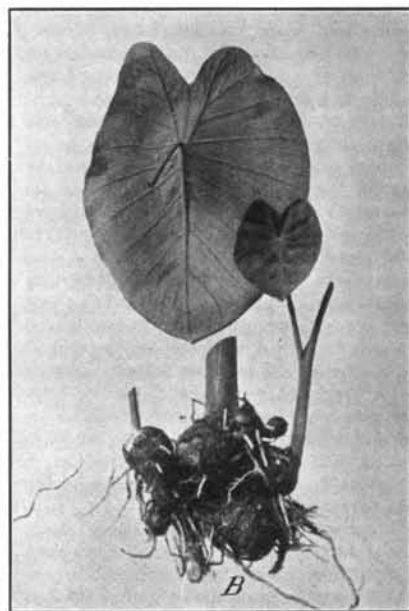


ILLUSTRATION SHOWING LEAF AND LEAF STOCK OF DASHEEN, TOGETHER WITH CORM AND TUBERS

be eaten in the raw state. Another form of dasheen is the Trinidad, the erect petioles of which are purplish bronze-green, while the leaf blade is dark bluish-green. The tubers of this mature in about six months after planting under favorable soil and climatic conditions. They are about the size of a hen's egg, but are very prolific, a small plot of six hills in the experiment station yielding an average of seven pounds to the hill, or at the rate of over twelve and one-half tons to the acre. This particular variety adapts itself to either moist or dry soils, provided they are not baked or do not sour.

Where the frostless season is less than five months in duration the tubers for propagation are started in sand, under glass. They require six months or more to mature. The hills are usually made in rows, as in the case of potatoes, though in very wet lands on which horse tools can not be used they are placed quite close together in haphazard fashion, as in the Orient, where the standing water kills the weeds that spring up about them. The dasheens require from one-half to one square yard of ground for proper growth. In rich, alluvial soil 5,000 to 10,000 plants may be planted per acre. In fairly dry soil close planting in rows three feet apart is recommended.

E. J. Waggoner gave a brief but eloquent Christmas address, the Haskell Home children sang two songs and the orchestra, under the leadership of Mr. William T. Drever, filled the intervals with music. For Christmas itself, the lobby was decorated with wild smilax. The centerpiece was a palm surrounded by ferns banana trees, small palms and poinsettias. The dining room was hung with ropes of holly and the tables were beautified with jardinières of ferns, poinsettias, begonias and other plants. However the chief feature of Christmas was the dinner. Here is the menu:

Macedoine of Fruit  
Cream of Tomato Soup Sanitarrapin Soup  
Celery Radishes Ripe Olives Croutons  
Chestnut Pie—Jelly Nut Sausage—Gravy  
Baked Nuttolen  
Glazed Sweet Potatoes Baked Dasheen

Baked Potatoes Cream Sauce Browned Onions  
Head Lettuce—Lemon Waldorf Salad  
Cinnamon Buns Graham Bread White Bread  
Rice Biscuit Good Health Biscuit Bran Biscuit  
Cherry Sauce Steamed Figs  
Cream Puffs Lemon Pie  
Steamed Fruit Pudding—Sauce  
Oranges Apples Malaga Grapes  
Apple Juice Minute Brew Yogurt Buttermilk  
Creamed Yogurt Cheese Salted Almonds

The orchestra rendered the following program:

OVERTURE—Zampa . . . . . Herold  
WALTZES—Très Jolie . . . . . Waldeufel  
INTERMEZZO—Sparklets . . . . . Miles  
SELECTION—The Rose Maid . . . . . Granichsdaeden  
SONG—My Heart Belongs to You Alone . . . . . Bertrand  
THE SEXTETTE—From "Lucia" . . . . . Donizetti  
MORCEAU—Piouette . . . . . Finck

In the evening there was another concert in the lobby.

## PROMINENT TEXAS PHYSICIAN AT THE SANITARIUM

Dr. J. C. SILLIMAN, of Palestine, Texas, has been spending a few days at the Sanitarium. The Doctor is a neighbor and friend of Ex-Governor Campbell, and has heard much of the institution from the latter, who, together with other Palestine residents, is a frequent visitor at the Sanitarium.

Doctor Silliman has been sending patients here for some time, but had never visited the Sanitarium, so decided to come up and see for himself what was being done in a place where patients ate no meat, drank no tea or coffee, led the simple life and pinned their faith largely to the curative properties of water and other of Nature's remedies.

Said he, on the eve of his departure, "When one visits an institution like this he sees and is impressed by many things. I think I may say that I was first impressed with the religious atmosphere pervading the place. There is no smoking, no drinking, and all the great body of workers are happy. From the bootblack to the specialist, all are satisfied. I was most agreeably surprised when I saw operations actually begun with prayer."

"I can readily understand why this is as popular a place for the well as for the sick. Time never drags here. There is something going on all the while. In regard to the diet,—the menus are varied and the vegetables that are provided in an abundance, largely in the Sanitarium hothouses, are palatably cooked and attractively served, together with nuts and fruits of all kinds. Then, too, the rooms are so comfortable about the place, and the building is absolutely fireproof. Many times buildings are said to be fireproof when they are not; this one is. I have satisfied myself as to that."

On first planting no water must be allowed to stand in the hills or plant holes, but after growth is well started it does not matter how much moves through the soil. Like all root crops dasheens and their kin, yautias and taros, require a naturally rich or well-fertilized soil. The special element demanded seems to be potash. Of course soil frequently flooded is rich enough without fertilizing.

In harvesting dasheens the usual method employed is hand pulling. Where the soil is moist or sandy, one strong pull will bring up the entire plant system. Then again in other instances a hoe or pick must be used to release all the tubers. In South Carolina, Alabama, Texas, and Florida, the tubers are usually left in the ground through the winter season. If bagged or crated for preservation they are allowed to stand in the shade for several days to dry and as much of the earth is shaken from them as it is possible to remove.

The tubers grow about the base of the dasheen corm much as tiny new buds appear around a hyacinth or gladiolus bulb, the depth of the corm being about six inches. When stored the central corm is more liable to decay than are the smaller tubers, just as the center of an onion decays first. They have to be spread out in thin layers with a free circulation of air about them to insure proper preservation.

"How can good help but result from a complete change in diet, in pursuits and in atmosphere? Complete change is an excellent curative agent. There are many unique features in the treatment methods, some simple, some complex. The electric light bath is a mighty good thing. It does physicians good to get around and see what is going on outside their own little sphere. I have noted many things here out of the ordinary. The mechanical equipment is truly wonderful. Every where you turn you see something to interest you. I really believe it would be advantageous to physicians passing this way to come to the Sanitarium and see what it is accomplishing. I surely am glad I came."

Doctor Silliman remarked again and again on the courteous treatment accorded him during his stay in the institution. He was shown through every department, taking treatments in some of them, and he has nothing but praise for the institution and its régime.

The various offices about the Sanitarium are prettily decorated for Yuletide and the lobby presents a festive appearance. A huge pyramid of greenery occupies the center, being composed of a giant palm flanked roundabout with smaller palms and fringing ferns. This, with the overhead bower of choice potted plants from the conservatories and the large palm garden with its mammoth tropical trees and plants for a background, makes a picture that delights the artistic sense and inspires Christmas cheer. The nurses' department and treatment rooms, too, are beautifully decorated with red bells and Christmas greens.

The first experiments with the dasheen were made at the Porto Rico and Hawaii experiment stations in a small way. Later specimens were brought in considerable quantities and varieties from the Porto Rico station to Washington, where they were grown in government greenhouses. Additions were frequently made from all parts of the tropics and the Orient until what is probably the largest and most complete collection in the world has been assembled. Experiments in dasheen growing have been going on in the southern States since in a small co-operative way but the Brooksville, Florida, station seems to show more favorable conditions. The crop has a season of about seven months, and the soil is a black, very rich sandy loam.

The dasheen has already found favor in the United States and the day is not far distant when everybody will have come to know it as an article of food. Just now it is a delicacy known only to the few. Two bushels have been planted in the Sanitarium hothouses and the coming year experiments will be made with dasheens insofar as climatic and soil conditions in Michigan are concerned, as well as regarding yield. A large portion of the earload lot of tubers will be taken to the Kellogg Food Company's plant and ground into flour, after which the dietitians will experiment with the product.



ONE OF THE ARC LIGHTS USED IN THE PHOTOTHERAPY DEPARTMENT

## How Light and Heat are Used in the Sanitarium System

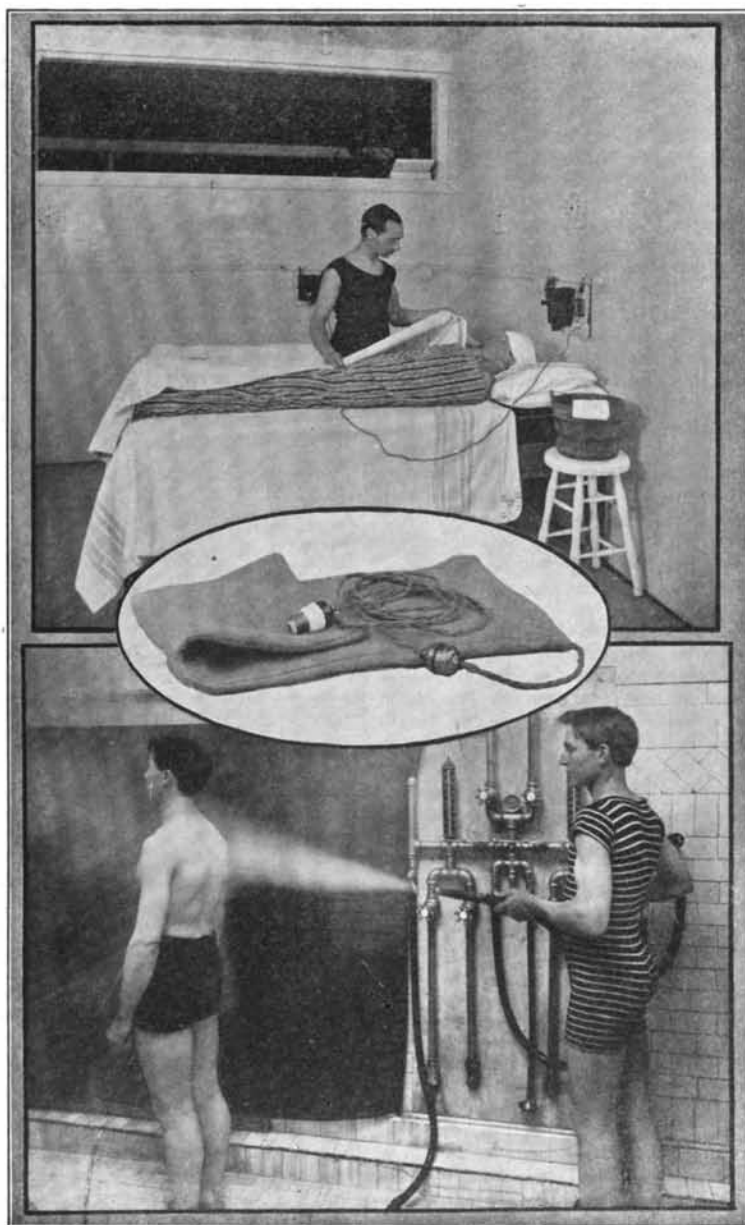
NEXT to hydrotherapy, there is no known therapeutic means which may be effectively employed in so large a variety of chronic maladies as those which utilize the miracle-working energy of light. The phototherapy department of the Sanitarium employs both the solar light and the electric light. In summer time, solar light is used both direct and after filtering through a blue glass screen (to diminish its intensity when required). In winter time, the arc light is chiefly relied upon as a source for the actinic rays. Phototherapy, first systematized and scientifically studied and applied at the Battle Creek Sanitarium, has proved a wonderful curative agent.

Electric lamps of 10,000 candle power act with greater energy than ordinary sunlight in stimulating the skin and nerves to normal action. Electric light is in fact resuscitated sunlight. The immense arc lights in the phototherapy department produce sunshine whenever wanted, day and night. Sunburn and tanning of the skin is more easily produced by these arc lights than by exposure to actual sunlight, and with the same curative and stimulating effects that follow real sunburn. In the outdoor gymnasium is offered the advantage of the outdoor life, exposure to air and sunshine; in the winter, the benefits of sunlight may be secured with more convenience by means of the arc lights.

By repeated applications intense pigmentation is produced; in some instances the skin has been darkened to such an extent by this means that the individual might easily be mistaken for a mulatto or an Indian if only the color of the skin were regarded. The improved circulation of the skin which accompanies the pigmentation is always attended by relief from a multitude of disagreeable symptoms, and when these general light applications are supplemented by other indicated physiologic measures, proper regulation of diet and general habits of life, multitudes of cases incurable by other means are in the course of a few months restored to excellent health.

Local applications of light produce equally





The Thermophore and the Vapor Douche

pronounced beneficial effects. Applications of the incandescent light may be made by means of the photophore, which consists of a mental cover enclosing one or more electric lamps. Lamps of any power desired may be employed.

#### The Electric Light Bath

The electric light is one of the most important additions to the curative art. The most celebrated use to which it is put at the Sanitarium is in the electric light bath. It is here that the incandescent light was first utilized as a therapeutic means. Here the first electric light bath was constructed. The original model devised and still in use here has been closely followed by those who have employed this bath in various parts of the world. At the present time, this important therapeutic means is recognized and utilized

by progressive therapeutists in all civilized countries. Thousands are in use in the leading hospitals and sanitariums of both Europe and America.

The electric light bath has been found of inestimable advantage in dealing with all classes of chronic invalids. Its chief therapeutic value lies not so much in its eliminative effects as in its influence upon the circulation. Under the influence of the general electric light bath the skin is filled with blood. The stimulation of the sweat glands is incidental. The perspiration has some value through its influence upon general metabolism, but the amount of toxic matters carried out through the skin is exceedingly small. The complete filling of the skin with blood removes the disabling congestion of the liver, stomach, spleen, and other internal parts.

Electro-thermophores of various sorts are also in use. The electro-thermophore consists of pads, compresses, or blankets in which wires are interwoven which are heated by electricity. Scores of these are in constant use here.

#### The Combined Light and Electric Bath

In the ordinary electric-light bath the patient receives only light rays which fall upon the skin and penetrate to greater or less depths. In the combined bath, electrical currents, preferably the sinusoidal or the high frequency current, are sent through the body in various directions or localized in individual parts as may be desired. Most excellent results are attained by the use of these two most powerful agents, especially in cases of obesity, diabetes and rheumatism.

#### Kindness Shown by Sanitarium Helpers Remarkable, Says Cincinnati Visitor

Mr. Joseph Mundhenk, of Cincinnati, has been spending the past three weeks at the Sanitarium with his brother, William Mundhenk, who recently underwent an operation. Mr. William Mundhenk was formerly paying teller in the savings department of the Western German Bank in Cincinnati. In chatting about the Sanitarium Mr. Joseph Mundhenk said: "Of course I am stopping at the Sanitarium, not as a patient, but a visitor merely, so perhaps I am not so competent to judge the institution as some others, yet I cannot refrain from remarking the extraordinary kindness which prevails among the physicians and nurses; in fact, all the employees of the place. It means a great deal to a sick person to have those around him apparently interested in him and his welfare. I am glad that my brother has had the advantages of so admirable an institution."

#### A Remarkable Rendition of the Messiah

ONE of the rarest treats of the year was the presentation of "The Messiah" in the Sanitarium gymnasium, December 17th, by the Amateur Musical Club, under the direction of Professor Edwin Barnes and the local orchestra, recently recruited by Mr. Arthur Bryce, with Miss Maude Russell at the piano. The soloists were Mrs. C. S. Gorsline, soprano; Mrs. Joy C. Hubbard, contralto; Mr. Marshall Pease, tenor; Mr. George B. Dolliver, basso. The audience was large and appreciative, and frequent applause greeted the efforts both of the chorus and of the soloists. Many who had heard Handel's composition numberless times declared this rendition of it to be most excellent.

Mr. Pease of the Detroit Conservatory, was the only out-of-town soloist. He was a guest of the Sanitarium while in the city. In commenting on the event he paid the following compliment to the local singers: "I was delighted and surprised to find such a professional quality among singers whom I had been informed were amateurs. It was the most accurate singing of 'The Messiah' I ever heard."



## COMES TO SANITARIUM TO GAIN STRENGTH FOR EUROPEAN TRIP, SAYS WIFE OF FAMOUS AUTHOR

MRS. GRENVILLE KLEISER, of New York City, is sojourning at the Sanitarium and purposes remaining until after the holidays, when her husband will join her. Mr. Kleiser, it will be recalled, wrote "The Development of Power and Personality," "Public Speaking," and other works on public speaking. He also founded the Kleiser public speaking correspondence course conducted by his publishers, Funk & Wagnalls Company.

Mr. and Mrs. Kleiser are great travelers, going every year to Europe and traversing their home country in the interim. They first came to the Sanitarium last June, the institution having been recommended to them by a friend, a Wall Street broker who had been a patient here and received great benefit from the treatment and diet régime. They were enroute to the Pacific coast and after a two-months' outing there returned to the Sanitarium.

"I think the Sanitarium a wonderful place," said Mrs. Kleiser. "Last year we stopped at an institution in England, but neither it nor any other of which we have any knowledge can equal this Battle Creek institution. Its equipment is marvelous. And then the diet, the quiet and the regularity of life are great aids to recuperation. One really learns how to live, and that one thing is worth a visit here. You know I came to gain strength for our spring trip to Germany. One needs to have good health for such an undertaking."

### "Actions Speak Louder than Words," Says Sanitarium Friend

J. W. Wiltshire, of Lynchburg, Va., traveling salesman for a large New York firm, expresses his opinion of the Sanitarium

thus: "Actions always speak louder than words, and as this is my fifth visit to the institution you can readily see that I am extremely enthusiastic about it. I have nothing but admiration for the management of the institution and the principles taught by it. The diet I find extremely palatable. In fact, I never come with the feeling that I am to be deprived of the good things of life. I admire the skill with which the institution handles the patients: it enables us to get out of ourselves by keeping busy with treatment and exercise."

### A New Journalistic Enterprise

THE students of the Normal School of Physical Education have published the first number of a new journalistic venture, *The Normal Pulse*—monthly, eight pages, and very creditable. The work, aside from the printing, is done entirely by students, who thus announce the purpose of the paper: "Its function is indicated by the name itself—it is the index of what might be termed institutional conditions—the infancy and childhood of the school is passed, the period when rapidity of pulse is so great that a few beats gained or lost has no practical significance. We have safely passed through all minor contagious diseases of immaturity, and have settled down into the steady rhythmic beat of college spirit, whether it relates to social ethics, literary effort, college yells and songs or athletics. We have passed those acute stages of 'prep' jiggy yells and songs and athletics and social life, and have come to the full realization of manhood and womanhood and the real leadership involved in our chosen profession, and with this realization, we have laid away childish things. Our paper springs naturally out of a mature consciousness of power and need for its expression."



## The Battle Creek Sanitarium and Hospital Training School for Nurses

The Sanitarium School offers a two-year course of instruction in nursing for men. Diploma entitles the graduate to registration as a trained nurse. Courses of study include, besides ordinary medical and surgical nursing, the many scientific methods of treatment for which the Sanitarium is noted.

An unequalled opportunity for practical experience as well as thorough theoretical instruction; an excellent preparation for a medical course.

Only men of good character and habits admitted.

Prospectus describes fully the course and requirements

For particulars address

**The Battle Creek Sanitarium and Hospital Training School for Nurses**

Box A-65

Battle Creek, Mich.

## Many Times Better than a Turkish Bath—Tones the Entire System

You can't be healthy unless you sweat. Business men—busy women—don't get enough exercise and sunlight to make them perspire as nature demands. Consequently their bodies clog with poisons. Sooner or later this clogging brings disease and debility. The Battle Creek Electric Light Bath is a speedy relief and sure prevention. Used in Sanitariums and Hospitals the world over.

### Battle Creek Electric Light Bath



now in thousands of homes, installed in bathroom or bedroom—simple, always ready, gives a thorough bath at a cost of 4c—no attendant needed. Rests every muscle, refreshes brain and body. An invaluable regulator of the Family Health.

#### Book of Treatments Free

Send for it. Explains how to overcome nervous troubles, rheumatism, stomach, bowel, liver and kidney disorder—obesity and anemia. Professional women use the Battle Creek Electric Light Bath for its wonderful tonic and skin beautifying results.



**Frees the Body from Poisons—Used in Great Sanitariums**

Battle Creek cabinets are built to last a lifetime—large upright and small folding styles. Send for Free book of Home Treatments and full details. Every cabinet Guaranteed and shipped on

**10 Days Trial**

**SANITARIUM EQUIPMENT CO., 99 West Main St., Battle Creek, Mich.**



Dr. Carrie Staines spent Christmas with her brother in Fenwick, Michigan.

Mr. and Mrs. S. R. Ingham, of New York City, are guests at the Sanitarium.

Dr. Will Walter, of Chicago, is a recent arrival at the Sanitarium. Doctor Walter brought his wife and Mr. and Mrs. W. E. Barrett, of Evanston, Illinois, for treatment.

Dr. C. C. Hubley, recently called from private practice in Illinois to join the Sanitarium medical staff, has arrived with his family.

Mrs. Dora Samuels, of New York City, has come to the Sanitarium for treatment. She was a patient here several years ago and finds many changes throughout the institution.

Miss Lulu Viagofski, of Wilmington, Delaware, who was a nurse at the Sanitarium fifteen years ago, returned recently for treatment and is now assisting Miss Carrie Zahn in the women's medical office.

Mr. Henry R. Colby, of Dayton, Ohio, has been paying a brief visit to his father, Rev. H. F. Colby, also of Dayton, who recently underwent a surgical operation at the Sanitarium.

Mrs. N. O. Boyd, who has been a patient for some time, has returned to her home at Greenville, Indiana. "I am going home so much better than I ever thought possible!" said she on her way to the train.

Mr. Grenville Kleiser has arrived at the Sanitarium to spend the holiday week with his wife, who has been sojourning here for some weeks. Mr. Kleiser was formerly an instructor in Yale, but now devotes all his time to the writing of books on public speaking and instructing pupils in the art.

Dr. Leslie Frazier returned to join the staff of Sanitarium physicians Wednesday, the 18th. Doctor Frazier has been a member of the staff before, but for some time has been engaged in private practice in Vallejo, California.

Miss Helen Nussbaum has returned to her home in Marion, Indiana, following an eleven-weeks' stay at the Sanitarium. "I came here with the intention of being cured and stayed until I was," she said on leaving. "I can assure you this will be a happy Christmas for me."

Mrs. F. F. Ide of Kansas City, is a patient at the Sanitarium. Mrs. Ide is a sister of Mr. J. L. Loose, of the Loose-Wiles

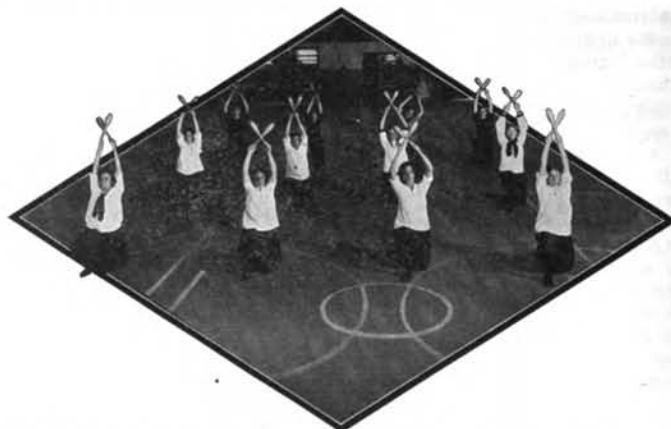
Biscuit Company, the manufacturers of Sunshine Dainties. Mr. Ide and Mr. Loose expect to visit the Sanitarium during the holidays.

Dr. J. H. Kellogg was in Ypsilanti Tuesday, the 17th, where he delivered a lecture on health before the students of Cleary College, in the afternoon and the members of the Twenty Club in the evening. The Twenty

Club is an organization of prominent Ypsilanti professional and business men.

Mr. James Van Culen, President of the Cincinnati Ice Company, has been at the Sanitarium since before Thanksgiving, recuperating from a severe attack of typhoid fever. He is pleased with the city and has nothing but words of praise for the institution.

Friends about the Sanitarium hear occasionally from Miss Charlotte Dancey, formerly assistant to Mrs. M. S. Foy, Superintendent of Nurses. Miss Dancey responded to a call to become superintendent of nurses in the Latter-Day Saints Hospital in Salt Lake City, Utah. On her staff are the four nurses who came here to receive their training in the Sanitarium school.



## NORMAL SCHOOL OF PHYSICAL EDUCATION

### A Splendid Opportunity for Men and Women

The Normal School of Physical Education offers a practical two years' course to Physical Directors and those who wish to fit themselves for the profession. Each school year comprises thirty-five weeks and an eight-weeks' summer course.

This school enjoys many extraordinary advantages because of its affiliation with The Battle Creek Sanitarium. The equipment, including laboratories, indoor and outdoor gymnasiums and swimming pools, playgrounds and athletic field, is unsurpassed.

In addition to the regular studies, students of the school have special advantages in the study and practice of Physiology, Anatomy, Hygiene, Chemical Analysis, and the various methods of treatment which have made this Institution famous.

Tuition for full year \$100, including Summer School; for rest of the year, \$75. For Summer Term alone, \$40; without electives, \$25. Board \$3.00 to \$3.50 per week in addition. Unusual opportunities are given by special arrangement for earning money toward expenses. Two \$100 competitive Scholarships open to High School graduates.

For full particulars and catalogue, address

Wm. W. HASTINGS, Dean,  
THE SANITARIUM, Box B-65, Battle Creek, Mich.

N—S—P—E

"I want to say one thing," remarked a patient the other day, "and that is that, sick or well, I shall spend next Christmas at the Battle Creek Sanitarium. I have more of the Christmas spirit in my heart this year than I have had since my boyhood days. The place seems to be filled with it. Everybody looks happy, everybody is happy."

The Sanitarium Christian Endeavor Society has raised sixteen dollars among its own members and friends and will send this as a Christmas offering to the Sanitarium Dispensary in Chicago, in order that it may bring a bit of cheer into the lives of the very poor in that vicinity.

Dr. Florence McCormick, of the High Park Sanitarium, Toronto, arrived Monday to spend the holidays with friends at the Sanitarium. Dr. McCormick is a graduate of the American Medical Missionary College, and is now associated with her husband, Dr. W. J. McCormick, in the management of a sanitarium in Toronto which adheres to the same principles employed at the Battle Creek Sanitarium.

Miss Marguerite Andress, who since graduating from the State Normal at Ypsilanti, has been taking a special course in dietetics in the Sanitarium School of Home Economics under Miss Lenna Cooper, has just accepted a call to become head dietitian in a large hospital in Bismarek, North Dakota. She enters upon her duties January 1st.

Bishop W. S. Lewis, recently returned from China mission fields, spent a few days at the Sanitarium last week. He has already raised a \$300,000 fund for the furtherance of educational work in Foochow, China, and is now turning his attention to the raising of another, this a \$500,000 fund. Bishop Lewis will return to China soon but expects to be able to attend the fifth Medical Missionary Conference that is to be held in the Sanitarium, December 31 to January 7, inclusive.

Mrs. M. S. Foy, superintendent of nurses, has returned from Lansing, where she attended a meeting of the Michigan State Board of Registration of Nurses, of which she is a member, and of the Legislative Committee of the Michigan State Nurses' Association. The purpose of the conference was to consider amendments to the State law governing examination and registration of Michigan nurses.

Dr. Charles J. Stauffacher, night physician at the Sanitarium, leaves January 1st for South Africa, where he will labor as a medical missionary. His wife and little boy will accompany him. Doctor Stauffacher was a student in the American Medical Missionary College and received his degree from the Physicians and Surgeons College in Chicago, last June. Doctor Hubley will take his place.

Mr. and Mrs. J. S. Templeton, of Chicago, are stopping at the Sanitarium, the former recuperating from a severe illness. Mrs. Templeton is loud in her praise of the Sanitarium. "Aside from the treatments there is

so much going on to take up one's time," she says. "It is a busy, busy place. And then, two, the diet is different. In other sanitariums they tell you to eat everything while you are under treatment, that it does not matter so long as you do not overeat. In Battle Creek the method is different; it is new to me, but I like it very much."

The pupil nurses in the class of 1914 gave a costume party Saturday evening in the parlor of the nurses' dormitory, West Hall. Their guests were the young men who have joined their class to complete the course with them. The hours were whiled away with games, and readings given by Mr. D. B. Buttons and Miss Nina Merritt. Mrs. M. S. Foy, superintendent of nurses, was the guest of honor.

Mr. and Mrs. H. P. Thornton, of St. Joseph, Missouri, are here on a visit to Mrs. Thornton's brother, Mr. J. Ross, a patient at the Sanitarium. This is their first visit to the Sanitarium and both are much impressed with the institution. "No one could find fault with anything in the Sanitarium," says Mrs. Thornton. It is certainly a wonderful place.

I have always been fond of fruits, nuts and vegetables and the menus here please me very much." Mr. Ross is a leading hardware, and wood and coal dealer in St. Joseph, and since his health failed him has spent much time in the Sanitarium. He and Mr. and Mrs. Thornton leave soon for California, where they will spend the winter months.

The Sanitarium has been entertaining a most distinguished guest in the person of Dr. F. Penny, of London, England. Doctor Penny is at the head of a sanitarium run on the Haig principles—that is, no food that produces uric acid is ever served, the institution having been founded by a wealthy patient of Dr. Alexander Haig, the world-famed dietetic authority, and author of a work on uric acid that is regarded as a classic by the medical fraternity.

Doctor Penny is a keen student of dietetics and is making a tour of this country with a view to acquainting himself with American dietetic methods. Though he stopped in Battle Creek but a brief while, he acquired, he said, a great many helpful impressions and new ideas, not alone regarding dietetics but also treatments by natural means.



## COURSE for DIETITIANS

There is an ever-increasing call for trained Dietitians and Culinary Supervisors. A growing interest in the science of Domestic Economy and Hygiene has created this new and dignified profession.

The Battle Creek Sanitarium School of Health and Household Economics offers very unusual opportunities for training for those desiring to fill positions as Dietitians in Hospitals, Sanitariums and other Institutions. Courses of study include advanced cookery, dietetics, hygiene and institutional methods and management.

Nowhere are such exceptional advantages for training in all branches of Domestic Science work to be found. The unsurpassed facilities of the Sanitarium, including the splendidly equipped laboratories, offer unusual advantages for practical experience and useful observation. Graduates are in great demand.

Students are given a special opportunity to meet a large part of their expenses by employment of a character that will aid them in their training, by arrangement. For prospectus address—

### THE BATTLE CREEK SANITARIUM SCHOOL OF HOME ECONOMICS

Lenna F. Cooper, Director. Box C-65, Battle Creek, Michigan.

# The Battle Creek Idea

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VOL. VI JANUARY 1, 1913 No. 1

## Why Not Put a Tax on Tea?

A REVISION of the tariff is one of the first tasks to be undertaken by the new Democratic administration. It is to be hoped that Congress will be wise enough to restore the duty on tea and coffee. The Republican party placed these two articles on the free list because they were not produced in this country, and hence no industry was benefited by the tax on them. At that time, tea and coffee were generally regarded as ordinary foods, and the reduction in their cost following the removal of the tariff was looked on as a triumph of beneficent legislation. But people have learned something in a generation. Not only physicians and scientists, but the laity as well, are coming to realize the widespread harm that is done by these two insidious foes. Strong drink and tobacco are used chiefly by men, while tea and coffee invade the home and attack also childhood and womanhood. This country has reached a stage of civilization where it ought, for purposes of taxation, to treat these poisons just as it does tobacco and whiskey. The aim in fixing the internal revenue and customs rates on these articles is not only to raise money but to discourage their use. The tax on whiskey is placed at the highest possible point that will not offer an undue incentive to illicit distilling. Similarly, tea and coffee should be subject to a substantial impost, so as to raise their price and lessen their sale. Cereal substitutes for coffee are now made so palatable that they form a wholly acceptable article of diet. The caffeine toppers may give up their noxious addiction without sacrificing anything but the nerve-weakening, disease-producing drugs. Harmless beverages will yield adequate and rational enjoyment.

One factor that should incline Congress to favor a tariff on coffee is the action of the Brazilian Government in controlling the production and sale of the berry in that country, so as to increase its price. Brazil is the largest grower of coffee in the world, and consumers in this country have had to pay tribute to the skilful manipulation of the South American statesmen. A tariff on coffee would be an effective measure for cutting down the profits of the Brazilian producers.

The mere agitation of this subject will do a vast deal of good. Men have utterly changed their attitude toward alcohol in the last quarter of a century, and a strong movement against the use of tobacco is discernible. Tea and coffee are next on the list as scourges of mankind. They too will come under legislative disfavor as the campaign of education proceeds. It would mean a whole lot for the

people of the United States if Congress, by taxing these two articles heavily, should officially declare them, like whiskey and tobacco, to be public enemies.

## The "Outlook" Favors a Federal Department of Health

IN SUPPORTING the arguments urged by Dr. Earl Mayo in behalf of a federal department of health, the *Outlook* offers some unanswerable arguments of its own. "If a father comes home from business to find one of his children seriously ill," says the editorial in question, "he would not treat the matter as he would a business question. That child's illness is a bigger and more important matter to him than any mere question of dollars and cents. There is only one thing that he regards as of more consequence than the health of the members of his family, and that is their character and reputation. When illness enters his household, he needs no further argument to persuade him that human life is more valuable than property."

"And yet if Americans were judged by the government they have made for themselves, they would appear to place a higher value upon property than upon human life. The federal government is very well equipped, on the whole, to help farmers protect the health and lives of cattle; but it is very badly equipped to enable the American people to defend their own health and their own lives."

The *Outlook* answers the two arguments that are most frequently raised against a department to do for men and women what the Department of Agriculture does for cattle; namely, the propriety of the federal government to engage in health propaganda, and the danger of persecution of schools of medicine that are regarded as heterodox. Regarding the former contention the writer says, "There is no question of the right of the federal government to conduct such a department. It has as much right, for example, to put up barriers against disease as it has to put up barriers against goods of foreign manufacture. Moreover, it is exercising its right already through various disconnected agencies, such as the Public Health Service and the officials who are engaged in the enforcement of the Pure Food Law. *The question is not*" (the italics are ours) "*whether the federal government shall exercise the right or not, but whether it shall exercise that right intelligently and effectively by means of a single, unified, administrative body devoted solely to matters of health.*"

The second objection, urged with fanatical zeal by certain schools of medicine whose chief concern seems the parading of their so-called "unorthodoxy," is as pointless as the other. "With the work of such a Department of Health," says the *Outlook*, "so-called therapeutic methods, schools of medicine, or schools of healing, have nothing whatever to do." In advocating the department and taking great pains to insist that care be taken that no "school" shall be discriminated against, "one might as well say that in establishing the Bureau of Chemistry there should be no discrimination against or for the practice of alchemy; or in the work

of the Geodetic Survey there should be no discrimination for or against astrology. The Bureau of Chemistry is concerned only in ascertaining and acting upon the facts of the science of chemistry. The Geodetic Survey has only to take into account the scientific work of geographers, mathematicians, and astronomers. And so the sole basis of such a department of health as is proposed should be, and must necessarily be, the facts of science as ascertained by the scientific methods of the laboratory—in other words its function is to acquire and distribute scientific information relative to health.

Reasoning of this kind is unanswerable. Legitimate methods of healing have nothing whatever to fear from the aggressive administration of a federal health department, and no one is better aware of this than quack practitioners of dangerous systems of "healing," who by a great hue and cry about persecution attract the sympathy of well meaning but misguided people, these in turn setting up obstructive tactics that make their influence felt in Washington, and nothing, of course, being accomplished. What every man and woman should do, as the *Outlook* suggests, is to give concrete expression in the form of a federal health department to the concern they feel when illness enters the family.

## Sanitarium W. C. T. U. Holds Christmas Bazaar

The Sanitarium W. C. T. U. held a Christmas bazaar in one of the parlors between the hours of 2 and 6 Tuesday, the 17th, affording many the opportunity of purchasing gifts in the fancy goods line. The students of the Domestic Science class contributed bread and a variety of dainties, together with a variety of choice homemade candies. The proceeds from the Domestic Science contribution will be sent to the committee having in charge the raising of a \$100,000 fund to be known as the Ellen Richards Memorial Fund. This movement is being furthered by the American Home Economics Association and schools of domestic science all over the country are contributing thereto. The fund is to be a permanent one, the proceeds of which will be used to establish lecture bureaus, publications and institutions along domestic science lines. Ellen Richards started the Home Economic movement in America and was president of the association up to the last two years of her life, when she was made honorary president.

The Helpers' Social held in the gymnasium Thursday evening, the 19th, was a very enjoyable event. The Sanitarium band gave an excellent program and some motion pictures were shown descriptive of life in and about the institution. One portrayed the walking party as it started out on a tramp, climbing hills, wending its way along country highways, following trains through woodland stretches, and crossing streams. A decidedly homey appearance was given the great hall by the individual grouping of tables and chairs, and those in charge of the affair received much praise for their efforts. Delicious refreshments were served.



## Sanitarium Charity Drives Wolf from Many Doors

The food dispensary, which was turned over to the nurses' department two weeks ago has twenty-three on the list of patrons, eighteen coming regularly. The children looked after number seventy-nine. This philanthropy is a part of the work of the medical dispensary and has been maintained for several years. The food remaining in the kitchens each day after the noon meal is carried in big receptacles kept specially for the purpose to a little cottage at the foot of Barbour hill and distributed to the waiting patrons around the hour of four. Everything appearing on the Sanitarium menu goes to the dispensary, in lots small or large, just as the supply and demand vary. All is of the very best quality. Aside from the regular food, cereal coffee and other family supplies are frequently given out in the baskets.

Patrons are always eagerly waiting for the door to be unlocked. There are hoary-headed men and women; scantily clothed younger women with babies in arms and other tots clinging to their skirts; boys and girls who have been made prematurely old through reverse of family fortunes. Apart from the giving of food to local families, thousands of barrels of crackers and zwieback have been sent to orphans', old ladies' and workmen's homes in Chicago and New York. The Kellogg food factory contributes granose and rice biscuits and cereal coffee. The Sanitarium contribution includes crackers, too, by the barrelfuls.

The venture was small in the beginning but has grown to proportions surprising to those with whom the idea originated. There are women by the score whose little flock would go to bed hungry were it not for the daily basket; penniless widows and wives left destitute by runaway husbands, all struggling to do what lies within their power to keep the family together, yet whose earnings are too meager to pay rent and buy fuel, clothes and food.

## Yogurt in Antiquity

DR. A. L. CANNON, of Lalgarh, India, writing to the *American Journal of Clinical Medicine*, calls attention to the fact that the inhabitants of the region now called Bulgaria were noted in ancient times for longevity as they are at the present day. He quotes as follows from Cowper's translation of the *Iliad*:

" . . . . . on that land looked  
down remote  
Of the horse-breeding Thracians, of the  
bold  
Close-fighting Mysian race, and where  
abide,  
On milk sustained and blessed with  
length of days,  
The Hippomolgi, peaceful, just and  
wise."

The use of milk fermented with the *bacillus Bulgaricus*, known as "yogourth" in Bulgaria, as "madzoon" in Armenia, as "Leben" in Egypt and as "dhaddi" in India, is evidently a practice which in oriental countries has prevailed from prehistoric times.



"Figure 1 shows the subject under test, lying on a couch breathing into and from the apparatus without, however, being confined in a chamber."

## RESPIRATION CALORIMETER DEvised BY SANITARIUM EXPERT NOW IN SUCCESSFUL OPERATION

THE exact studies in nutrition carried on by the late Doctor Atwater and by Doctor Benedict were made possible by the use of the calorimeter, or "iron box," as it is called, a chamber in which subjects under experiment are hermetically sealed up, often for as long as three weeks, the air of the chamber being supplied with oxygen as fast as this element is consumed, and impurities being removed from the air by special apparatus connected with the calorimeter.

This device marked a new era in the study of dietetics, a vast amount of accurate information being obtained which before was entirely unknown. By it numerous theories concerning nutrition, assumably well established, were proven to be wholly erroneous. It was found, for example, that a man engaged in the hardest kind of mental work actually consumes no more energy, hence requires no more food, than a loafer, a fact of great practical importance to sedentary people, who often fancy that because they are working their brains hard they ought to work their stomachs equally hard. All this because the respiration calorimeter enabled the experimenters to measure accurately the amount of energy and heat generated by foods of different kinds, and the amount of energy consumed in various conditions of work and idleness.

Doctor Benedict, associated with the great Carnegie Nutrition Laboratory, in Boston, has since constructed an apparatus by means of which similar information can be obtained without confining the subject in a closed chamber. By means of this apparatus it is possible to give a person a meal and then within half an hour, determine just how the body is utilizing the food eaten. This apparatus is of great importance, especially in the treatment of cases of diabetes and obesity, for it shows at once the influence

upon the patient of the food given or the treatment administered. The apparatus proves especially valuable in cases in which it is of the highest importance to recognize grave cases from mild cases at the earliest possible moment. Heretofore it has been impossible to do this. By the aid of this apparatus it is only necessary to have the patient lie quietly upon a couch and breath into the apparatus, which automatically examines the products of respiration, and in the course of half an hour, it will be possible to determine whether his condition is really serious or not, and what are the prospects for securing substantial improvement.

Through the courtesy of Doctor Benedict various members of the Sanitarium staff of physicians visit the Carnegie Nutrition Laboratory methods at frequent intervals, and are thus able to study calorimetric methods at first hand. Something like a year ago Dr. Paul Roth spent some weeks in a special study of the respiration calorimeter devised by Doctor Benedict, and on his return home began the construction of a similar apparatus. After months of careful study he has completed the work, and has tested it until it now registers with the utmost accuracy and faithfulness. It is now ready for practical use, and promises to be a most important addition to the already large number of facilities for diagnosis. The apparatus which he has constructed, and the principles upon which it is based Doctor Roth has described for IDEA readers in the following paragraphs:

### The Sanitarium Calorimeter

"THE intelligent treatment of disease or any of the disorders of the human body requires, first of all, thorough knowledge of the human organism, of its intricate mechanism

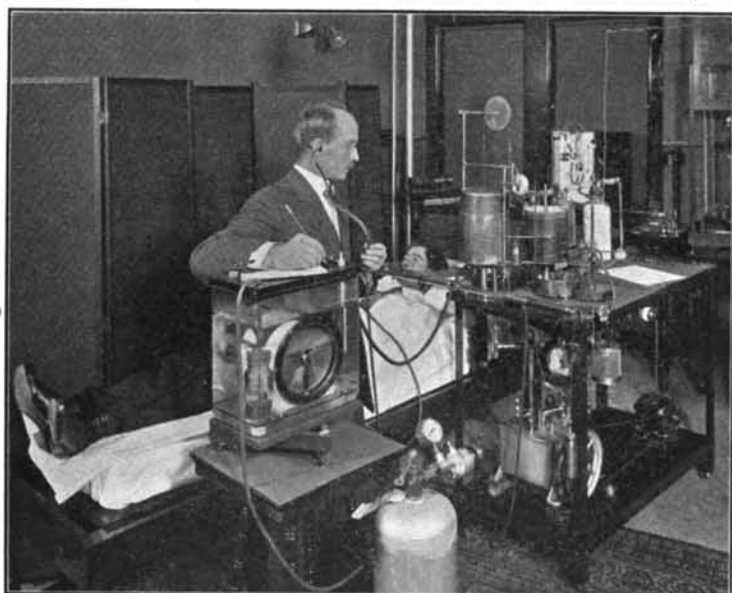


Figure 2. "The air contained in this system is kept in continual circulation by means of a centrifugal pump and electric motor placed on the lower shelf of the table."

and of its many functions in conditions of health as well as of disease. All functions of the body depend upon a continual building-up process from materials taken into the body—food, air, etc.—and also upon a breaking-down process which ends in the throwing out of the body such materials as can be of no further use to the organism. This building-up and breaking-down process is what is called 'metabolism.'

"Just as in the examination of the material used in feeding a furnace and of the substances thrown out in the form of heat, ashes, smoke and gas, we find out whether the furnace is working right, so in the study of metabolism we obtain valuable information as to the character of the work and functions of the body. When we know the amount of the various food materials—proteins, fats, and carbohydrates—taken into the body this is comparatively easy by an analysis of the urine and of the feces. All proteins contain nitrogen, which is eliminated by the kidneys in the direct proportion to the amount of proteins consumed in the body, but the analysis of the urine gives us practically no information as to the utilization of fats or of carbohydrates, because these two food substances when utilized and burned in the body produce carbondioxid, a substance which is almost altogether eliminated by the lungs in the expired air. It is obvious that a study of respiration is invaluable for estimating the character of metabolism.

#### How Metabolism is Measured

"Metabolism is measured directly by the amount of oxygen required to burn up the various food substances in the body. This oxygen, of course, finds its way into the body through the air we breathe. Briefly stated, metabolism can be studied not only through an examination of the urine and feces, but mainly through a careful estimation of the amount of oxygen breathed in and of carbondioxid breathed out during respiration.

"The analysis of the urine especially has been brought to a high degree of perfection and the most improved methods used are as a rule very practical. The estimation of the respiratory changes, on the other hand, has been done under serious difficulties, making it not only impractical but often very defective. Doctors Atwater and Benedict have done remarkable work in devising methods and apparatus by which the study of metabolism can be carried on with a high degree of accuracy. The device consisted of chambers into which the subject under observation could be confined for hours or days with the possibility of keeping accurate record of all material taken in by the subject, in the form of air (oxygen), water and food, and also of the amount of carbondioxid exhaled, together with the amount of heat eliminated, etc. But this required a very elaborate and expensive equipment which could not easily be duplicated. Later on, however, Doctor Benedict, devised a very ingenious and practical apparatus for studying the respiratory exchange and with which most accurate data can be obtained of the degree and character of metabolism.

"Only a brief description of this apparatus, which we have now added to our Sanitarium equipment, can be given here. The accompanying illustrations afford a good idea of the complete device. Figure 1 shows the subject under test, lying on a couch breathing into and from the apparatus without, however, being confined in a chamber. The apparatus, as can readily be seen from the illustration, consists of a series of bottles and instruments all connected one with the other by tubing. The air contained in this system is kept in continual circulation by means of a centrifugal pump and electric motor placed on the lower shelf of the table (see figure 2). The subject is therefore breathing from and into this current of air. The air exhaled by the subject is immediately conveyed to a large bottle containing chemicals which have the property of retaining all

the carbondioxid in the air which passes through it. This bottle, of course, increases in weight with the amount of carbondioxid retained, and by weighing the bottle (on the balances also shown in the left upper corner of Figure 1) before and after the test we can know exactly the amount of carbondioxid breathed out. As the subject is breathing the same air over and over again all the oxygen it contains would soon be absorbed, but a constant supply of oxygen is introduced into the system from an oxygen tank as fast as it is absorbed by the subject. This oxygen, however, is passed through a delicate meter which accurately measures it.

"The essential purpose of the apparatus is to measure the amount of carbondioxid breathed out and of oxygen absorbed by the subject while under observation. By means of a spirometer, which is one of the instruments through which the air current passes, a tracing of the respiratory movements is made on smoked paper placed over a slowly revolving drum. On this same paper a record is automatically made of the total amount of air breathed by the subject.

"It is beyond the scope of this paper to discuss the practical use that can be made by the observations and records taken by this apparatus. Suffice it to say that in all diseases in which metabolism is disturbed a careful estimation of the respiratory exchange would give valuable information concerning the condition of the patient."

#### January "Good Health" Ready

THE January *Good Health* has made its appearance, full of helpful health hints, as usual. The leading article is entitled "Colds and Their Causes," and is the first of two papers on the practical treatment of the common cold. Mrs. E. E. Kellogg contributes a stimulating paper on "Living the Simple Life." Three of the departments, "Question Box," "New Medical Discoveries," and "Pertinent Paragraphs," contain exceptionally interesting features. Of special interest to IDEA readers is an article describing the manner in which the Greeks make what they call "Yiaurt," identical with the Yogurt which appears on the Sanitarium menu.

#### The Progress of Medicine

DISCUSSING the recent surgeons' convention in New York, in which some astonishing feats were performed with the knife, Simeon Ford remarked that "the way of surgery is progressing." "Nobody need ever be given up any more—unless, indeed, it's a case of poor old Sykes.

"There goes Sykes," one of my clerks said to me the other day. "There goes old Bill Sykes, as hale and hearty as he ever was. And yet eight doctors have at various times given him up."

"Ha, ha!" I laughed. "And what did they give him up for, George?"

"He wouldn't pay his bills," the clerk replied."—*Los Angeles Times*.



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## THE MISSION OF THE BATTLE CREEK SANITARIUM AND THE METHODS EMPLOYED

AN ADDRESS BEFORE THE FIFTH MEDICAL MISSIONARY  
CONFERENCE BY DOCTOR J. H. KELLOGG

THE aim of the Sanitarium is first of all to tell the world that the human race is degenerating and that the present race of men is dying; to discover the causes of race degeneracy, and, having discovered the causes, to point men and women to habits of living that will save the race from becoming extinct.

Twenty-five years ago when I first became a member of the Michigan State Board of Health we held sanitary conventions in

of it; otherwise we are doing the race a great damage. I came to the conclusion, therefore, that we must add personal hygiene to public hygiene in order to save the race.

Now that is not a simple thing to accomplish. We are making practically no progress, and unless there is a change the human race is bound to become for the greater part extinct. There are a few people, however, who are going to live, who are going to recognize



We are delighted to present herewith a photograph of the delegates to the fifth Medical Missionary Conference which convenes annually at Battle Creek. Not only is the Conference itself unique among religious gatherings, but the present session was remarkable for the wide area which it represented, delegates being present from nearly every mission field in the world.

various parts of the State, and I soon made the discovery that so far from tending to strengthen the race, our various public health agencies were only serving to keep weak people alive; that all the sanitary regulations did was to prevent the operation of that great law, the survival of the fittest. I found we were actually weakening the race, doing positive harm unless we went a step farther and made a strong man of the weak man. If, for example, we are going to keep a feeble baby alive we must make a strong creature out

the great biological laws that work in eugenics and euthenics—people who recognize the fact that man as well as other creatures must heed the operation of the great law of God, that the soul that sinneth it shall die, that the family that sins shall die, that the race that sins shall die. For we must stop sinning against our bodies as well as against our souls, else our bodies as well as our souls will end in destruction.

These few whom I have just mentioned will form the beginning



of a new race, a new race springing out of the present race. The law of heredity, you remember, assures continually the survival of the fittest when the right conditions are applied. Just to make this plain let me point you to this fact: a black-eyed man marries a blue-eyed woman; the black-eyed man is strong, the woman weak; or, conversely, the blue-eyed woman is strong and vigorous, the black-eyed man is a degenerate; now if they have four children all four have in them the potency of both soundness and degeneracy. Or again, a brown-eyed man, a degenerate, marries a brown-eyed woman, a degenerate, and they have four children; now two of the children will have brown eyes and will have the potency of degeneracy; one will have blue eyes, with the potency of soundness; while one will have black eyes, and will be a degenerate. That is the law. The sins of the fathers are visited upon the children unto the third and fourth generation, but not upon the fifth generation. Why the fifth?—because they have died out, there is no fifth generation.

#### Disease the Result of Physical Sin

So I say, there is going to be a new race, and I want all of you to be represented there. Men and women are living who will be in the new race, and that new race is the thing we are enthusiastic about here at the Sanitarium. We want to get men and women interested in the development of a splendid new race of men that will represent, not something better than God made in the first place, but that will be a better representation than the men and women of the present, of what God made when he put Adam in the garden of Eden and told him how to dress the garden and how to live. If Adam had continued to live the way God told him, we would not have had disease in the world at the present time. For disease is the result of our own sins, and when we cease to do well we begin to degenerate.

Now, while it will take a long time to bring about all that we expect to see accomplished, yet more has actually been done in the last fifty years than I had ever expected to see accomplished and more than I thought it would be possible to accomplish. And the aim of the Battle Creek Sanitarium is to do all in its power to assist the good work.

#### Healing Power is Creative Power

Now, as to our methods, which I can sum up in a very few words. In the first place, we recognize that it is not the rubbing or the compress that cures the sick man, but the power that is within him. The healing power is creative power. It takes the same power to make a man well that created him in the first place. We must have a reconstruction, a recreation, a renovation, a renewal of the old diseased body, and a making of a new body. We must put off the old man of sin and put on the new man. That is true in spiritual things, and it is true as well in the realm of the physical. We must put off the old man of disease and put on the new man of health, and the methods of the institution here are simply methods of rubbing off, scouring off, beating off, melting off, and getting rid of, the old man and

## FIFTH ANNUAL MEDICAL MISSIONARY CONFERENCE CONVENES AT THE BATTLE CREEK SANITARIUM

THE delegates to the Fifth Medical Missionary Conference took the Sanitarium quite by storm. They came from India, they came from China and Japan, they came from the Levant, they came from Africa, and they came from the Americas. In fact, there was hardly a portion of the world that was not represented in Battle Creek last week, and the Sanitarium took on an air of cosmopolitanism even more remarkable than that which usually characterizes it.

The meetings were held, most of them in the chapel, the evening sessions, however, being held in the gymnasium in order to accommodate the large audiences which assembled: for the patients at the Sanitarium as well as citizens of the city took a lively interest in the Conference and attended the meetings as opportunity permitted.

A word with reference to the purpose of the Conference: in the first place, the Conference is interdenominational, and was organized for the sole purpose of encouraging and upbuilding missionary work in the field and a missionary spirit in the home land. The primary object is the promotion of medical missions, but all lines are represented, while the medical is accentuated. The conferences are not legislative or authoritative, but are rather for interchange of experiences and acquaintance. By this means the missionary cause is consolidated and the spirit of fellowship between the various bodies is fostered. The Medical Missionary Conferences are maintained and carried out by an association named the American Medical Missionary Association, which centers in the Battle Creek Sanitarium, the aims of which are suggested by the name. The Sanitarium undertakes to entertain the guests free, while the Association pays the other expenses. The profits are altogether spiritual and social, accruing mutually to the missionary cause at large, and to the Sanitarium workers in their religious life.

#### Five Grand Old Men of Missions

The Conference was fortunate in having that quintette of grand old men of missions, Bishop J. M. Thoburn, Bishop Joseph C. Hartzell, Bishop W. F. Oldham, Dr. Joseph K. Greene and Dr. R. H. Nassau, whom we photographed and present on the following page. These pioneers performed a great service to the Conference in giving of their accumulated experiences of a long life

spent in active work in the field, and by setting the pace, as it were, for enthusiasm and life in the Conference. No one who heard the performance can ever forget the masterly address given by Doctor Greene on "The Mohammedan Crisis," in which he gave a bird's-eye view of the situation in the Near East so far as the national and international status of Turkey is concerned. For an hour and a quarter the venerable Doctor held his audience spell bound by his eloquence and by his marvelous grasp of the situation, and the burst of applause which followed is still to be heard in the Sanitarium corridors, for when two people meet this question is more likely than not to be asked, "Did you hear that remarkable address of Doctor Greene's on the Turkish question?"

#### A Bird's Eye View of the Question of the Crescent

Another noteworthy performance was an address delivered by Bishop Hartzell on Mohammedanism, in which he traced the religion of Mohammed from its rise in the seventh century down through its successes in Asia, Asia Minor, Egypt, Northern Africa, Spain and Eastern Europe, and on down to the present day. The address was characterized by remarkable lucidity, and was stamped by a felicity of phrasing which made it a masterpiece of literature as well as of historical exposition.

#### Dr. L. Duncan Bulkley Addresses Conference on Siam

The Conference was fortunate, too, in having in its midst Dr. L. Duncan Bulkley, who has recently returned from a tour of missionary observation around the world, and who addressed the Conference on the subject of "Personal Glimpses of Medical Missions in Siam." Doctor Bulkley's talk was illustrated with lantern slides, which covered many phases of Siamese life that were new to those of the audience who had not actually studied that land at first hand. Of especial interest to the guests of the Sanitarium were those views showing the wide variety of fruits, vegetables and nuts which enter into the diet of these wonderfully vigorous Siamese, to the almost total exclusion of meat products.

Doctor Bulkley, we might add, is the foremost authority in the United States on skin diseases, his methods of treating psoriasis

building up a new man. Down in the bath room we tear down the old man; we wear him out; we sweat him out, and dispose of him in every possible way. Then up in the dining room at the top of the building we build up the new man and take care to form the new man out of good material, to furnish good bricks for the new house—we do not want any old rubbish to go into this new man we are building, so we put our dining room on the sixth story. So, I say, it is not the bath, it is not the doctor, it is not the nurse,

that does the work, but it is the same power that made him, so that we must cooperate with that power and bring ourselves into harmony with God's laws, physically, mentally and morally, in order that through the accomplishment of God's law—and that is the divine law, both of which are working in harmony in the reconstruction of the new man—we may put off the old man of physical sin and put on the new man, and thus perform our part in the formation of that new race.



and other skin maladies by the use of a low-protein diet in which rice figures largely, having created a good deal of interest in the low protein diet among the medical fraternity at large. Doctor Bulkley was interested in the methods employed at the Sanitarium, and particularly in the dietetic system.

#### Miss Ellen M. Stone Pictures Future of Balkan States

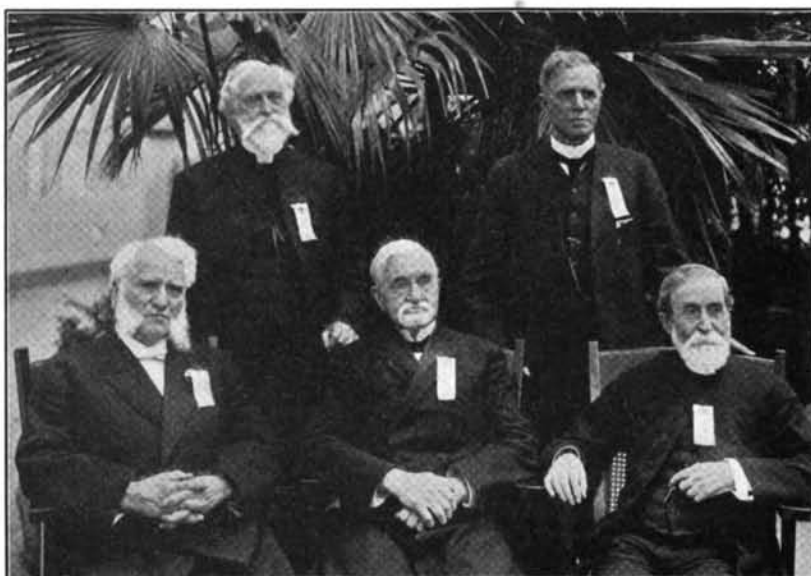
Another visitor, who by her amiable manner and her enthusiasm for medical mission work created a profound impression at the Conference, was Miss M. Ellen Stone, who in 1901 was kidnapped by brigands in Macedonia, and was ransomed by \$65,000 raised by popular subscription in America. Miss Stone delivered an address on the subject of "The Young Giants of the Balkans," which was especially interesting in view of the present struggle between the Balkan allies and Turkey. It is a roseate picture that Miss Stone draws of the future of the Balkan peoples, a future, however, bound to be realized if Miss Stone's enthusiasm for these new states is well founded, and there is no doubt that it is.

Other features of the program were as follows: "Medical Work and Its Aid in a Land Like India," by L. B. Wolf, M. D.; "Work for the Insane in China," by Charles C. Selden, M. D.; "Missions to Lepers in India," by Miss Bertha G. Johnson; "The Training of Missionaries in the Home Land," by Mrs. Lucy Rider Myers; "Superior Advantages of Medical Mission Work in China," by George A. Huntley, M. D.; "Medical Education in West China," by Rev. C. S. Carscallen; "Medical Work among Women in India," by Margaret MacKellar, M. D.; "Thirty Years in Syria," by Ira Harris, M. D.; "Mission Work in Africa by Africans," by Bishop W. H. Heard, D. D.; "Diabetes among High-Caste Hindus," by Robert H. H. Goheen, M. D.; "Thy Kingdom Come," by Rev. Chas. C. Creagan, D. D.; "What the Gospel has done for the Karens," by Miss Augusta Peck; "Witchcraft on the Kongo," by Royal J. Dye, M. D.; "Peculiarities of Hindu and Mohammedan Thought," by Mary W. Bachelor, M. D.

#### Battle Creek Sanitarium Methods Described by Members of Staff

Two sessions of the Conference were devoted to a presentation, by members of the Sanitarium physician staff, of the methods employed at the Battle Creek Sanitarium, as follows: "The Mission and Methods of the Battle Creek Sanitarium," by J. H. Kellogg, M. D., which is reproduced on our first page; "Sanitarium Methods as Applied in Neurological Diseases," by W. H. Riley, M. D.; "In Renal Diseases," by C. E. Stewart, M. D.; "In Gastro-Intestinal Diseases," by E. H. Eggleston, M. D.; "In Cardio-Vascular Diseases," by M. A. Mortensen, M. D.; "In Gynecological Diseases," by M. V. Dryden, M. D.; "In the Care of Surgical Cases, Before, During and After Operation," by R. H. Harris, M. D.; "Physiologic Methods on the Mission Field," by A. J. Read, M. D. The papers were enthusiastically received and elicited favorable discussion and many questions, the visitors expressing freely their gratification at being able to study the Sani-

(Continued on page four)



THE QUINTET OF GRAND OLD MEN OF MISSIONS

Dr. R. H. Nassau

Bishop W. F. Oldham

Bishop Joseph C. Hartzell

Dr. Joseph K. Greene

Bishop J. M. Thoburn

### A FEW FACTS ABOUT THE MEN WHO HELPED TO MAKE THE CONFERENCE THE BEST EVER HELD

#### BISHOP OLDHAM

*Presiding Officer*

WILLIAM FITZJAMES OLDHAM, D. D., born in India, where he reached young manhood, is the son of an English army officer. While engaged in the service of the Indian government as a surveyor he was converted in the great revival movement headed by William Taylor, of California. Coming to America, he was educated in Allegheny college, Meadville, Pa., and in Boston University. Returning to Asia in 1884 he opened a mission for his church in Singapore, where a very successful educational mission was launched. Later on he helped to found the Department of Missions in the Ohio Wesleyan University at Delaware, Ohio. He was then elected a Bishop of Southern Asia, and at the last General Conference was appointed Corresponding Secretary of the Board of Foreign Missions, with headquarters at New York.

#### DOCTOR NASSAU

REV. ROBERT H. NASSAU, M. D., S. T. D., a son of Charles W. Nassau, D. D., was born near Philadelphia in 1835 and was educated at the Lawrenceville (New Jersey) Preparatory School, and at Lafayette College and at Princeton University, from which he graduated in 1854. After spending two years in teaching he entered Princeton Theological Seminary in 1856, graduating in 1859. As a preparation for work in unhealthful West Africa he immediately entered the University of Pennsylvania as a medical student, graduating in 1861. In July 1861, he went to the Equatorial West African Mission of the Presbyterian Board where, for forty-five years, he was variously occupied on the west coast and in the interior as preacher, pioneer, and translator; also making valuable contributions to natural science.

Doctor Nassau was married in 1862 to

Miss Mary Latta, of Philadelphia, who died in 1870, leaving two sons. He was married in 1881 to Miss Mary B. Foster, of Barnegat, N. J., who died in 1884, leaving one daughter.

Since his resignation from his mission in 1906, Doctor Nassau has written several books on African religion and life, and is a member of the National Geological Society and other scientific bodies.

#### BISHOP THOBURN

JAMES MILLS THOBURN was born at St. Clairsville, Ohio, March 7, 1836, of Scotch-Irish parentage. He graduated at Allegheny College in June, 1875, and immediately proceeded to Marlboro, Ohio, where he had been appointed junior preacher on an old-time Methodist circuit. The following spring he was admitted on trial into the Pittsburgh Conference, but before the close of his first year was appointed as a missionary to India, where he rendered fifty years of service. At the General Conference of 1888, he was elected "Missionary Bishop for India and Malaysia," and in this great field he served until the meeting of the General Conference in 1908, when at his own request he was granted the relation of a "retired Missionary Bishop." Since his retirement from official duty he has resided in Meadville, Pennsylvania, where his friends have presented him with a comfortable home, and where, in the midst of his children and grand-children he is spending the evening time of a happy life.

#### BISHOP HARTZELL

JOSEPH CRANE HARTZELL, D. D., was born in Illinois, June 1, 1842. He received his Bachelor of Arts Degree in the Illinois Wesleyan University, and later on graduated from the Garrett Bible Institute. At an early age he was ordained to the Methodist Episcopal Ministry. He became Assistant Secretary

(Continued on page eleven)

## SIR HORACE PLUNKETT TO PRESENT BATTLE CREEK SANITARIUM IDEA BEFORE ROYAL DUBLIN SOCIETY

SIR HORACE PLUNKETT, of Dublin, Ireland, member of the King's Privy Council, for twenty years Secretary of Agriculture for Ireland, and leading spirit of the Irish back-to-the-land movement, has just concluded his third visit to the Sanitarium, so impressed has he become with the importance of the methods employed here, especially, as he points out below, in view of their bearing upon the larger question of national health. Before leaving he granted an interview to an IDEA representative, in the course of which he was questioned upon this very point: what he finds at the Sanitarium that induces him to return.

"The reason," Sir Horace replied, "is this: I come back because I have been benefited by the treatment I received before. I believe thoroughly in the Battle Creek idea, and find that keeping in personal touch with the institution is the best way of minimizing the difficulty of following out the system in ordinary life. Moreover, I am deeply interested in the scientific aspects of the work, though I am not myself a scientist. I know of no body of scientific men who are so capable of giving the outsider an inside view of the mysteries of modern science as the staff of the Battle Creek Sanitarium. Since I was here a year ago I have observed a remarkable development of diagnosis by the X-ray apparatus under Doctor Case, by the respiration calorimeter, and by the best cardiograph known to the medical profession.

"I did not leave my work in the old country to come to Battle Creek, but I always take my holiday in the United States, as I have some business interests to attend to and some economic problems to study, and I find it pays me well to take a short rest at the Battle Creek Sanitarium."

### Medical Missionary Conference

Sanitarium system at first hand, since they felt that in a great many disorders such as diabetes, which is due to disturbances in the metabolism, they could introduce Battle Creek methods in the mission field with success.

The delegates to the Conference were, indeed, delighted with all they found at the Sanitarium. A remark made by Doctor Greene, for instance, to an IDEA representative, expresses the feeling expressed by many: "This is the most wonderful place I ever saw. It is remarkable, the ease and little friction with which everything runs, and the fine spirit that prevades every department and that is expressed by every helper. Everyone connected with the Sanitarium has taken so much interest in the Conference! I was especially impressed by the papers on the Sanitarium work delivered by the members of the physicians' staff."

Several of the delegates have remained over with us, to take treatments and to enjoy much needed rest and recuperation,

In view of Sir Horace's interest in the larger aspects of personal health he was asked as to his conception of the relation sustained by the work of the Battle Creek Sanitarium to the growing movement in favor of the conservation of national vitality.

"Obviously," he said, "anything which induces the individual to take a sane view of his health must profoundly affect the welfare of the community to which he belongs, and one might talk indefinitely of the ways in which the popularization of the Battle Creek idea and system might benefit humanity. But there is just now one special question of national importance upon which much useful light is thrown by the Sanitarium and its staff. I mean the rise in the cost of living, out of all proportion to the increase of wages. Even those who do not go the full length of the Sanitarium limitations upon the animal portion of a sound dietary must recognize that a partial adoption at least of the vegetarian principle would enormously decrease the cost of the working family's food. I do not think sufficient attention is given to this aspect of rational living."

"Have you," Sir Horace was asked, "tried to gain adherents for the Battle Creek idea in the old country?"

"Yes, in a general way, among my friends and those I meet in the course of my work. I have been asked in March next to deliver an address to an ancient and learned scientific society—the Royal Dublin Society, upon some subject of my own choosing. I have given in as my title 'Some American Views upon Health,' and I propose to attempt a presentation of the Battle Creek idea as I have learned it as a guest in the institution."

And while we are pointing out the interest which our visitors took in the Sanitarium, allow us to suggest the pleasure which everyone at the Sanitarium felt in administering to the comforts and welfare of the delightful men and women who have been our guests. Their amiableness made it, not a duty, but a privilege. Everyone in every department felt as did the matron of the dining room, who remarked:

"I have just enjoyed looking after their wants in the dining room. They have not given us a bit of work. They were all so kind! No one ever found a word of fault, and it was a pleasure to serve them." The splendid spirit that prevailed was remarked also by the Sanitarium patients, many of whom declared that they had never seen a gathering of the kind pass off more smoothly than did the Conference just past.

The next session of the Conference, the sixth, will convene December 30, 1913, at the Sanitarium. Plans for the meeting are already under way and we are assured by those who have the matter in charge that it will measure up to the very high standards set by the Conference just closed.

## Dr. Newell Dwight Hillis, Noted Brooklyn Divine, Praises Low Protein Diet

REV. NEWELL DWIGHT HILLIS, D. D., who lectured in the First Presbyterian church Tuesday evening, the 7th, was the guest of Dr. J. H. Kellogg at the Sanitarium during the afternoon. Doctor Hillis is a convert to the low-protein diet, and declares that since adopting it he is able to do more than three times the work he formerly performed.

In an interview he said, "I have been living on a low-protein diet fourteen years, eating less and less meat, and I am not only able to accomplish more, so far as my work is concerned, but I am in better health. I consider the Battle Creek Sanitarium a wonderful help to right living."

Behind all this there lies a little story. Fourteen years ago, when Doctor Hillis was en route from Chicago to Brooklyn to take charge of the Henry Ward Beecher church, he stepped off to see Doctor Kellogg and the Sanitarium. On meeting the head of the institution he propounded this question, "Doctor, I have been told you work like a horse. How do you do it?" "I work like a horse," the Doctor replied, "because I eat like a horse; I choose natural food, as does the horse, which means that I use horse sense." Then it was that Doctor Hillis determined to give the method a trial and so well pleased was he with general results that he has adhered to the low-protein diet in the interim and will continue to pin his faith to it in the future.

### Non-Meat Diets of Other Races

MUCH about the diet of other races was told at the Missionary Conference by visiting missionaries. Thus we were told that the Arabs eat large quantities of clover and green wheat, also onions, which grow in abundance. Boatmen eat only bread from the marketplaces, the rest of their food being taken from the fields. Bread is always plentiful and cheap. Dates are eaten in quantities and in many instances are served in grass-plaited baskets. Sometimes a cup of butter will be brought on with the dates, and it is the custom to take a date and dip it in the butter before eating, each guest doing this until he has had enough.

Miss Ellen M. Stone, too, famed as the missionary who was kidnapped by brigands in Macedonia and held for ransom, chatted at the close of one of the conference sessions about yohourt, the Bulgarian dish made from cultures of the *Bacillus Bulgaricus*, and which appears on the Sanitarium menu as "yogurt." "They usually make it over there," said Miss Stone, "from sheep's or buffaloes' milk, which is heavier than cow's milk. The leaven is borrowed from the neighbors much as our mothers and grandmothers used to borrow and lend yeast for bread. The process is simple, but great care has to be taken lest the mass turn to whey. Milk in sufficient quantity is set over a fire to scald, and after the scalding point has been reached is allowed to cool. The leaven, if we may call it such—

(Continued on page ten)

## MR. GRENVILLE KLEISER, WELL-KNOWN AUTHOR AND TEACHER, PAYS HIGH TRIBUTE TO SANITARIUM

THE Sanitarium has had as one of its guests the past few days Mr. Grenville Kleiser, author of several books on public speaking and director of a correspondence course in public speaking with students in every part of the world. A new addition to Mr. Kleiser's activities is a correspondence course in business success which he is engaged upon, and which promises to be unique among courses of this kind. Mr. Kleiser came to the Sanitarium to visit Mrs. Kleiser, who is with us for a rest, preparatory to an extended trip on the continent. On leaving, Mr. Kleiser paid the following tribute to the Sanitarium:

"As a visitor to the Battle Creek Sanitarium, I have been particularly impressed by the quietness and orderliness with which the work is conducted. It is difficult for the casual observer to realize the immense amount of detail which is disposed of in this manner. There is, too, an atmosphere of genial optimism which acts as a beneficent tonic upon even the most hopeless invalid.

"Again, the uniform courtesy on the part of those connected with the institution, and the spirit of patience and helpfulness towards everyone, readily communicate themselves to the patients, many of whom come to the Sanitarium in special need of a mental uplift.

"The physical exercises, under Professor Miller's able direction, are valuable for the tired-out business and professional man, as well as for the invalid, and the system of bath treatments is probably not equalled in any other part of the world.

"A little over a century ago, an eminent English surgeon declared as his conscientious opinion that if there were not a single physician, chemist or drug on the face of the earth, there would be less sickness and a lowered mortality. The Sanitarium advocacy and use of natural treatments is doing much to show that this prejudice against drugs and doctors, while perhaps exaggerated, is not without a foundation in fact. Here men and women are pointed to rational living, and shown how to take care of themselves.

"What has pleased me beyond all else, however, is the constant endeavor to impress upon the patients a realization of the higher healing power within themselves, a power infinitely greater and more efficacious than drugs or human skill. The general system of the Sanitarium is admirable, and it is a constant inspiration to be with the men and women of the institution in their unselfish and consecrated service to suffering humanity."

## A Prominent Chicago Surgeon Studies Sanitarium Methods

DR. BERTHA VAN HOOSEN, a well known Chicago surgeon was a recent visitor at the Sanitarium. She had long been interested in the institution, but had not been able to pay it a visit until she yielded to the solicitation of Miss Georgia A. Filley, one of the Sanitarium nurses. Dr. Van Hooten was able to spend only a day here but she managed to see everything about the place which concerned her profession and expressed herself as being extremely pleased with everything she saw. She found that the Sanitarium was especially well equipped in apparatus for diagnosing disease.

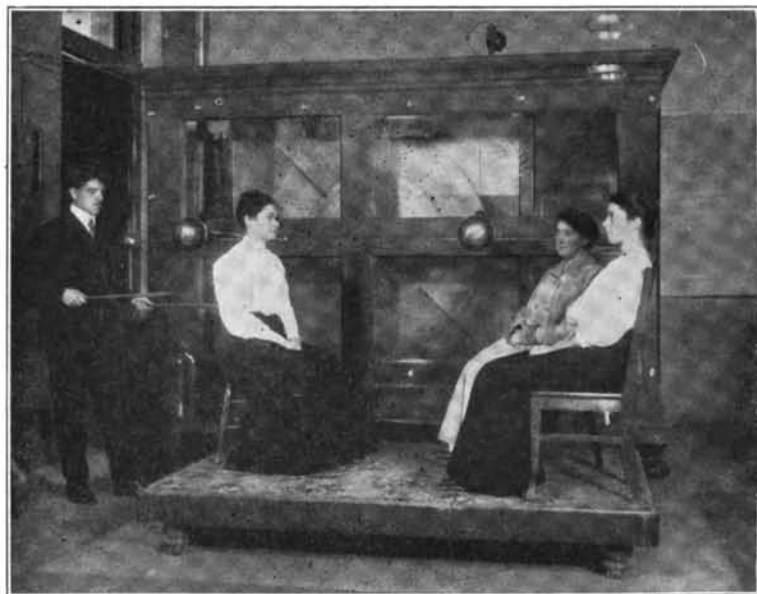
## Insurance Man Spends Winter and Summer Vacations at the Sanitarium

Most people who come to the Battle Creek Sanitarium do not do so until their illness has reached a stage where they must quit work. Mr. H. M. Taylor, representative of the Northwestern Mutual Life Insurance Company, at Wheeling, W. Va., is not one of these. He came here recently for a ten days' stay, although he was in excellent health. He merely wanted a little rest and vacation, and knew that there was no place like the Sanitarium for his purpose. He had been here five years before, and was therefore familiar with the institution. Mr. Taylor thinks that every business man ought to take a vacation every winter as well as every summer, and that he ought not to wait until he is actually ill before visiting the Sanitarium.

"I intend to make regular visits to the Sanitarium in the future," said Mr. Taylor; "I find the diet extremely agreeable, and I believe that the knowledge that I get here will enable me to work off disease and to do more efficient work."

## Visit to Sanitarium an Education

MRS. L. W. TUCKER, of Syracuse, New York, who has been about the Sanitarium for some time as a guest, returned to her home Friday. She is a college-bred woman of great charm and simplicity, one whom it is a pleasure to meet in these days of veneer and unnaturalness. Though well along in years and a grandmother, she possesses perfect health and, best of all, she appreciates the fact. On leaving the Sanitarium she said, of her visit: "As I look about me I thank Heaven I have never been rich in worldly goods. Many blessings there are that come to those just comfortable. One of them is self-denial, and self-denial along certain lines makes for good health. They who are kept from eating rich, heavy foods, including a preponderance of meat, are the better for it. And then the mother who has to fill in the hours with household and family duties is healthier and happier than she who has nothing to do but worry and think about her little ailments, fancied or real. Yes, my visit to the Sanitarium has taught me many things. Among others, I have learned to like the grain and nut substitutes for meat, and have had some shipped back to Syracuse."



THE STATIC MACHINE—THE LARGEST IN THE WORLD

## ELECTROTHERAPY AS APPLIED AT THE SANITARIUM

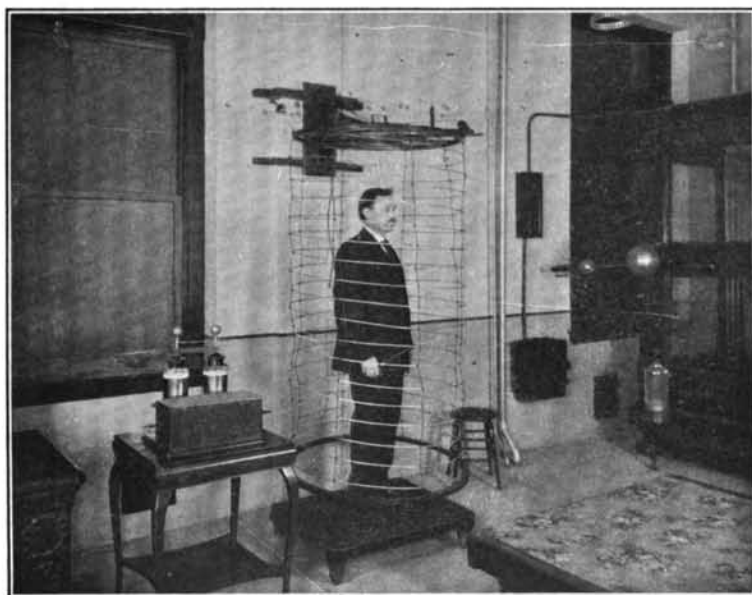
ELECTROTHERAPY is not capable of accomplishing all the marvels that are claimed for it by many enthusiastic electrotherapists, but it is, nevertheless, an extremely valuable therapeutic agent, especially when utilized in connection with hydrotherapy, thermotherapy, and other physiologic methods. By itself its usefulness is extremely limited, but in con-

nection with other physiologic measures this agent is capable of securing most excellent results.

The electrical department of the Sanitarium includes the most elaborate outfits to be obtained. The electrical currents used are dosed with the greatest care, by means of

(Continued on page six)





THE STATIC COIL

## Electrotherapy as Applied at the Sanitarium

(Continued from page five)

delicate instruments of precision, and not only as regards the strength of the current employed, but also with reference to the amount of actual electrical work done during the application in cases in which large currents are used. This important agent is used in all cases in which it is capable of meeting indications present more effectively than other means, or whenever it may assist the work of other agents.

The apparatus employed in this department has been especially made for the institution, and some of it is unique and represents an advance over anything heretofore produced. The static machine is by far the largest in the world. Therapeutic effects are obtainable by these superior electrical facilities which cannot be obtained by less efficient means.

### Electrical Appliances and Methods

Since the days of Volta and Galvani, electricity has been constantly growing in favor as a natural curative agent. Unfortunately, however, until recent years its use was almost entirely in the hands of empirics; the methods were crude and unreliable and the results equally unsatisfactory, but within the last generation the various forms of electrical energy have been studied and their application reduced to a scientific method. The experiments and researches carried on in the Battle Creek Sanitarium have contributed in some degree at least to the accomplishment of this result. Certainly there is no place in the world where the various useful electrical currents are applied with greater thoroughness or efficiency, or with more beneficial results, than here.

Electricity as a curative agent has often been brought into disrepute because of its isolated employment. Used alone it often fails of success; in combination with

a proper regulation of the diet, and especially with applications of water, complete success might have been attained. There are, indeed, comparatively few cases in which electricity alone is capable of meeting all requirements. On the other hand, there are few chronic cases in which this powerful agent cannot render useful service.

At the Sanitarium, electricity is used in the various well-known forms—galvanic, faradic

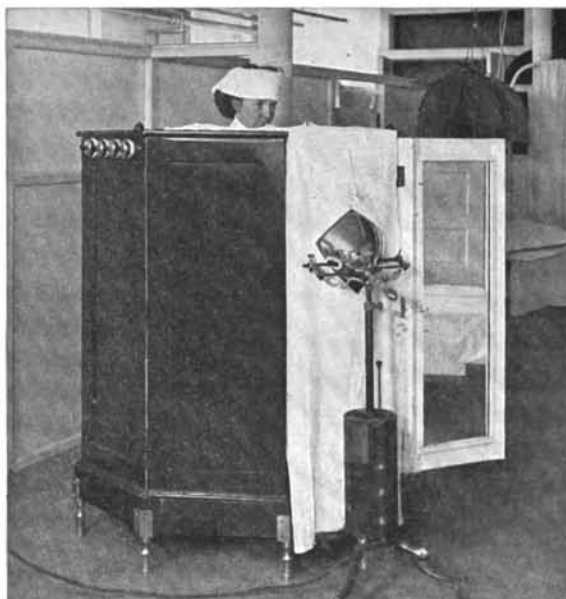
people at once. Exceedingly valuable effects are obtained from this powerful machine in cases in which it is especially indicated. Galvanic electricity is on tap in every room in the house, and is utilized not only for various resolvents, soothing and pain relieving effects, but as a means of heating warming-pads and the electric thermophore, and in making prolonged, if necessary, all night applications of feeble electric currents when this is deemed advisable.

The high frequency current is utilized in cases to which it is adapted. Although the full value of this form of electrical current is not yet clearly determined, it has certainly proved itself capable of producing some very useful therapeutic results in relieving pain and lowering blood-pressure, and in certain forms of skin disease and certain nervous affections. The apparatus for the use of these measures are the best that can be obtained in the United States or Europe, including Ruhmkorf coils and all necessary devices.

### The Sinusoidal Current

The form of electrical current most in use here is the sinusoidal. This is a current the peculiar properties of which were first discovered in this institution something more than twenty years ago and described in a scientific paper published soon after and read at a meeting of the American Medical Association.

Dr. d'Arsonval, of Paris, some years later made the same discovery, and to him is due the credit of having accurately studied and described the current and made its properties known to the world.



COMBINING THE ARC-LIGHT AND THE ELECTRIC LIGHT CABINET

and static currents, but the largest place is perhaps given to that special form known as the sinusoidal current.

The Sanitarium static electrical department is provided with the largest static electrical machine ever constructed. It produces currents of such volume that an electric bath may be administered to a whole roomful of

### The Benefits of Exercise Without Effort

This current has the advantage of being painless in application, even while producing the most vigorous muscular contractions. It is employed as a means of passive exercise, especially for the development of the muscles of the back in spinal curvatures, and the muscles of the abdomen in cases of ente-



## WIFE OF SERVIAN DIPLOMAT AT THE SANITARIUM

One of the most distinguished visitors it has been the privilege of the Sanitarium to entertain is Madame Slavko Grouitch, wife of the *charge d'affaires* of the Servian legation in London, who is touring this country as an emissary of the new Balkan confederation, her mission being to raise funds for the Servian Red Cross Society, these to go to the soldiers, and relief funds for the wives, mothers and children as well.

Madame Grouitch is a West Virginia girl, who during archeological explorations in and around Athens, Greece, met and married M. Grouitch, a young Servian diplomat. Since that time she has secured a firm grasp on problems affecting the struggles and ambitions of her husband's country, her acquaintance with political leaders giving her valuable aid. This militant American-born wo-

man is making a personal appeal to her countrymen for subscriptions to help the brave Balkan states, which have amazed all Europe with their successes in battle. She came to Battle Creek direct from a three-weeks' stay in Chicago, where she raised many thousands of dollars. Her host and hostess, Mr. and Mrs. Cyrus H. McCormick, and their friends gave liberally and funds are still being pledged. Buffalo, too, has given nearly \$1,000, and Madame Grouitch has been importuned to return there. She is loud in her praise of Miss Boardman, head of the American Red Cross Society, and proudly shows tabulated figures to reveal the fact that many thousands of dollars have been apportioned for Red Cross work among the several Balkan States by the American organization.

roptosis. It is also an excellent means of exercising paralyzed muscles when they have not reached a too advanced state of degeneration, and furnishes a convenient method of inducing vigorous passive exercise of the muscles in cases of obesity and diabetes in which the patient is too feeble to take the requisite amount of exercise in walking or other forms of muscular activity.

This current is administered through water in the bath as a tonic. There are also various local and general applications whereby the various nerves and nerve centers and muscular groups may be brought under its curative influence. One of the special features of this current is its painlessness. It is both interesting and agreeable to see the muscles of a patient under its influence contracting with as much vigor as though he were chopping or sawing wood or climbing a hill, although the patient lies quietly on a lounge, experiencing no other sensation whatever than that of motion.

## Treatments for Every Case

"THIS Sanitarium is a wonderful institution," remarked a stranger within our gates, the other day. "I have been all through it and I must say that I am greatly impressed with what I have seen and heard. I had now and then heard of the place, of course, but had no idea that such splendid equipment was to be found here. The country at large should know more of it. Certainly it surpasses all institutions of its kind in many ways. Think of the privileges afforded one here to get well! If one method of treatment fails, there are others at hand. What surprised me most of all was to find a department given over to radium treatments: it had been my impression that one would have to go to Europe to get those. And the X-ray rooms have apparatus direct from Berlin, Vienna, Munich and Hamburg, the latest of their kind! The magnitude of the work done here is simply marvelous."



## The Battle Creek Sanitarium and Hospital Training School for Nurses

The Sanitarium School offers a two-year course of instruction in nursing for men. Diploma entitles the graduate to registration as a trained nurse. Courses of study include, besides ordinary medical and surgical nursing, the many scientific methods of treatment for which the Sanitarium is noted.

An unequalled opportunity for practical experience as well as thorough theoretical instruction; an excellent preparation for a medical course.

Only men of good character and habits admitted.

Prospectus describes fully the course and requirements

For particulars address

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Box A-66

Battle Creek, Mich.

## Many Times Better than a Turkish Bath—Tones the Entire System

You can't be healthy unless you sweat. Business men—busy women—don't get enough exercise and sunlight to make them perspire as nature demands. Consequently their bodies clog with poisons. Sooner or later this clogging brings disease and debility. The Battle Creek Electric Light Bath is a speedy relief and sure prevention. Used in Sanitariums and Hospitals the world over.

## Battle Creek Electric Light Bath



now in thousands of homes, installed in bathroom or bedroom—simple, always ready, gives a thorough bath at a cost of 4c—no attendant needed. Rests every muscle, refreshes brain and body. An invaluable regulator of the Family Health.

### Book of Treatments Free

Send for it. Explains how to overcome nervous troubles, rheumatism, stomach, bowel, liver and kidney disorder—obesity and anemia. Professional women use the Battle Creek Electric Light Bath for its wonderful tonic and skin beautifying results.



**Frees the Body from Poisons—Used in Great Sanitariums**

Battle Creek cabinets are built to last a lifetime—large upright and small folding styles. Send for Free book of Home Treatments and full details. Every cabinet Guaranteed and shipped on

**10 Days Trial**

**SANITARIUM EQUIPMENT CO., 99 West Main St., Battle Creek, Mich.**



MRS. G. C. BREWER and Miss C. Doty, of Belle Plain, Iowa, have been sojourning at the Sanitarium.

PASTOR G. C. TENNEY spent the week of January 5th in Hinsdale, Illinois, the guest of Dr. David Paulson.

MRS. W. C. PLUNKETT, of Adams, Massachusetts, has come to visit the W. B. Plunketts, who have been here for some time.

STUDENTS and nurses have been enjoying the skating on nearby lakes, and so skilled are many of them in the art that they are watched with interest by beves of onlookers.

DR. C. M. RYNO of Watervliet, Michigan, has brought Mrs. E. Butzback as a patient to the Sanitarium. Doctor Ryno is enthusiastic in his praise of the methods employed in the institution.

MISS GRACE HYDE, a senior in the Sanitarium School of Home Economics, has accepted a position as teacher of domestic science in the schools of Keifer, Oklahoma. Miss Hyde's home is Marietta, Ohio.

MR. D. K. CORNWELL, the Sanitarium babies' Santa Claus, found over eighty little dears on his list this year. It is his custom to send each baby in the Sanitarium family a crisp new five-dollar note on Christmas Day. Mr. Cornwell is a former business man of Chicago, who now calls the Sanitarium home.

THE home of the Doctors Roth on Oaklawn was the scene of a merry gathering New Year's eve. Eleven of the class graduated from the American Medical Missionary College in 1904 were numbered among the guests, the hours being whiled away with reminiscences of the old days.

MRS. M. S. FOY entertained Wednesday night her Sabbath-school class, the Philathians, composed largely of nurses and numbering about forty. The guests were received in her apartments in West Hall and then the company repaired to the parlors, where a program of games and music was introduced and delicious refreshments were served.

MRS. M. S. FOY, superintendent of nurses at the Sanitarium, has just been honored by Governor Woodbridge N. Ferris with reappointment to membership on the State Board of Registration of Nurses, her term to expire July 31, 1918. Mrs. Foy has been a

member of this important body for some time and her return is a great compliment to her endeavor and capableness. The first meeting of the board under the new régime was held at the Sanitarium Monday, January 6th.

HONORING Mrs. Rebecca McNaughton, a dinner was given last week by Mrs. L. W. Cleaveland, formerly of the Sanitarium family, now a resident of New Haven, Connecticut, who is on a return visit. East Hall was the scene of the function and covers were laid for seventeen, only the most intimate friends of the guest of honor being included in the guest list.

SAID Dr. Margaret Patterson, head of the Woman's Christian College and Hospital in Ludhiana, India, who visited the Sanitarium as a member of the Missionary Conference, "A friend in America remarked to me recently, 'Oh, how I adore the Oriental religion! It is so beautiful!' I replied: 'Well, I wish you might take it with all it means to the native women.' And from the depths of my soul the speech came. Think of 40,000,000 women being kept by religious tenets from looking out of their own windows even; never seeing a sunrise or sunset; with nothing to do to pass away the hours except to sit for a time on this mat, for a time on that; with never a kind word or look. Why, women haven't even a soul, according to the beautiful Oriental religion."

MRS. REBECCA McNAUGHTON, who has been at the Sanitarium for the past six months, left last week for New York City, where she will be joined by her daughter, then together they will journey to Turkey. Mr. McNaughton did not return with them to the United States but remained in the mission field, where they have been laboring for some time. The center of their interests is about fifty miles out of Constantinople, but Mr. McNaughton is at the head of a school for Armenian boys in the Turkish capital. Mrs. McNaughton will be greatly missed, not only at the Sanitarium where she made many friends, but in the city itself, for she was ever ready and willing to go here, there and everywhere to speak before societies and organizations on the work so near her heart. Each and every one wishes her God-speed on her long journey.

CHARLES C. CREEGAN, D. D., one of the speakers at the Missionary Conference, and a frequent visitor at the Sanitarium, is president of Fargo College, Fargo North Dakota. He has been active in international medical missionary work all his life. He was ordained in the Congregational ministry in 1875 but five years later became superintendent of home missions in Colorado, then labored as

field and district secretary and general agent. He is trustee of a hospital in Talos, Turkey, and of the American Hospital and Training School for Nurses in Constantinople.

PATIENTS and guests were registered at the Sanitarium during December from the following States other than Michigan: New York, Iowa, Ohio, Indiana, Arkansas, California, Illinois, New Hampshire, Massachusetts, Kentucky, Pennsylvania, North Dakota, South Dakota, Wisconsin, Connecticut, Texas, Minnesota, Oregon, Washington, Colorado, Georgia, Oklahoma, Montana, Virginia, Tennessee, Wyoming. Ireland and Canada were represented and visiting missionaries came from Egypt, Arabia, Africa, India, China, Japan, Korea, Siam, Burmah, Turkey, Syria, Malay Peninsula, Mexico and Porto Rico.

JUDGE AND MRS. L. W. CLEAVELAND, of New Haven, Connecticut, received a hearty welcome from their many Sanitarium friends when they returned to attend the Medical Missionary Conference. As Mrs. Dowkontt the latter spent three winters in the institution, her personal charm and vivacity being important factors in the social life of the place. As social secretary she planned many delightful entertainments for the parlor and gymnasium.

BISHOP WILLIAM H. HEARD, A. M. E. Bishop of West Africa, was one of the most prominent figures at the Medical Missionary Conference. He was born a slave in Georgia and was liberated at the age of fifteen, acquiring an excellent education thereafter. In 1895 he was appointed United States minister to Liberia by President Cleveland, and served four years in that capacity. Having been ordained in the A. M. E. ministry, he decided to take up missionary work in that country and labored most conscientiously until 1908, when he was elected Bishop of West Africa, with residence in Monrovia. His district embraces Liberia, Sierra Leone, and the Gold Coast and covers 1,600 miles. Bishop Heard came to this country for the express purpose of visiting the Sanitarium and attending the Conference, and is glad that he came. He says it is the greatest religious gathering he ever attended, not excepting the world's missionary conference held in Scotland.

DR. J. J. MULLEN, the well-known Pittsburgh surgeon, has been taking treatment at the Sanitarium. Doctor Mullen has been a liberal donor to the General Emergency Hospital in Pittsburgh, having given during the past seven years \$18,000 to the institution. It is his intention now to install there electric light cabinets, together with various baths and hydrotherapeutic methods of treatments, since he is convinced of their effectiveness as curative agents. Then a later addition will be the services of one or more Sanitarium nurses. Doctor Mullen says it is his belief that physicians are each year getting further away from medicine, that there is a general tendency toward natural curative methods.

## A Former Sanitarium Patient Reports Continued Progress

A PATIENT came to the Sanitarium some months ago suffering from pernicious anemia and in a condition regarded as entirely hopeless. After spending four months in the institution he returned home in excellent health. He was instructed to have his blood examined occasionally and send in a report.

### Pernicious Anemia Not Incurable

It is right and proper that the public should know that pernicious anemia is by no means a hopeless malady. Of course, the disease after a while reaches a stage in which it can not be cured, but many cases which seem hopeless may be cured by means which are comparatively simple. Unfortunately the idea prevails that persons suffering from anemia must eat meat in large quantities to build up the blood. This is a very great mistake. Meat is the worst possible food for these cases, for the meat promotes the growth, in the intestines, of the germs which are the source of the poisons by which the blood is destroyed. Indeed, these germs abound in meat and are always present in large numbers in butcher's meat as it is sold in the market. So a person suffering from pernicious anemia could scarcely do a worse thing for himself than to adopt a meat diet. Of course, these patients receive no meat in any form here at the Sanitarium, but this is not the only place where meat is prohibited in these cases. Many of the most eminent physicians in the world, including Von Noorden of Vienna, Kraus of Berlin and other authorities of world-wide repute discourage the use of meat in pernicious anemia. The things of most importance in cases of this sort may be done at home.

We are sure the readers of the IDEA will be interested in the following report recently received from the patient above referred to. "I am not gaining in weight much," she says, "but I have fine color and my general condition otherwise is good enough to continue to startle the natives as they meet me when I occasionally come up town. There is certainly a great deal of Battle Creek talk in this town on my case. There is a newspaper woman, twenty-five years of age, who just quit her work with anemia and can not come up there for want of funds. I think I will take her case in hand. I will at least stop her meat eating. She tells me that she eats hardly anything but meat."

We may add that the blood examination referred to showed the blood to be normal in color and the count of blood-cells is also nearly normal. It is interesting to note that our old patient has discovered the chief cause of success in the treatment of these cases and believes himself able to do something for the patient by simply correcting her diet. We shall advise the gentleman to send the lady here, however, notwithstanding the fact that she is in limited circumstances, for the Battle Creek Sanitarium is always ready to give its advantages to persons in limited circumstances, as well as to those who are well to do.

## Government Expert Superintends Planting of New Delicacies

MR. R. A. YOUNG, scientific assistant of the Bureau of Plant Industry in Washington, has arrived at the Sanitarium and will look after the planting of the new plant importations just received from the government experiment station at Brooksville, Florida. He will also instruct the gardeners as to the care of the growing plants. Among the importations are dasheens and udos. Dasheens come from the tropics and their food uses are many. The tubers are used as substitutes for potatoes, the young shoots above ground for asparagus, the leaves for greens, and a

flour that is most excellent for invalid's cookery is obtained from the dried tubers. Miss Cooper and her assistant dietitians have been experimenting with the new vegetable and the delicacy has already appeared on the Sanitarium menu several times. Out of the carload lot sent on from Brooksville, some will be taken for experimental use, under Mr. Young's direction, to the Kellogg Food Company factory, where they will be ground into flour and meal. The udo, of which a more extended description will appear in the next IDEA, is more commonly called the Japanese salad plant. The roots resemble vegetable oysters in appearance, though they grow in a multiple sweep nearly a yard long.



## NORMAL SCHOOL OF PHYSICAL EDUCATION

### A Splendid Opportunity for Men and Women

The Normal School of Physical Education offers a practical two years' course to Physical Directors and those who wish to fit themselves for the profession. Each school year comprises thirty-five weeks and an eight-weeks' summer course.

This school enjoys many extraordinary advantages because of its affiliation with The Battle Creek Sanitarium. The equipment, including laboratories, indoor and outdoor gymnasiums and swimming pools, playgrounds and athletic field, is unsurpassed.

In addition to the regular studies, students of the school have special advantages in the study and practice of Physiology, Anatomy, Hygiene, Chemical Analysis, and the various methods of treatment which have made this Institution famous.

Tuition for full year \$100, including Summer School; for rest of the year, \$75. For Summer Term alone, \$40; without electives, \$25. Board \$3.00 to \$3.50 per week in addition. Unusual opportunities are given by special arrangement for earning money toward expenses. Two \$100 competitive Scholarships open to High School graduates.

For full particulars and catalogue, address

Wm. W. HASTINGS, Dean,  
THE SANITARIUM, Box B-66, Battle Creek, Mich.

N—S—P—E



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VOL. VI JANUARY 15, 1913 No. 2

### Harmfulness of Bread and Tea

ONE of our readers has asked our opinion concerning the not infrequent habit of soaking bread in tea, and our opinion is that it is decidedly injurious. In the first place, bread of any kind should be thoroughly chewed before it is swallowed, in order to insure thorough admixture with the saliva, for starch is the predominating element in bread, and depends largely for its digestion upon the starch-digesting ferments of the saliva. When one first soaks the bread in tea, however, he does not chew it, but swallows each mouthful wholly without insalivation.

In the second place, tea of itself is unutterably bad. The sallow complexion so common among Americans, the too-prevalent digestive disorders, and the nervous and sick headaches are only a few of the results of the excessive use of tea and coffee.

The well-known effect of these beverages in producing wakefulness, banishing as if by magic the sensation of fatigue, affords sufficient evidence for their poisonous character. No one would doubt for a moment the poisonous nature of a drug capable of producing irresistible drowsiness in a person who is not weary. The power of a drug to produce wakefulness in a person who is strongly inclined to sleep as the result of fatigue, is equally evidence of its poisonous character.

Again, the fact that a person who is accustomed to the use of tea or coffee finds himself nervous and uncomfortable when the usual cup is dispensed with, is another proof of the poisonous character of these common beverages that is very frequently in evidence. "I must have a cup of tea or coffee for my breakfast; I am good for nothing without it for the whole day," is an expression which one often hears. The conclusion to be drawn from this experience is not that coffee or tea is necessary or beneficial, but the very reverse. The evidence of its harmful and poisonous character is conclusive. No such results follow the incidental temporary withdrawal of ordinary food substances to which one has been accustomed. It is only artificial stimulants or narcotics the withdrawal of which is accompanied by such unpleasant effects.

Tea and coffee contain, in addition to caffeine, tannic acid and various volatile poisons. Each of these poisons produce characteristic and harmful effects. The volatile oils give rise to nervous excitability, and after a time provoke serious nervous disorders. Caffeine is a narcotic that has been shown to diminish

the activity of the peptic glands and to interfere with digestion.

Wolfe has shown that three grains of caffeine, an amount which might easily be furnished by an ordinary cup of tea or coffee, greatly impairs the quality of the gastric juice, lessening its total acidity. Robert has shown that both tea and coffee interfere with the action of the saliva upon the starch of the food, and may even wholly destroy its effect. Doctor Wood proved that the daily use of a decoction prepared from one ounce of tea leaves produces decidedly poisonous symptoms. A German physiologist found the digestion to be reduced one-third by the use of tea. The tannic acid of tea not only interferes with the digestion of starch, but also prevents the proper digestion of albumin.

### How Indian Children Took Cold

AN interesting visitor at the Medical Missionary Conference was Rev. A. M. Hamlin, who three years ago was sent by the Michigan Conference of the Methodist Church to northeastern California to organize work there. He located at Fort Bidwell. The Indian reservation situated at that point was formerly a government fort, the buildings of which are now used for school purposes for the Indians. Mr. Bidwell was deeply interested in Doctor Kellogg's address before the Conference on Sanitarium methods and particularly that part of the address which bore upon the subject of fresh air, and related to an IDEA representative one of his experiences among the Indians:

"The teacher on the reservation had left," he said, "and so they were in need of one for the school. At the superintendent's request, I consented to take charge. I had an assistant. It was in the early fall and the children were all well, practically one hundred in all. Along in February we had cold rains and snow, and often the children would run in the snow until they became wet above the knees. Then they would come to the school room, where I would try to get them to dry their feet, but which they refused to do, for they seemed to be perfectly well. But one day the physician ordered that the children who were wet should be confined in the dormitory when they were out of school, and kept in the closed school room, which was overheated, during the school hours and not permitted to run out to play; they were ordered to do all their playing inside. The result was that I began to see a change in the children, and at last a number of them dropped out of school and took to bed. Some of them, eight in all, died there, and some were taken away to the teepees of the Indians. Seeing this change in the girls and not in the boys, it convinced me that something was wrong. I went to the dormitory and found it extremely hot. I told the doctor what I thought the trouble was, and he investigated the matter. He released the children, and allowed them to play outdoors after school and romp in the snow and wet, and the result was that they began to change in color and appearance and they recovered. We had no more deaths during that term of school."

### Stomach Trouble—An Essay

BY J. N. HURTY, M. D.

Secretary Indiana State Board of Health

How often we hear this term "stomach trouble." Did you ever have it? If you have, you know what a humbler it is. How effectually it humbles one's pride, how thoroughly it dissipates one's egotism. Yet stomach trouble is not a wholesome discipline, for the longer it continues the grouchier and the more impossible we become. The stomach these days is a sort of garbage can. It is suspended by straps immediately south of the thoracic cavity, and being connected with that funnel called the mouth by a good strong tube, it readily catches chunks of dead animals, lumps of poorly baked bread, boluses of vegetables, ices, pickles, soggy pies, weinerwurst, booze and muddy coffee. The tobacco eaters add that portion of tobacco juice which they don't use for flooding sidewalks.

There is no more patient and long-suffering organ in the human body than the stomach. It is amazing how long it will stand abuse, but once it kicks back, then look out, for something is coming to you sure. You may hit it with an unskilled railroad sandwich, scorch and burn it with pepper and mustard,

### Non-Meat Diet of Other Races

(Continued from page four)

a tablespoonful or a half-cupful, whatever amount is required—is then stirred in and the receptacle in which it is to remain, usually a large vessel, is carried as gently as though it were a sleeping babe to a corner of the fireplace, where it is covered with a clean white cloth, and that in turn by a heavier cloth.

There it stays until mealtime, when it is carried carefully to the table. It is now solid, resembling our blanc mange somewhat, and is cut in thick slices with a knife. Of course, as soon as disturbed it begins to whey. With it they serve stuffed grape, bean, or cabbage leaves, the filling for which is often made of rice, combined with some kind of fat—olive oil is used mostly. They say to you: "Will you have your yohourt on the top or on the side?" That means. Will you have it on, or beside, the stuffed leaves, or whatever the other dish is. Soured cabbage is another dish they prepare. The native women cut cabbages by the hundreds and, armed with big knives, march out and cut them up in quarters. These they pack in barrels and cover with fresh water. Now and then the water is drawn off through the snotgot and a fresh supply is turned on. Ugh, what a smell it is! I can almost sense it now! It is not like our sauer kraut, and yet it is, in some ways. When they cook it they let it simmer slowly. Another dish is dolmaz. This is thickened with egg instead of cornstarch, which they know nothing about, or flour. They take out a little of the cooking mixture and into it stir gradually beaten egg, then by degrees this is in turn stirred into the whole amount. If the beaten egg were to be precipitated suddenly into the hot mass it would cook immediately."



irritate it with salt and vinegar, chill it with ice cream, ice water and mint juleps, pour stinking mineral water into it, shrink it with whiskey, assault it any old way, and it will work uncomplainingly for a long time; until—alas! and alack! some day it will go on a strike, and then the doctor for you, or you run to the drug store and proceed to souse the poor thing with patent medicines. Of course, they do harm, although temporary relief may be secured. So the world becomes dark and life is a failure to you, but you quit bolting and gorging, that's sure; for that much sense will come finally to any kind of a fool.

Oh, that we could have the good sense to know, when young, that the stomach should not be used for a garbage can. Then we would not load our tables with foods, some good, some bad, and then chase them half chewed down our gullets with black coffee or ice water—

Full many a man has lost his head  
Through eating soggy, half-cooked bread,  
And he who would his kidneys save  
Had best avoid the whiskey wave.  
Your heart and nervous system, too,  
Are surely worth a heap to you,  
Why prod them, then, with nicotine,  
And make believe all is serene!  
In tobacco heart there is no wealth,  
And what is more, there's weakened health.  
Oh! foolish man when thus you choose  
Your soul and body to abuse;  
You'll realize, some pleasant morn,  
That you have raised an awful storm.

### Nurses Christian Help Band

THE meeting of the Sanitarium Christian Endeavor Society December 27th was in charge of the "Nurses Christian Help Band," at the head of which is Miss Lottie Hoffman, head nurse of the Sanitarium Dispensary. The Band was organized in November with six members and now numbers forty, young women who have voluntarily given a part of their time to the work of assisting the sick poor in the city. These nurses work eight or ten hours each day, and usually spend two hours in the class room, so that to give time to others is an act of self-denial. They are thoroughly organized and the work is systematized.

In the first place there is a Doreas Society, whose work is to visit homes and afford whatever help may be required of clothing or food, medical care, or Christian comfort. They report having put in sixty hours of such services during the month of December. In these homes they may be found singing, reading, praying, washing dishes, scrubbing the floors, mending clothing and whatever seems to be necessary to be done.

The food dispensary is also in charge of the Band, about twenty baskets of food, on the average, being sent out daily to needy families. The first basket is sent on demand; before the second is sent an inquiry is instituted as to the real circumstances of the case. This food is first-class in every respect having been removed from the Sanitarium serving-rooms in good order.



### WHERE SUMMER REIGNS IN WINTER

THAT small section of the tropics, the Palm Garden, certainly comes into its own with the arrival of winter. During the summer months the indoor garden is more or less neglected, what with the competition of the summer flowers out of doors.

It has been eleven years since the Palm Garden was first planted, and many of the varieties have changed places of their own accord. In the case of the banana, for instance, it is characteristic of the plant that after it yields fruit the main stalk dies, and a "sucker," which has been growing for just such an emergency, immediately takes its place next to it. This is continued indefinitely, and gradually the tree shifts ground. The banana tree in the palm garden has moved in this way some three or four feet, when first planted being placed immediately in the corner nearest the door.

There is a peculiar plant found climbing over the rocks at the extreme left at which many people have wondered. It has aerial roots that drop from the branches at a height of from five to six feet from the ground. The plant bears an edible fruit which resembles the pineapple. Its name is *Philodendron petusum*, and also travels from the place it is planted, propagating itself by means of runners.

A variety of ferns add greatly to the beauty of the garden. Nearly all of these are home varieties, and are of hardy growth. A Norfolk Island pine grows in the garden to the right and but a little distance from it is the only flowering plant in the room, the hybiscus, which bears a red flower. Many

palm trees, some of them of unusual size for cultivated plants, grow in this garden and lend an added attraction for the visitor.

### A Few Facts About the Men Who Helped to Make the Conference the Best Ever Held

(Continued from page three)

and later on Secretary of the Freedman's Aid and Church Extension Society. In 1896 he was elected a Bishop to Africa in which land he has since labored in building up missions.

#### DR. JOSEPH K. GREENE

JOSEPH K. GREENE, D. D., a graduate of Bowdoin College and of Union Theological Seminary, was commissioned by the American Board in 1858, and arrived in Turkey on February 22d, 1859. For thirteen years he was a missionary in Brousa and other interior cities, and in 1872 was called to Constantinople to the editorship of three weekly religious newspapers. All his missionary life of fifty-four years he has been a preacher in the Turkish and Armenian languages, in close touch with all classes of people. He has seen the native Evangelical Churches increase in number from 40 to 144, with 16,000 members and 44,000 adherents; and he has seen the establishment of a system of education, by means of 300 common schools; 44 high schools and 8 colleges, and has helped prepare the public mind for the reception of the new régime: the establishment also of eight hospitals with more than 100,000 patients a year, indoor and outdoor.

SANITARIUM  
DIETITIANSA CLASS  
IN COOKERYBUSY IN  
THE FOOD  
LABORATORY

4. **M**OST people are ill because of wrong modes of living. The moment a patient enters the doors of this University of Health, his habits and daily mode of life are changed . . . he is taken back to simple principles at once; simple diet properly regulated, health-building exercise, the out-door life, sunshine, fresh air, physiologic medical treatment, and rest for body and mind.

The diet system of the Battle Creek Sanitarium is the result of almost half a century of thorough-going scientific research. It is not based on fads, guess-work, or unproven theories. The Sanitarium dietitians have succeeded in making a simple, wholesome bill of fare which is surprisingly varied and appetizing. A wide variety of fresh fruits and vegetables, hygienically prepared, and a thousand and one new dainty and delectable dishes give zest to the menu. Tempting nut and cereal preparations take the place of heavy, indigestible foods. The new calorie system, originated at this institution, enables each patient to regulate the diet to his own individual needs. Most people who visit the Sanitarium to learn the better way are so favorably impressed with the new diet system that they continue it after returning home.

In addition to opportunities for education in "right living", the Sanitarium affords many unique advantages to health seekers. First of all, the most thorough-going examination possible is made by a corps of experts. Chemists and bacteriologists examine kidney and bowel excretions, X-Ray experts inspect heart, lungs, stomach and other internal parts. A complete inventory of the whole body is made. Hydrotherapy, phototherapy, electrotherapy, mechanotherapy, diathermy, radium, medical gymnastics, electrical exercises, massage, and all other scientific remedies are applied by the aid of 300 specially trained nurses and attendants and the most varied and complete equipment ever installed.

Guests have the combined advantages to be derived from favorable climatic conditions, attractive surroundings, scientific methods, and close and conscientious medical supervision with interesting daily lectures and health classes, physical culture and health training.

#### Send for this Book

A free copy of booklet, "The Simple Life in a Nutshell" by Dr. Kellogg, of the Sanitarium and copies of daily menus mailed on request. Sign and mail the coupon today.

MENU		DINING HALL	
January 15, 1913		January 15, 1913	
Breakfast	7:00 - 8:00	Breakfast	7:00 - 8:00
Lunch	12:00 - 1:00	Lunch	12:00 - 1:00
Dinner	5:00 - 6:00	Dinner	5:00 - 6:00
Supper	7:00 - 8:00	Supper	7:00 - 8:00

Dept. 128-A  
The Sanitarium  
Battle Creek, Mich.

Send me the free booklet "The Simple Life" by Dr. Kellogg and copies of Sanitarium Menus.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



The above full-page advertisement appeared in each of the following magazines for February: "Cosmopolitan," "World's Work," "Country Life in America," "Literary Digest," "Current Literature," "Outlook," and "Review of Reviews."



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PRICE, 5 CENTS

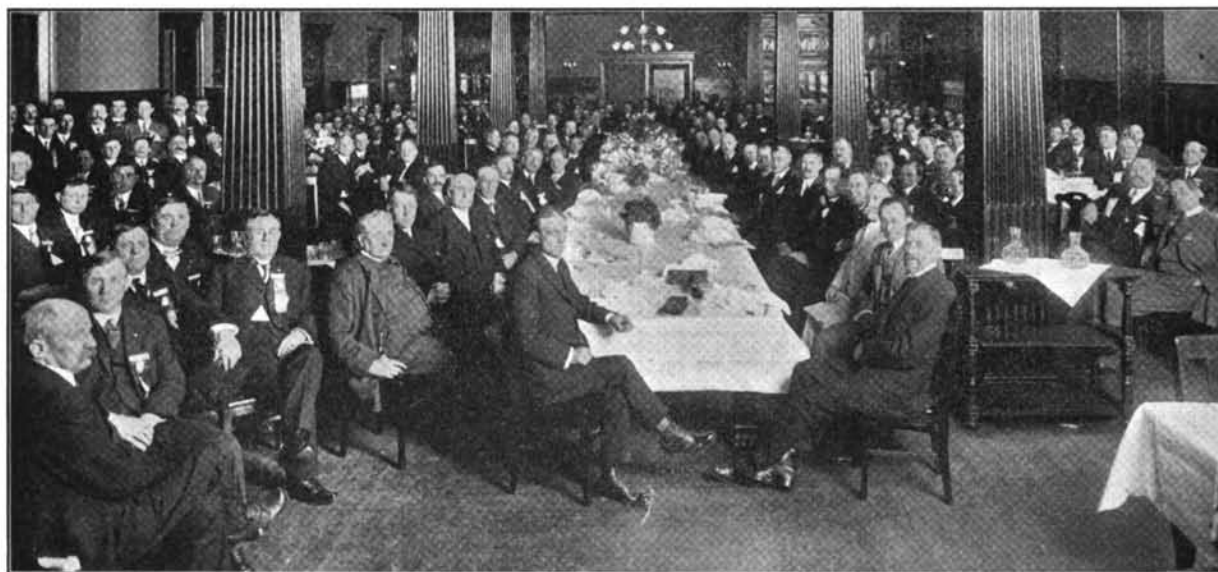
# HOW MANY MEALS A DAY SHALL WE EAT

A LECTURE DELIVERED IN THE SANITARIUM PARLOR  
BY DR. J. H. KELLOGG

THE arrangement of the meals and the time that should elapse between them, depends in the first place upon the individual, and in the second place on the amount of food he eats. If the digestion is slow longer periods must elapse between the meals, and thus fewer meals will be required; conversely, rapid digestion will demand a shorter interval between meals, and consequently meals closer to-

every three hours, or in two and a half hours, without any distressing results, but when a square meal is eaten, composed of such indigestible things as Saratoga chips, fried oysters, ham and eggs, griddle cakes, etc., he should wait until the next day before he eats again in order to give the stomach a chance to recruit itself.

As a general thing the length of time between meals ought



The sales force of the M. Rumely Company, manufacturers of farm implements, guests at a banquet in the Annex dining room tendered by the Sanitarium. The non-meat meal was a novelty to most of the visitors, but all expressed themselves as pleased with the experience.

gether. Moreover, some foods digest more quickly than others; therefore if the food one eats requires a longer time for its digestion a longer time must intervene between meals than would be required if the food digested quickly.

Thus, by regulating the kind and quantity of food we may arrange our meal schedule almost as we choose. For instance, if one takes a tablespoonful of gruel at a time, or fruit juice, say, he can take a spoonful every hour without over-working his stomach; indeed, in some cases, when the stomach is very feeble, this course is necessary. If one had but a half pint of food he would be able to dispose of it

to be about six hours. The stomach empties itself every four or five hours. To this ought to be added one hour in order to give the stomach a rest. For the stomach is a muscle, like the biceps; this hollow muscle, having muscles running around lengthwise and cornerwise; of these muscles there are three layers, all working together, churning and manipulating the food, for four or five hours at a time, so that it deserves, as I say, at least an hour's rest.

This works out in this way: suppose we have breakfast, say at eight o'clock in the morning. The meal takes five hours for chewing and digesting, which brings us to one o'clock in the afternoon. An



hour's rest brings us to two o'clock, the hour for dinner.

The same thing applies to dinner, except that since we eat more heartily for dinner the meal will require a longer time for digestion, with the result that we ought not to eat again before eight o'clock in the evening. After this meal, again four hours should elapse before we retire, for sleep is not sound or restful while gastric digestion is taking place. This gives a retiring hour of midnight. Eight hours' sleep are required and one hour for making the morning toilet, which would bring us to nine o'clock, with the result that each succeeding day would find our meals an hour later, and we should often be taking our breakfast at midnight.

A meal scheme of this kind would be impossible, on the face of it, and inasmuch as we could not take on any more meals, or bring them closer together, the feasible plan is to omit one meal. As a matter of fact, however, three meals a day are not physiological unless one is careful to regulate the quality and quantity of food, and inasmuch as a wide variety of foods must include many that do not digest rapidly, one is likely to have on his menu foods that would bring three meals a day too close to one another to be hygienic.

#### The Ideal Plan

The best of all meal plans is to have breakfast at eight o'clock and dinner from two to four, with no supper whatever unless we take a small amount of fruit or fruit juice. When one accustoms himself to this plan he will find no inconvenience whatever; so far from feeling ill effects, he will, on the contrary, feel himself fit and efficient for his work; his mind will be constantly alert and his body very responsive to his mind.

The fact of the matter is that the world eats too much. There is no doubt whatever that we overtax our digestive organs, and that we eat too much food. Not long since someone, becoming interested in the problem, discovered that he had eaten eighty-six wagon loads of food more than his body required in a life time. It is a fact that one eats his own weight every month, twelve times a year, probably a ton altogether. Now, to digest a ton of food a year requires a vast amount of energy, and thus a vast amount of energy is thrown ruthlessly away on food that the body does not want and that it absolutely refuses to use. We hear a great deal about the conservation of natural resources; we hear much about the conservation of human life; but it occurs to few people to deplore the shameless waste of energy involved in excessive over-eating. We squander energy on excessive breakfasts, on dinners and on superfluous suppers, with the result that the average man consumes more energy in digesting his meals than he applies to his daily work.

#### Where the Business Man Errs

The trouble with the American business man is not that his work affects him to the point of exhaustion, but that the useless stomach work is leaving him no energy for the duties of life. Every physician is acquainted with the type. Many come here, saying, "I am all run down; I have worked

## SALES DEPARTMENT OF GIANT FARM IMPLEMENT CONCERN IS BANQUETED BY THE SANITARIUM

VISITORS BECOME ACQUAINTED WITH SANITARIUM SYSTEM  
IN TOUR OF SANITARIUM AND AT FESTIVE BOARD IN ANNEX

The sales force of the M. Rumely Company, one of the greatest manufacturers of farm implements in the world, were tendered a banquet by the Sanitarium on the evening of the tenth. Including about seventy-five representative citizens of Battle Creek, three hundred people sat down to the eight-course dinner which was served.

To those of our readers who are not familiar with this great concern we might say that in 1853 Meinrad Rumely, a German immigrant, started the Rumely company by building a separator. From the start he built strong and well. At the World's Fair in Chicago, in 1893 his separator was awarded the first prize medal over 13 other makes.

The name of Rumely came to mean reliability to farmers. They wanted this same reliability in other machines, and Rumely began making steam plowing and threshing engines—which added still more to the company's reputation.

The Rumely company of 1913 is different from the company of 1853, but like it in the worth of the machines turned out. For instance, the famous Gaar-Scott and Advance lines with their splendid factories and lines of machines were added. Secor was called upon to design an effective system for replacing gasoline with kerosene for power—the famous "Oil pull" was the result. Seager and Olds added their well known line of gas engines; Watts, his corn sheller; Adams and Falk, kerosene engines. All have been bound into a greater Rumely company, which makes steam, gasoline and kerosene tractors, steam, gasoline and kerosene stationary and portable engines; automatic hay balers; corn huskers; grain separators; weighers; baggers; wind stackers; feed

mills; pump jacks; engine gang plows; clover and alfalfa hullers; husker shredders; feeders; grain graders; cream separators; saw mills; tank wagons; diaphragm pumps; corn shellers; contractors' hoists; soil packers and pulverizers; portable saw rigs and other machinery.

A delightful menu had been provided by the Sanitarium dietitians. It was non-meat, of course, but one of the speakers, in responding to a toast, pointed out that, after all, the aim of the Sanitarium and that of the guests of the evening were identical—in the one case it was to discourage the use of cattle as meat, in the other to discourage the use of horses as power on the farm, since oil-power is cheaper and more efficient. Another speaker, too, referred to the fact that the Sanitarium encouraged the use of wheat and other grains, the production of which, of course, demands more and more the use of such machines as the Rumely Company puts out. The menu follows:

Macedoine of Fruit		
Cream of Tomato Soup	Bread Sticks	
Radishes	Celery	Ripe Olives
Roast Potose with Dressing—Cranberry Jelly		
Potatoes a la Maitre d'Hotel	Scalloped Daubeen	
Buttered Cauliflower		
Buns	Apple Juice	
Waldorf Salad—Wafers		
Pumpkin Pie a la Mode	Pine Nuts	
Creamed Yogurt Cheese—Jelly	Health Chocolates	
Minute Brew		

An honored guest was Sir Horace Plunkett, of Dublin, Ireland, who more than any other one man has been responsible for the renaissance, we might say, of Irish agriculture, and who enjoyed the opportunity of meeting men

(Continued on page twelve)

so hard that I am completely exhausted, absolutely tired out with work," when as a matter of fact it is not his work that is at fault. Sometime since Doctor Benedict, of Boston, made an interesting experiment. He put an athlete inside a calorimeter—an airtight, oxygen-supplied box inside of which the subject is hermetically sealed so that the carbonic acid gas and heat which he throws off is a measure of the energy produced by the body. At first the athlete was made to work with all his might on a bicycle, his output of energy being measured. Next he was made to loaf, to sit and fold his arms, and it was found that the output of energy was smaller by a very small figure. He was then set to work at intense study in problems of physics, the application covering hours at a stretch; it was found on computation that the output of energy was no greater under excessive mental work than when he loafed, doing nothing at all.

The significance of this experiment is this:

the business man really consumes in his work no more energy than the loafer who does not work at all; the sedentary man can sit at his desk and dictate letters, receive callers and do all the work ordinarily connected with office routine, and yet actually consume no more energy than though he sat with his arms folded gazing into space with his mind *in vacuo*. With the man who is doing hard muscular work the situation is different, but we seldom hear the muscular worker complaining of over-work; the man who actually consumes energy is able to supply all the energy demanded, and keeps himself fit. The sedentary worker, on the other hand, consumes no energy in his labor, yet he constantly complains of fatigue; the trouble, of course, being that the energy which he ought to conserve is consumed by the body in digesting unnecessary food, and in taking care of toxins and poisons introduced into the body by tobacco, alcohol and other substances.

# FAMOUS COLUMBUS, OHIO, CATERER AND RESTAURATEUR DISCUSSES THE BATTLE CREEK SANITARIUM

MR. R. C. ACKLAND FINDS BATTLE CREEK IDEAS BEING ADOPTED  
BY BUSINESS MEN WHO DESIRE TO BECOME EFFICIENT

MR. R. C. ACKLAND, Vice-President and Treasurer of the Busy Bee Company, of Columbus, Ohio, has been a guest at the Sanitarium for the past four weeks. The Busy Bee Company operates three restaurants and in connection therewith conducts a large wholesale and retail catering business, employing all told more than three hundred employees. Mr. Ackland is very much interested in the Sanitarium régime, and says he has observed during the past few years an enormous decrease in the quantity of meat used by restaurant patrons.

"This is especially true of business men," says Mr. Ackland. "Sedentary workers are finding that they can do much better work on a light, non-meat diet than on a heavier diet. I have also observed in the past few years an enormous increase in the use of buttermilk. We are serving to our customers, you will be interested to know, a fermented milk prepared in the Dairy Department of the Ohio State University from the Bulgarian bacillus, the same as is Yogurt. We have a large call for this product. I, myself, have not heretofore been strictly a non-meat eater, but I intend when I go back to cut out meat entirely."

Mr. Ackland commented upon the splendid spirit which prevails among our employees. "You get a class of service here which you cannot buy for money," he said. "It must be in response to the principles for which the Sanitarium stands, for everybody is in a helpful attitude. You notice that from the time you get off the train until you leave the Sanitarium. I have been in many hotels and never have found a place where the service comes from the heart as it does here. Everybody who comes here feels it, I am sure."

"I was very much interested in the kitchen, which I found wonderfully clean and sanitary; it is one of the best I have ever seen. The dining-room, too, is uncommonly beautiful and attractive."

"And I must not forget the gymnasium, which affords such a splendid variety of work. It is a very valuable part of the Sanitarium system. Much of the work I am doing here I will take with more regularity than before when I get home. I am much interested in the volley ball games of the gymnasium, for the game is very popular among business men in Columbus, there being about eighty who engage in the sport, holding spring and fall tournaments for trophies."

Mr. Ackland makes the very interesting observation that the Business Men's Gymnasium Club in Columbus depends very largely for its patronage upon the enthusiasm for gymnasium work and baths shown by business men who have been to the Battle Creek Sanitarium and become awakened here to the importance of this kind of work, according to E. W. Roehm, physical

director of the Columbus Y. M. C. A., with which the Club is affiliated. This is a remarkable tribute to the value of the ideas which the Sanitarium is attempting to impress upon the people who visit it. Our aim is not only to cure, but to teach people how to live, and our success is in direct ratio to the extent to which the principles learned here are carried out in every day life.

## Edison Expert Studies the Sanitarium

MISS WINIFRED E. BLACK, of New York City, Manager of the Edison Electro Medical Bureau, has been at the Sanitarium for a few days. Miss Black is on a tour of investigation, visiting those hospitals where electricity is used for medical purposes. She stated that she found the Sanitarium much the best equipped for giving electric treatments of any place which she had studied. Here she found the largest static machine in the world and the only electro-cardiograph in the United States, also a most wonderful instrument for the inhalation of radium, an invention of Dr. J. H. Kellogg's. Miss Black was greatly impressed, she said, by the cleanliness which prevails everywhere at the Sanitarium.

The Bureau of which Miss Black is in charge, is an entirely new venture of the Edison company's, and is the only one of its kind in the world. Its purpose is to impart information as to the uses of electricity for medical purposes to New York physicians, and also to have all apparatus in their offices so that doctors may bring their patients there for treatment should they not have the required appliances in their offices. Miss Black took a full course of electric treatments while at the Sanitarium in order to be able to know whereof she speaks when she returned to New York.

## Noted Missionary Visits the Sanitarium

REV. W. D. POWELL, who began pioneer missionary work in the West when there was no railway beyond San Antonio, and who has spent sixteen years on horseback in the wildest regions of Mexico, and who has built more churches than any other man living, has been spending a few weeks at the Sanitarium to recruit his energies for the strenuous campaign he is conducting among the moon-shiners and feudists of the Tennessee mountains. Just before he left Mr. Powell without solicitation handed in the following expression of his appreciation of the Sanitarium and its work:

"This is certainly the greatest Sanitarium in the world. In 1898 I came here from Mexico, where I had been a missionary for sixteen years. I had traversed the majority of the twenty-seven States, planting the Gospel. I traveled on horseback and ate the native foods, soaked in grease and so heavily charged with red pepper and garlic that my digestion was ruined and I was more dead than alive. Your wise treatment gave me a new lease on life. I have done harder and better work since than ever before."

"Six years of strenuous life in Kentucky, working mainly in the mountains, where the food and sanitary conditions are often very poor, has again imperilled my life. My friends became quite apprehensive. So I have come a second time with an abiding faith in God, in you and your noble helpers that I shall be cured. The disease, while troublesome, is yielding to the treatment and I hope soon to return to my interesting work among the mountaineers a new man. I sing the praises of the Battle Creek Sanitarium, wherever I go."

"I do not see why every room is not taken the year round. Many in the South fear to come in winter. They misunderstand the weather conditions. The dry cold here is not so penetrating as the cold farther south. The Christian influences of this institution and the uniform kindness of every employe surpass anything I have ever seen."

## Prominent National Cash Register Official Visits the Sanitarium

THE National Cash Register Company, of Dayton, Ohio, employs sixty-five hundred hands. The management of the company are enthusiastic advocates of the Battle Creek idea, and not only visit the institution frequently, but attempt to promote the efficiency of their plant by increasing the efficiency of the force as individuals. For this reason the plant has been equipped with a gymnasium in charge of a physical director from the Battle Creek Sanitarium, and containing many Sanitarium appliances; it has also a finely equipped dispensary, with Battle Creek nurses in attendance, where workers in need of first aid and other relief are given the best of attention. Not content with this, the officers' club, which provides a dining room at which five hundred officials and clerks take their dinners, encourages the adoption of a low-protein diet and sets a "vegetarian table," which is well patronized.

A most important department of the concern is the employment department, at the head of which is Mr. J. J. Munsell, who is in hearty sympathy with the efforts made by the Company in behalf of the welfare of its employees. Mr. and Mrs. Munsell have just spent a week at the Sanitarium, learning of our system at first hand. On leaving he remarked to an IDEA representative: "Although our stay has been a short one, we know that it has resulted in much good to both. The knowledge gained here we can carry home, and by applying it properly we hope to gain everlasting benefit."

## ORIGINATOR OF NEW DENTAL DEPARTURE AND FANCIER OF REGISTERED HOLSTEINS GUEST AT SANITARIUM

**DR. EDWARD EVERETT CADY, OF BROOKLYN, AFFIRMS THAT  
BALANCED RATION IS AS ESSENTIAL FOR MEN AS FOR CATTLE**

DR. EDWARD EVERETT CADY is one of the foremost dentists in the United States. His offices, in the very heart of Brooklyn, are a busy place, for the Doctor has in his employ nineteen persons, nine of them expert dentists. His system is unique. Doctor Cady attends personally to all the diagnosing of his patients and to the prescribing of treatments, passing each case on to a specialist, be it the man who cleans the teeth, who makes bridges, who extracts teeth, or who confines himself to some other branch of dentistry, as the case may require. Doctor Cady's system has attracted wide attention throughout the country, and the time must come when it will be adopted far more extensively than it is at the present time.

Doctor Cady first came to the Sanitarium late last autumn, and being very much improved returned home, but later on returned, bringing Mrs. Cady for treatment. Both Mrs. Cady and the Doctor are enthusiastic over what they have found at the Sanitarium. "Several years ago," said the Doctor to an IDEA representative, "I took the Salisbury cure for a stomach difficulty, and lost sixty pounds in sixty days; but with it I lost a great amount of vitality which I have never regained. I then went to Carlsbad for three successive summers, but without improvement. Finally one day one of my patients began talking in my office about the Battle Creek Sanitarium, which he was in the habit of visiting occasionally for treatments. I asked him how he liked it, and he said, 'Bully! it is a great place.' I had already read the GOOD HEALTH MAGAZINE and the BATTLE CREEK IDEA, but it had not occurred to me to come to Battle Creek. Now, however, hearing such good reports from this patient and later on from others who had been here, I decided to come, and have been very glad I did so.

"You know I own 350 acres up in Orange County, New York, where I have a fine herd of registered Holstein cattle. At first I bought grade stock, but the first winter I lost eight and the second winter twelve cows from garget, due, I am sure, to improper feeding. They were given too much protein. I then bought thoroughbred stock and put them on a balanced ration, cutting down the proportion of protein, and since then I have not lost a cow. This incident led me to the conclusion that if cattle are so responsive to correct feeding, human beings must be equally so, and prepared my mind for Doctor Kellogg's low-protein theory.

"I have been much impressed by the educational feature of the Sanitarium work," continued the Doctor. I feel about it much as did a patient, an elderly man, whom I met here a few weeks ago. Some one said, 'Oh, if I had only come twelve years ago!' The old gentleman replied, 'Oh, if I had only come when I was twelve years old!' Great as is the curative side of the work here, yet

the biggest thing of all, in my mind, is the fact that the institution is teaching men and women how to live."

During his entire residence in Brooklyn, Doctor Cady has been a member of Plymouth church, in the affairs of which he takes an active part. He possesses a large fund of Henry Ward Beecher anecdotes, which he tells with great effect, and is a great admirer of Beecher's successor, Dr. Lyman Abbott. He was much interested the other day to meet in the elevator at the Sanitarium his pastor, Dr. Newell Dwight Hillis, and to know that he also is a friend of the Sanitarium's.

### Battle Creek Women's League Meets at the Sanitarium

THE Battle Creek Women's League held a most interesting and profitable meeting in the parlors of the Sanitarium Wednesday afternoon, the 8th. It was Sanitarium Day and the program, while in charge of the home department, was under the personal direction of Mrs. M. A. Emmons, of the Sanitarium staff.

Miss Irene Jackson, a Sanitarium nurse who is the possessor of a beautiful soprano voice, rendered a number of delightful songs, with Irving Steinel at the piano. Dr. A. J. Read was then introduced and proceeded to give the audience a rare treat in his lecture on "Recent Advances in Medical Diagnosis and Therapeutics." He outlined the process in the study of the blood, especially of modern blood-pressure, described the chemical and microscopical analyses of the blood, the sphygmograph, the X-ray examination of the heart, and the electro-cardiograph. He also mentioned the modern study of digestive disorders, including the various forms of test meals and laboratory analysis. Reference was made to the use of the X-ray in the diagnosis of digestive disorders and the study of body wastes by laboratory methods as well as to the use of the respiratory calorimeter, an instrument of record devised by Doctor Benedict of Boston. This measures the metabolism of the body by abstracting the carbon-dioxide from the breath and weighing it on a balance—so delicate that even the moving of a finger affects its calculations.

The modern use of hydrotherapy was also discussed, together with radium. Doctor Read cited the fact that in one institution four hundred cases of rheumatism and gout had been cured with radium. The new form of actinic light, or Alpine sun, for the treatment of various forms of eczema and skin disorders came in for a share of attention, moving pictures and lantern slides being used by way of illustration. The use of diathermy was explained, as also the vacuum bath and the pulmotor, which aids in resuscitating the victim of accidents such as drowning.

Miss Bessie Edwards, of the Sanitarium, contributed a solo, sung so acceptably as to merit an encore, which was graciously responded to. Dr. J. T. Case was presented thereafter and the listeners were still further enlightened as to the wonderful achievements of modern science by means of the X-ray. Doctor Case is Roentgenologist of both the Battle Creek Sanitarium and St. Luke's Hospital in Chicago, and has an international reputation as an X-ray authority. By the aid of moving pictures he divulged to his hearers many scientific secrets, and presented facts which only the powerful X-ray could reveal. Various physical disorders dealing with the inner part of the human anatomy were plainly shown, those of the stomach, heart, lungs, appendix and intestinal tract being the most prominent. The natural size and position of the various organs were plainly portrayed and compared with those made abnormal by disease. The presence of tumorous and cancerous growths was also demonstrated by this powerful agency. Tubercular conditions came in for a share of attention, the cloudy indistinct color-masses being a true index to the nature of the affection. Deformities in children and adults were brought in to show another part played by the wonderful ray in diagnosis as well as the introduction of foreign bodies as a direct cause of disorders.

Both the Sanitarium physicians were thanked by the organization as a whole and by the members individually for taking so much of their valuable time to present the instructive program. At the close of the session the guests were refreshed with fruit juices.

### Prominent Great Northern Railway Official at the Sanitarium

MR. O. W. SEATON, traveling Passenger and Immigration Agent of the Great Northern Railroad Co., is very enthusiastic over the future of Montana. He says this State is being settled more rapidly than any other new State in the Union. The Glacier National Park in northwestern Montana will attract a great many tourists every year. To furnish these with the best possible accommodations the Great Northern Railroad is spending half a million dollars on hotels and chalets throughout the Park.

Mr. Seaton comes to the Sanitarium every little while and admires it greatly. He learned a good deal about the methods of the institution when a relative of his underwent an operation here. He believes that people even right here in Michigan do not appreciate that the Sanitarium is one of the greatest institutions of its kind in the whole world. Mr. Seaton spends a good part of his time in travel, and he never misses an opportunity to tell people what an excellent place the Sanitarium is for those suffering from disease or wishing to learn right living.

Patient—I wish to consult you with regard to my utter loss of memory.

Doctor—Ah, yes. Why—er—in cases of this nature I always require my fee in advance.— *Christian Intelligencer*.



## The Sanitarium Builds Four More Greenhouses

THE managers of the Battle Creek Sanitarium have decided to build four new greenhouses next summer. Each will be 125 by 34 feet. They will be erected below the present green houses, on land which has hitherto been used as a flower garden. This will about double the present greenhouse capacity of the Sanitarium, and it is probable that this institution will have the largest green house plant in the country devoted to raising flowers and vegetables for its own consumption. The Sanitarium believes that blooming plants and cut flowers are helpful in benefiting the sick, and is therefore liberal in providing this form of cure free of charge.

Until now the Sanitarium has raised chiefly lettuce and radishes in its vegetable houses, but next winter it will be able to supply its tables with tomatoes, cauliflower and other articles that are now shipped from other places. Of course there is a big advantage in raising its own crops, because the patients can be sure of having everything absolutely crisp and fresh; furthermore, the dietitians can find out exactly what kind of vegetables the patients prefer, and thus supply every taste. With invalids it is especially important that the diet be made as attractive as possible, and the new greenhouses ought to help in making every meal at the Sanitarium a delight.

One of the products to be raised here is dasheen, which the United States Department of Agriculture is seeking to introduce in this country on a large scale. Another is the udo, described elsewhere in this issue. Doctor Kellogg has arranged to try several more new plants which agricultural experts believe will prove popular.

## Patient Gains in Weight and Continues Improvement After Returning Home

THE following letter from a former patient shows that health improvement begun at the Sanitarium is not a thing merely of one's stay here, but that it continues after one returns home, if Sanitarium principles are persisted in:

"You will be glad to hear a report of your one time patient, I am sure. I have gained thirty pounds since I left Battle Creek, and am as plump as ever I was; but alas, it has not distributed itself about this flesh, as I should like. When you have discovered some way to fatten up your patients, and have the flesh cover the bones all around, and not make itself too conspicuous, you will be heralded as one of the great benefactors of the age.

"Men as a rule do not care so much about this as women; but I do! However, I am not disposed to grumble, for I feel fairly well; very well, but not as strong as of yore. I stick rigidly to the diet, and vegetables and fruits are the sum and substance of my dietary. I have an excellent appetite and enjoy

## SIMPLE EXERCISES FOR CORRECTING ROUND BACKS AND STOOPED AND UNEVEN SHOULDERS

By F. C. Miller, Sanitarium Physical Director



"PLACE HANDS ON TOP OF HEAD,  
ELBOWS WELL BACK"



INCORRECT WAY OF DOING SAME  
EXERCISE

ROUND back and stooped or uneven shoulders are usually due to abnormal positions of the body. In the case of children the deformity results from carrying heavy books to and from school, sitting in ill-fitting desks and chairs, from rapid growth, overwork, eye strain, or general muscular weakness. When the weakness is from faulty attitude or muscular weakness, exercise will effect a cure, but if the cause is from a deformity of the vertebrae or ribs, the attention of an orthopedic physician will be required. The old saying, "As the twig is bent so will the tree become," is true of a child, as of a twig, for the deformity continues to increase as the years go by if no effort is made to correct them. The weak muscles, too, become weaker and the strong muscles become stronger. It is important, therefore, not to wait before beginning the exercises until one shoulder is higher than the other, until one hip is more prominent than the other, or until a shoulder-blade projects outward.

When the deformity is pronounced it is well to have a photograph made, for comparison with another taken three months later. At all times, whether the child is walking or sitting, a correct position must be maintained. Keep the top of the head raised, and the chest as high as possible, with hips

back, about three inches from the accustomed posture. The abdominal muscles will be developed quite as much by the effort to keep the chest raised as by the special exercises outlined.

### Exercises

1. Place hands on top of head, elbows well back; press downward on head with hands, while elbows are well raised. Keep chest well forward. Repeat sixteen times.

2. Place hand in front of chest, palms downward; move elbows back in line with shoulders, and gradually straighten forearms to side horizontal, with slight resistance. Repeat sixteen times.

3. Place hands on back of head, elbows well back; force the head backward, resisting the head movement with the hands. Repeat sixteen times.

4. Interlace fingers back of hips; move hands up well under shoulders, then straighten arms backward and downward, keeping fingers interlaced. Repeat sixteen times.

5. Walk on tip toes, stretching arms overhead, and making an effort to touch ceiling. Continue about twenty steps; after few moments rest. Repeat four times.

6. Place hands on back of head, elbows well back; bend body forward, keeping back

everything. I confess to a strong inclination to tempting morsels of meat, chicken and fish, and I do like oysters, and I revel in coffee and occasionally tea; but one and all of these things I refuse, and hope some time to

outgrow even the taste for them. I have two large movements of the bowels each day; drink eight to ten glasses of water each day and am now reducing a double chin, which does not become me."

and knees straight, the movement to be from hips. Repeat sixteen to twenty times.

7. Raise arm sideward up over the head, palms upward; raise on toes, and take a deep breath; lower arms to side and exhale. Repeat sixteen to twenty times.

8. If the left shoulder is lower than the right, place left hand back of head, right hand on right hips; bend the body to the right as far as possible; with feet about twenty-four inches apart, keep legs straight. If right shoulder is low reverse the movement. Repeat sixteen to twenty times.



SPECIAL EXERCISE FOR UNEVEN SHOULDERS AND LATERAL CURVATURE OF THE SPINE

9. If left shoulder is lower than the right place hands on shoulders; swing left arm up over head, and right arm downward. If right shoulder is low reverse movement. Repeat sixteen to twenty times.

10. If left shoulder is lower than the right, place arms at side horizontal, palms upward, level with shoulders; raise left arm over head, right arm downward, making slight resistance. Repeat sixteen to twenty times. Reverse the movement if right arm is high.

11. Raise shoulders as high as possible, back, down, and forward, describing circle while taking deep breathing exercises. Repeat sixteen times.

## THE SANITARIUM ADDS ANOTHER VALUABLE PLANT TO LARGE LIST OF VEGETABLE PRODUCTS

A NOVELTY in the way of a winter salad plant is to be introduced at the Sanitarium soon, a shipment having been received from the bureau of plant industry at Washington and planted under the supervision of the scientific expert, Mr. R. A. Young, who comes from the Brooksville, Florida, experiment to look after the carload shipment of dasheens and other plant importations sent on from the station.

The name of the new plant is "udo," and it is a near relative of the wild plant found in the New England States called spikenard. The udo is, however, a much larger plant. While it does not approach lettuce as a winter salad plant and could never really replace the oldtime favorite, it has at the same time several advantages over the same. What seems to commend udo is the fact that the present-day folk are ever reaching out after something new with which to tempt their appetite. There was never a time when delicacies were so eagerly sought as now.

The udo plant has thrived in Japan for centuries and is on sale on most of the fruit and vegetable stands the country over. The Japanese prepare it in various ways and foreign visitors in Japan experiment with it largely. In fact, its importation here is largely attributable to Miss Fanny Eldredge's interest in it, she having first called the attention of Mr. Barbour Lathrop to it while he was on a continental tour in search of new plants and seeds. In her Yokohama home she served him with it and he at once determined that the udo would become a favorite in the United States.

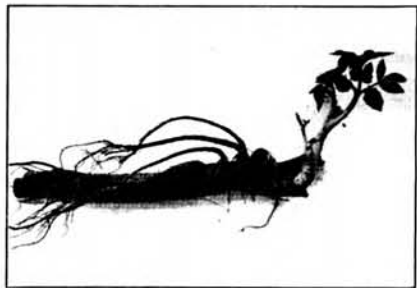
Her way of serving it was to cut the blanched stalks in long narrow shavings, which she allowed to stand in ice water for some time, then serving them with a salad dressing. The udo stalks are more crisp and brittle than the youngest celery shoots and in flavor are similar to the midrib of a lettuce leaf, though there is a bit of a piney taste about them, too. As a substitute for asparagus the udo is to be recommended. In truth, it will probably rank soon as one of the foremost vegetables in this country.

Udo is easy to grow and does not require transplanting oftener than once in nine or



UDO PLANTS BLANCHED BY ENCLOSING IN TILE

ten years. It can be cut again and again in the autumn as well as spring, and always



YOUNG ROOT CUTTING FROM UDO PLANTED IN THE SPRING, SHOWING NEW SHOOT

12. Arms at front of body; level with shoulders, palms up, draw arms backward level with the shoulders, touching back of head with thumbs. Repeat sixteen times.

13. Keeping arms straight, swing arms sideward upward, touching back of hands, with sideward downward. Repeat sixteen times.

14. Lying on floor, face upward, stretch arms over head and stretch out as far as possible, counting to sixteen.

15. Face downward, place hands on back of head, and force elbows well backward. Repeat sixteen to twenty times.

16. With face downward, repeat exercise 15, raising chest from floor sixteen to eighteen times.

17. Face downward, hands in front of chest, palms down; swing arms to the sides and backward, raising chest from floor, sixteen to eighteen times.

18. Face downward, hands down at sides of body, palms on floor; raise both thighs, keeping legs straight, twelve to sixteen times.

19. Face downward, hands on hips; raise chest, and turn body to the left and right; after turning to left and right twice rest for a few seconds.

20. Head in suspension, first with feet on floor, second on tip toes, third with feet off the floor. The suspension apparatus can be made at home, as shown in the illustration.

A month or more may elapse before one can take the full course of exercises outlined in this article. After each exercise, it is well to make an effort to see how large one can expand the chest, then making an effort to force air out of the lungs in expiration without dropping the walls of the chest. It will be better to practise the exercises at three different periods a day for ten minutes each time, than once for a period of thirty minutes.

yields a large crop of shoots that are often two feet long and an inch or more in diameter at the base. The entire shoot is edible,



UDO PLANT IN THE FIELD WHEN ALLOWED TO GROW

there being no coarse fibre present, as is the case with celery, or asparagus. By planting at different times in special forcing trenches one variety can be had the winter long.

The variety received at the Sanitarium is the "moyashi" udo. It is grown from root cuttings and the young sets are dug in November, following their growth from seed the year before, and kept in straw, well packed. In the spring they are planted,

March and April being the best months for the same, the root cuttings lying lengthwise in a shallow trench about four inches apart. The earth covering never exceeds two inches. When the leaves appear, filling is begun about the bases and, cultivated at intervals,



OLD ROOT OF UDO PLANTED IN THE SPRING, ON WHICH A YOUNG SHOOT HAS FORMED

the plants grow until the frost appears. When the two-year old plants are dug, all the dead stems are removed and they are packed in a dry place until needed for the forcing bed. In this the trenches are three feet wide and two feet deep, the bottom being covered with a layer of barley husks or bone dust with an over-covering of light garden soil mixed with ten per cent leaf mold.

In the forcing bed the dry udo sets are placed close together and the light soil mix-

(Continued on page twelve)

## Many Times Better than a Turkish Bath—

### Tones the Entire System

You can't be healthy unless you sweat. Business men—busy women—don't get enough exercise and sunlight to make them perspire as nature demands. Consequently their bodies clog with poisons. Sooner or later this clogging brings disease and debility. The Battle Creek Electric Light Bath is a speedy relief and sure prevention. Used in Sanitariums and Hospitals the world over.

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now in thousands of homes, installed in bathroom or bedroom—simple, always ready, gives a thorough bath at a cost of 4c—no attendant needed. Rests every muscle, refreshes brain and body. An invaluable regulator of the Family Health.

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**Frees [the] Body from Poisons—Used in Great Sanitariums**

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## The Battle Creek Sanitarium and Hospital Training School for Nurses

The Sanitarium School offers a two-year course of instruction in nursing for men. Diploma entitles the graduate to registration as a trained nurse. Courses of study include, besides ordinary medical and surgical nursing, the many scientific methods of treatment for which the Sanitarium is noted.

An unequalled opportunity for practical experience as well as thorough theoretical instruction; an excellent preparation for a medical course.

*Only men of good character and habits admitted.*

Prospectus describes fully the course and requirements

For particulars address

**The Battle Creek Sanitarium and Hospital Training School for Nurses**

Box A-66

Battle Creek, Mich.





MR. AND MRS. W. E. BARRETT, of Chicago, are among the Sanitarium guests.

THE arrivals at the Sanitarium the first eighteen days in January nearly reached the 350 mark.

MISS FANNIE PERRIN, of the X-ray department, is back from an extended visit to her home in Queen City, Missouri, also St. Louis, Chillicothe, and Macon.

DR. MARY V. DRYDEN and Dr. Carrie Staines are in New York, specializing in their particular branches of study. They will be absent about a month.

MRS. H. E. HOYT, of the staff of dietitians, has returned from an after-holiday visit with relatives in Iowa. She was accompanied by her two little daughters.

DRS. R. H. HARRIS and J. T. Case attended the semi-annual meeting of the Northern Tri-State Medical Society, held at Toledo, January 14. The Society embraces the three States, Michigan, Ohio and Indiana.

MR. AND MRS. G. W. MARQUARDT, of Des Moines, Iowa, are stopping at the Sanitarium for a time. They were here two or three years ago, and are being cordially welcomed by their old friends.

MRS. R. GRIFFITHS, of Avalon, Pennsylvania, is a Sanitarium guest. She is the wife of the superintendent of music in the Avalon public schools, and is herself a musician of considerable ability.

MRS. ENID S. WENTWORTH, of New York City, is stopping at the Sanitarium for rest and treatment. She is an ardent suffragist, and during the past few months has labored to such an extent that her present sojourn was enforced.

MRS. F. G. WARDEN, of Newark, Ohio, is a patient at the Sanitarium. Mr. Warden, who is the owner of a chain of prominent hotels scattered through the largest cities of the middle West, has recently joined her.

FRIENDS of Mrs. Loraine Pratt Immen, of Grand Rapids, an old friend of the Sanitarium, have received from her calendars of her own design that are truly beautiful. They picture a reproduction of the famous picture portraying the Child Jesus in the Temple and carry bits of verse appropriate for such use. Mrs. Immen is a woman of much talent and her visits to the institution are greatly enjoyed.

MISS MARGARET V. QUILLIARD, of Duluth, has entered upon her duties as social secretary. She has been a patient in the Sanita-

rium for some time and has made many friends about the institution already. Miss Quilliard was formerly a teacher and her success in that branch of work would seemingly bespeak like results in her new undertaking.

THOSE of the Sanitarium family who met and admired Mrs. Albert S. Burleson, of Texas, during her visit to the institution will be pleased to learn that her husband, Congressman Burleson, has been slated, according to late press reports, for postmaster-general on President-elect Wilson's cabinet. Congressman Burleson was also a guest at the Sanitarium during the early winter.

MR. AND MRS. M. LARR, of Detroit, were over-Sunday guests of the Sanitarium. Theirs was a honeymoon visit, as they were wedded Saturday in the City of the Straits and came immediately to the Sanitarium. The bride will be remembered as Mrs. Dorothy Mayler, who spent three years in the institution as a guest, with her son Jack, going to Detroit last autumn. Beautiful apartments await them in The Lenox, of which Mr. Larr is owner.

MISS MARY ADAMS, a nurse in training from Persia, enjoys the distinction of being the only person in all the hundreds connected with the Sanitarium in any way having perfect teeth. This fact was discovered during the holding of the annual medical missionary conference, and was divulged by Doctor Kellogg during his talk on the Battle Creek Idea. Her teeth are perfect as to quality and beauty, and she has never visited a dentist in her life.

THE January subjects for parlor lectures by Miss Lenna Cooper were: Tissue Builders and Repair Material, the 7th; Vegetables and their Preparation and Use, the 14th; Our Milk Supply, the 21st; Fruits and Sugars, the 28th. These are given on Tuesdays. Thursdays practice cookery classes are held in the cooking school. Their subjects for January were: Soups and Beverages, the 2d; Cakes, the 9th; Gelatine and Gelees, the 16th; Pastry, the 23d; Hot Breads, the 30th.

DR. W. H. RILEY, accompanied by his wife and Mr. Thorvald Aagaard, sailed from New York the 18th for an extensive tour through Europe. They will visit Naples, Florence, Rome, Venice, Vienna, Berlin, Copenhagen, and London. Dublin will also be included in their itinerary. Doctor Riley will spend considerable time in Vienna, where he will inspect the leading hospitals and medical schools and do special work by way of perfecting himself in his branch of study. He will be absent two or three months, Dr. Mortensen being assigned his patients in the interim.

MR. WILLIAM B. PLUNKETT and daughter have returned to their home in Adams, Massachusetts, following a prolonged stay at the Sanitarium. Mr. Plunkett is manager of the Greylock cotton mills and is a man of great prominence in the world of affairs. He is a trustee of the New York Life Insurance Company, and a director in the Berkshire Life Insurance Company. He was greatly pleased with the institution and returned much benefited by his stay.

NEW classes have been started in the senior department of the Sanitarium School of Home Economics. The one in institutional buying is conducted by Mr. O. C. Edwards, those in general cookery and in practical cookery by Miss Lenna Cooper. Laboratory work is done in both. This feature has also been instituted in the class: a patients' class in practical cookery, held each Thursday evening between the hours of five and six, and the students alternating in the teaching of it. Miss Faube, Miss Cooper's assistant, is in general charge, and also conducts the junior class in general cookery, with laboratory work.

MANY most favorable comments were occasioned by the serving of escalloped dasheens at the Rumely banquet. Even the government's scientific assistant from the Bureau of Plant Industry, Mr. R. A. Young, says he never tasted the new importation in such a tasty form. Many experiments are being made with dasheens at the present time. They are being boiled, fried, baked, escalloped, dried and frozen. Reduced to flour they have figured in experimental batches of wafers, sweetened and unsweetened. And, too, dasheen soup has appeared very acceptably on the Sanitarium menu.

THE recent assertion by Albert E. Shoemaker, of the Anti-Saloon League, that Washington women drink more and more each year, is stoutly denied by Mrs. John B. Henderson, wife of former senator from Missouri. Says Mrs. Henderson: "There is much less drinking among both men and women. Some of the smartest women in Washington do not serve liquor at all, and even in the diplomatic corps the use of liquor is not general as it was a few years ago." It is well to add that Mrs. Henderson is among those women by her termed "smart," she having long ago joined the ranks of temperance workers. She not only advocates temperance in so far as drinking is concerned, but eating as well. She and her estimable husband are old friends of the Sanitarium, and they long ago adopted the Battle Creek idea. Their no-meat dinners have become famed in the capitol city.

"MY FRIENDS," declaimed an orator in the Congress Hotel during the Republican convention: "My friends, I say to you that this great Republic of ours is standing right now on the brink of an abscess."

"Yes," said the old man, "I find my strength is failing somewhat. I used to walk around the block every morning, but lately I feel so tired when I get half way round I have to turn and come back."

## PROPER CLOTHING FOR OUTDOOR SLEEPING

In his recent book, "Fresh Air and How to Use It," Dr. Thomas Spees Carrington gives some very helpful advice as to clothing to be worn by outdoor sleepers. "When sleeping out of doors on very cold nights," says the Doctor, "it is necessary to dress for bed. Various methods are used in order to sleep in comfort, and the clothes suggested here should be tried by beginners, although after a little experience outdoor sleepers usually devise their own way of dressing. It should be remembered that some persons need much more clothing than others, and it is wise to experiment until a comfortable costume is found. At first, try a suit of warm underwear, with pajama and ordinary short length

cotton stockings into which the pajama legs can be tucked; over the stockings use eider-down boots or heavy lumberman's socks, and protect the shoulders with a sweater or shoulder cape made of double-faced eider-down. Those who do not like pajamas should try a woolen undershirt, a sweater, a long outing flannel nightgown or bathrobe, and knitted slippers.

### Directions for Making the Shoulder Cape

"A shoulder cape may be made in five minutes from a rectangular piece of flannel or a half yard of double-faced eiderdown. Cut the cloth to be used twenty inches wide by thirty inches long, and fasten the two ends

of each of the short sides together with a stitch or a safety pin; then slip the arms through the holes thus made and pin the upper edge around the neck.

### The Garments Necessary for Protecting the Head

"The head covering should be light, porous, and without a tight rim that presses upon the scalp and interferes with the circulation of the head. A knitted skull cap, long enough to be pulled down to the end of the nose and over the ears, gives good protection; or a knitted helmet covering the whole of the head, face and neck, with the exception of a small opening for the nose and mouth can be used. A hood shaped like an old-fashioned sunbonnet is also very warm and comfortable, and can be made at home from eider-down or outing flannel by using as many thicknesses of the material as may be needed. It should cover the head, and be drawn in closely around the neck with a wide flare over the shoulder, and it can be held in position by elastic bands passing under the arms. The flare of the hood should have a draw-string at the edge, which can be drawn in so as to pucker the cloth over the face. These hoods and capes can also be made of light weight canvas, lined with outing flannel or eider-down, but care must be taken to see that they are well fitted around the neck. When lying on one side with the face on a pillow, the nose usually keeps warm. If it grows cold when lying on the back, draw a cap down over the eyes until it covers the nose, or use a small piece of flannel to cover the top, held by elastic bands from the ears. *Never cover the head with the bed clothes* or allow any cloth to interfere with the inhaling of fresh air. If the breath, as it is expelled from the nose or mouth, comes in contact with the bedclothes on very cold nights, it will form icicles. Chapping of the face during the night can be prevented by using cold cream or vaseline about the nose and lips.

### Arrangement of Pillows

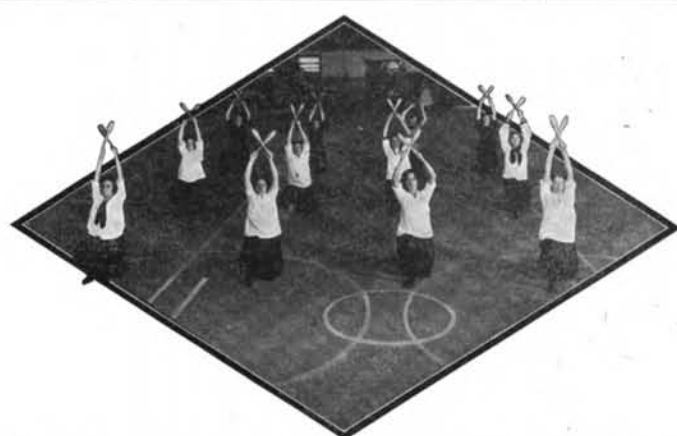
"Two pillows should be used for protection and comfort when sleeping out of doors in cold weather. Place them in the form of an inverted V with the apex at the top of the bed. The head should rest at the point where the pillows meet. This position allows the shoulders to nestle between the pillows, and protects them from the cold wind, which will otherwise find its way under the bedclothes. The head of the bed should be shielded from the wind or a strong draft by placing it close to the protected end of the shelter, or by boarding up the end of the bed. This can also be accomplished by covering the head of the bed with a canvas hood, supported on barrel hoops attached to the bedstead, or hung by a rope from the ceiling."

"SMITHERS was badly hurt in that trolley smash-up, wasn't he doctor?"

"Very. We had to amputate both legs."

"How sad! Will he pull through?"

"Oh, yes; we'll have him on his feet again in less than three months."



## NORMAL SCHOOL OF PHYSICAL EDUCATION

### A Splendid Opportunity for Men and Women

The Normal School of Physical Education offers a practical two years' course to Physical Directors and those who wish to fit themselves for the profession. Each school year comprises thirty-five weeks and an eight-weeks' summer course.

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N—S—P—E

# The Battle Creek Idea

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BATTLE CREEK, MICHIGAN

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## Ventilating the Lungs

THE Battle Creek Sanitarium was one of the pioneers in the agitation for fresh-air homes. Time was when the chief purpose of a house was regarded as affording an airtight compartment with a temperature of seventy to eighty degrees. A man or woman who ventured to sleep out of doors in the winter time was looked upon as a crank, or as a very close approach to those savages who have never, fortunately, got used to living in houses. Nevertheless, the Sanitarium continued to teach that so long as it did not furnish fresh air to its inmates along with reasonable warmth, a house was not a house, but a box, and that people who had the hardihood to build an outdoor sleeping porch were not savages, but on the contrary, had taken a step in advance of civilization. The result of our own and others' efforts has been that the fresh-air idea is becoming popular, and the up-to-date house has its sleeping porches as a matter of course, equally with bath- and other rooms.

A sleeping porch is not enough, however. The living rooms must be properly ventilated; old houses must be provided with facilities for fresh air, and new houses should be built with special attention paid to ventilation. As a writer in *Successful Farming* puts it:

"If your lungs are fully developed, they contain about 236 square feet of delicate membrane that permit the blood to spread out thin and grab at the oxygen in the air taken into the lungs with every breath. That makes a room 6x6x6 feet. With every breath the fresh air is taken in and the bad air is forced out. With every heart-beat, the blood laden with poisonous carbonic acid gas, is pumped into the lungs, where it trades the poison for life-giving oxygen.

"This breathing business is no joke. Consumption is on the increase. Pneumonia takes a great toll of life. Headaches deprive people of many an hour of useful work. Back of all the ailments and many others is the fact that few of us use our lungs to full capacity.

"Few homes are properly ventilated. Thus our lungs are half starved all the time, half developed, half used. What isn't used is thrown aside as useless by nature. Disease comes in and occupies the unused portions. It is like the homestead of a claim 'squatter.'

"Farm labor naturally gives a stoop to the frame and round shoulders result. It is

because we do not fill our lungs full at each breath. Good big lungs throw the shoulders back. Develop your chest by breathing exercises. Get the habit of taking a breath that fills every remote corner of your lungs.

"But don't abuse those big lungs by giving them foul air, poisoned with the carbonic acid gas of other breaths. You wouldn't eat the apple core somebody else threw away. But you feed your lungs on cast-off air!

"Consumption, pneumonia, headache, pale faces, sleepy, listless eyes—all tell the tale of starvation—lack of fresh air. You can live a long time without food, quite a while without drink, and about three minutes without air. And yet you put more time and attention to the food question than all else. You give pretty good heed to the water and milk supply, and never a thought of the air supply. Is that consistent with up-to-date living?"

## The Boy Smoker's Handicap

MR. J. J. MUNSELL, head of the employment department of the National Cash Register Co., Dayton, Ohio, a recent guest at the Sanitarium, told in conversation with an IDEA representative an incident which will occur more and more frequently in employment offices as employees awaken to the necessity of having only fit and efficient help. "A boy applied for a position in one of the mechanical departments one day," said Mr. Munsell. "He was about sixteen years of age I should say. I sized him up, and observed that his fingers and nails were very yellow, indicating an excessive use of cigarettes. I told him that we could not possibly use him, and explained why. I also embraced the opportunity to give a little sermon on the harmfulness of the cigarette."

There is no discounting the fact that the use of tobacco handicaps a boy. It stunts not only his physical but his mental growth; it makes him slow of movement and thought; it takes the lustre from his eye, and lowers his moral standards. It lessens his chances in the race for success, and no employer wants a boy who is going to develop into a failure.

Mr. Charles B. Towns, who has been described as the greatest "lay evangelist" in the country, writing in the *Century Magazine* says:

"In the immature the moderate use of tobacco stunts the normal growth of the body and mind, and causes various nervous disturbances, especially of the heart—disturbances which it causes in later life only when smoking has become excessive. That is to say, though a boy's stomach grows tolerant of nicotine to the extent of taking it without protest, the rest of the body keeps on protesting. Furthermore, all business men will tell you that tobacco damages a boy's usefulness in his work. This is necessarily so, since anything which lowers vitality creates some kind of incompetence. For the same reason the boy who smokes excessively not only is unable to work vigorously, but he does not wish to work at all. This result, apparent during growth, is only less apparent after growth, when other causes may step

in to neutralize it. Tobacco, in bringing about a depreciation of the nerve-cells, brings, together with physical results like insomnia, lowered vitality, and restlessness, their moral counterparts, like irritability, lack of concentration, desire to avoid responsibility and to travel the road of least resistance. If there were some instrument to determine it, in my opinion there would be seen a difference of fifteen per cent in the general efficiency of smokers and non-smokers. The time is already at hand when smokers will be barred out of positions which demand quick thought and action. Already tobacco is forbidden during the working hours in the United States Steel Corporation."

We remarked above on the moral effects of smoking. Of these Mr. Towns says, "The action of any narcotic is to break down the sense of moral responsibility. If a father finds that his boy is fibbing to him, is difficult to manage, or does not wish to work, he will generally find that the boy is smoking cigarettes. A boy does not start to smoke, however, only because his smoking father has made it difficult for him not to do so or because he has naturally come to consider it a badge of manhood, but because he finds other boys smoking. This is the worst feature of tobacco; it is a social habit, and not to smoke has its social disadvantages. Many men were prejudiced against smoking until they went to college. There they found themselves 'out of it' because they did not smoke. More than that, they found that the smoke of social gatherings irritated their eyes and throat, and they thought that smoking might keep them from finding other people's smoke annoying. A man who had left off smoking told me that at the first 'smoker' he attended afterward he found the air offensive and his eyes smarting intolerably, although when he had been helping to create the clouds in which they were sitting he had not noticed it at all. These experiences are common. For this reason, the social inducements for smoking are considerably greater than those for drinking. The man who refuses to drink may feel as much 'out of it' as the man who refuses to smoke, but he has ordinarily, and in the presence of gentlemen, no other penalty to pay. He undergoes no discomfort in spending the evening in a roomful of drinkers, and he can manage to find things to drink that will have for them the semblance of good-fellowship. It is the social features that attend the acquiring and the leaving-off the habit which make smoking so difficult to attack. In its present state, even if a boy were thoroughly familiarized in school with the harm tobacco would do him, he would still be seduced by the social side of it."

## Small Boy Takes His "Tummy" to Task

THE behavior of the ordinary stomach is incomprehensible to the boy who overdoes the eating business and the experiences celebrated in the following verses are quite typical, we believe. By the time the boy has grown up, however, he has discovered that the stomach is not in the least amenable



to persuasion; he has discovered it will not tolerate indigestible foods of any kind, and that it always has a good, sound stomach ache with which to repay the man who deliberately offends it. The astounding thing is how anyone, perfectly aware of this, can deliberately continue to feed the stomach food that it cannot digest and that it receives only on protest in the form of vigorous pains. But to the boy's remarks to his "tummy":

What's the matter with you, ain't I always been your friend?

Ain't I been a pardner to you? All my pennies don't I spend

In getting nice things for you! Don't I give you lots of cake?

Say, Stummick, what's the matter, that you had to go and ache!

Why, I loaded you with good things yesterday. I gave you more

Potatoes, squash and turkey than you'd ever had before!

I gave you nuts and candy, pumpkin pie and chocolate cake

An' last night when I got to bed you had to go and ache!

Say, what's the matter with you, ain't you satisfied at all?

I gave you all you wanted, you was hard just like a ball.

An' you couldn't hold another bit of puddin', yet las' night

You ached mos' awful, stummick; that ain't treatin' me just right!

I've been a friend to you, I have, why ain't you a friend of mine?

They gave me castor oil last night because you made me whine.

I'm awful sick this mornin', an', I'm feeling mighty blue,

Becoz you don't appreciate the things I do for you!

Roll on thou stiff and dark old towel roll

A hundred hands are wiped on thee each day;

Thou leavest mystic records, like a scroll,  
And finger prints of all who pass thy way.  
And where be those who saidst thou should not stay?

They pass, but thou rollest thy length immense.—*Judge.*

DYER: Did the doctors give Higbee up?

RYER: Yes, but not soon enough.

—*Life.*

### Where They Write

It is not surprising that Uncle Sam has to make special provisions for taking care of the Sanitarium mail when it is considered how many letters are written and sent out to all parts of the country each day. The two writing rooms near the main parlor are in constant use all day long, and the amount of paper that is used and the number of envelopes is enormous. There are sixteen desks in the two rooms and early each morning the mail supplies each with four pen



ONE OF THE SANITARIUM WRITING ROOMS

points, besides the two that are in the pen holders, and two blotters. Thus each day there are nearly one hundred pens used and thirty-two blotters. The number of envelopes and the amount of paper is proportionate, twenty packages of the former be-

ing used on rush days, while a box of paper over five inches in height is often used up. Ink also has an amazing tendency to vanish; one of the largest bottles lasting perhaps two weeks, but never longer, while a small bottle lasts not quite half that length of time.



## COURSE for DIETITIANS

There is an ever-increasing call for trained Dietitians and Culinary Supervisors. A growing interest in the science of Domestic Economy and Hygiene has created this new and dignified profession.

The Battle Creek Sanitarium School of Health and Household Economics offers very unusual opportunities for training for those desiring to fill positions as Dietitians in Hospitals, Sanitariums and other Institutions. Courses of study include advanced cookery, dietetics, hygiene and institutional methods and management.

Nowhere are such exceptional advantages for training in all branches of Domestic Science work to be found. The unsurpassed facilities of the Sanitarium, including the splendidly equipped laboratories, offer unusual advantages for practical experience and useful observation. Graduates are in great demand.

Students are given a special opportunity to meet a large part of their expenses by employment of a character that will aid them in their training, by arrangement. For prospectus address—

### THE BATTLE CREEK SANITARIUM SCHOOL OF HOME ECONOMICS

Lenna F. Cooper, Director. Box C-65, Battle, Creek, Michigan.

## Another Valuable Food Plant

(Continued from page seven)

ture is packed about them. Shoots begin to appear in about sixty days, these being cut like asparagus. The interval of their appearance may be regulated by planting at different times. This variety is better suited to American conditions than is the other, the kan. The same roots may be used again and again, like hyacinth bulbs, for instance, and while in many cases they are cultivated only in hothouses, climatic condition will permit them to grow and thrive in the open in Florida, and where the ground does not freeze until after the last of November the kan variety might be grown farther north.

## Sales Department of Giant Farm Implement Concern Banqueted by the Sanitarium

(Continued from page two)

who are making new agricultural methods possible. Sir Horace especially commended the new spirit of cooperation that is coming into our manufactures, and emphasized the need of our great industries assuming a moral along with their industrial leadership in the community: "Every company should do some service which will benefit the community with which it does business, but which will not directly affect the company's business," he pointed out. "The wholly new interests have not done enough to make the conditions better for the farmers. The time is extremely near when it will be generally recognized that agricultural economy in the United States must become as important a part in the nation's welfare as other things. It is necessary for posterity to live."

Some charming things were said by our guests about Battle Creek and the Sanitarium; many practical ideas about farm efficiency and the value to the farmer of oil tractors and other up-to-date machinery were presented; and it remained for Doctor Kellogg to tell how essential is the efficiency of the farmer and the men who make his machinery. "The facts are, however," he showed, "that Americans and other civilized races are dying because of the perversion of modern civilization. Fifty years ago the average life was 32 years; now it is 42 years. This would seem to indicate that we live longer. But that isn't the fact. We are dying off from the top. The maximum length of life is decreasing."

Doctor Kellogg then gave a few simple rules which if followed will make the workman more efficient for the day's work, give him a sounder physique, and prevent to a great extent, the threatened degeneration. "Don't 'bolt' your dinner," he said. "Take time to masticate. Don't worry while you're eating. Scientific investigation has shown that one's stomach does not behave properly while his mind is occupied with unpleasant thoughts. Don't eat meat or drink coffee. Sleep with your windows open. Cut out cigars and cigarettes."

Before the banquet the visitors were taken through the Sanitarium, every department and its workings being carefully explained.



## Normal School Basket Ball Team Makes Successful Bow for 1913

THE basket-ball team of the Normal School of Physical Education played its first home game of the season on January 14th, opposing the Albion College quintet. The final score was 28 to 26 in our favor, of course. The Normal School began the second half with the enormous handicap of an 18 to 6 score. The Normal School are great little finishers, however, and with a slight change in the line-up, some lightning plays and some accurate shooting, ran up 22 scores, as against 8 by the visitors, the final score, as already stated, being 28 to 26.

Not the least factor in the outcome was the remarkable work of the yell squad, headed by cheer master Ogilbee. The rooting was quite as fast and furious as the remarkable work on the field. The line-up was as follows:

N. S. P. E.	Position	Albion College
McKay	F.	Evans
Ambler, Ash	F.	Dillon
Offinger	C.	Field, Pahl
Colville	G.	Poleski
Herke	G.	Allen

A preliminary contest was played between the Sanitarium Basket-Ball team and the Augusta High School team, the "Vegetarians" winning easily.

ARE YOU HANDICAPPED IN YOUR DAILY WORK BY

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Might as well enter a marathon with the shoes weighted or a swimming tournament with the hands tied. The chances are against you. You can't do your best.

# PARA-LAX

offers the best means known of relieving the system of the burden imposed by this disorder. Battle Creek Sanitarium physicians find it more than takes the place of drug laxatives, for it produces quick results and is absolutely harmless.

It's a mild, innocent, agreeable preparation, and the relief it brings can be demonstrated in your own case at our risk.

Write for further information and special offer.

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Battle Creek, Mich.



Vol. VI, No. 4

BATTLE CREEK, MICHIGAN, FEBRUARY 16, 1913

PRICE, 5 CENTS

# NERVOUSNESS CAUSED BY POISONING

**DR. J. H. KELLOGG, IN THURSDAY NIGHT PARLOR LECTURE,  
SHOWS NEURASTHENIA TO BE A GENERAL CHRONIC TOXEMIA**

NEURASTHENIA, which embraces a large number of disorders often included under the general term "nervousness," is a chronic toxemia. In the first place the body is saturated with poisons which lessen the natural energies of the brain, rendering the brain cells less acute and less capable of mental effort. These poisons are very frequently produced by meat eating, though they may be the result of excessive

his system is rapidly converted into wastes, cinders, as it were, which poison and cripple every tissue, exercising their pernicious influence upon the brain and nerves, particularly as shown in depression of mind, irritability of temper, confusion of thought, inability to concentrate the mind, indecision, despondency, and other characteristics of neurasthenia.



THE NEW SANITARIUM PROPERTY

The building formerly known as the Sanatorium and more recently called the "Annex" has recently been purchased by the Sanitarium management. The building affords accommodations for three hundred guests. The Sanitarium has used the property for some two years on a lease, but the patronage has so increased, and the prospect for further demands is so apparent that it seems best to make this additional capacity permanent.

eating of any sort, especially in sedentary persons who do not exercise sufficiently to burn up the food material which they take in. For it should be remembered that a sedentary person, no matter how hard he works his brain, consumes in work only three-fifths as much food as does the man who engages actively in muscular pursuits. If he eats as much, the two-fifths excess which he takes into

Indigestion is another very frequent cause of nerve exhaustion. Bouchard has shown by incontrovertible evidence that the changes which often take place in the stomach and intestine, when in a state of indigestion resulting in fermentation and putrefaction, give rise to poisonous substances which, when absorbed into the body, may produce effects entirely similar to those produced by strychnia,



opium, alcohol, and other well-known drugs. When food is retained in the stomach beyond the normal time, either because of its indigestibility, or too large a quantity, or a crippled state of the stomach, these changes are certain to take place. This fact explains a very large share of the many symptoms which afflict the neurasthenic. The giddiness, the tingling sensations, the confusion of thought, and often mental incapacity, which are not infrequently observed for several hours after meals in chronic dyspeptics, are due to this cause. Here is the explanation of the irascibility, the despondency, the pessimism, the indecision, and various other forms of mental perversity, and even moral depravity, sometimes developed in persons least expected to exhibit such traits of character.

Alcohol, tobacco, tea, and coffee are also vicious poisons which exert a paralyzing influence upon the nerves. Alcohol, for instance, renders a man temporarily insane by paralyzing certain of the nerve cells, so that the brain is unable to form correct judgments. Irregular and unnatural combinations of ideas are formed, often with the most disastrous results. A man who naturally is peaceable, under the influence of liquor becomes violent, destructive, a veritable beast in ferocity. In the disease known as delirium tremens the nerve contacts become curiously mixed up, so that the sufferer sees snakes, reptiles, and all sorts of monsters and strange shapes before him. Such a patient once mentioned to me that he saw a sheep with a huge proboscis like an elephant, and chickens with enormous heads and jaws like crocodiles, with their mouths wide open and rushing at him. These facts forcibly impress upon one the evil effects of alcohol, tobacco, and other poisons which paralyze the nerve cells, destroying those cell groupings which are necessary for the maintenance of health of mind and body.

Again, the body is like a furnace. The food that we eat is taken into the body and burned, or oxidized, just as coal is burned in a stove. In the case of the furnace certain gases, the products of combustion, are formed which escape through the chimney. In the same way the products of vital combustion or oxidation escape from the body through the lungs, skin, and other excretory organs. When too large an amount of food is taken, the situation of the body is the same as that of a stove or furnace that is over-crowded with fuel; the combustion being incomplete, volumes of smoke are produced which choke the fire, and may extinguish it. An excess of food fills the body with organic smoke or imperfectly oxidized waste substances, of which uric acid is the best known representative, and of which rheumatism, neurasthenia, or nervous prostration, neuralgia, nervous headache, bilious attacks, apoplexy, paralysis, and various other disorders, are the natural results.

The body is a factory of poisons and if these poisons, which are constantly being produced in large quantities are imperfectly removed, or are produced in too great quantity, as the result of over-feeding, the fluids which surround the brain cells and all the living tissues are contaminated with poisonous substances, which asphyxiate and paralyze the cells, and thus interfere with their activity.



Four-Year Sober Paragon Chestnut Nursery Stock in Bearing

## THE PARAGON CHESTNUT

By G. H. CORSEN

THREE years ago there was formed in New York City the Northern Nut Growers' Association, the object of which is to try to adapt the finer nuts to growth in the northern States.

At the present time, only the very thick shelled and the extremely small nuts grow in the North. By careful selection, however, scientific grafting and hybridization, together with persistent and careful endeavor and patience, the members of this Association hope to endow the next generation with such an abundance of the best food that hunger will be unknown.

Last December the writer attended a convention of the Association held at Lancaster, Pennsylvania. There we saw the work of Mr. Rush, who has been experimenting for many years with the English walnut, and, in fact, with all the walnut family.

Mr. Rush's method of grafting the English walnut, by budding on a stock of the black walnut and thereby having a healthy tree capable of withstanding a temperature of twenty-two degrees below zero, was fully demonstrated. A Mr. Jones, of the same place, demonstrated his ability to top-graft

(Continued on page seven)

This fact explains, in part at least, the stupidity which is a common after-dinner experience with many persons, and which, with some people who are habitually gross eaters, is a confirmed, ever-present state.

A brain which receives impoverished blood is hampered in its activities. A brain surcharged with blood is, on the other hand, over-excited. The result is likely to be sleeplessness and irritability, and other symptoms of neurasthenia. If the blood is charged with irritating substances, the organs through which it circulates will be naturally exposed to abnormal irritation, excitation, and disturbance of function. A brain which receives too large a supply of blood must suffer first and most in this regard. Whatever is taken

into the stomach and absorbed enters the blood and circulates through the body. The odor of nicotine which hangs upon the breath of the smoker and the alcoholic odors which emanate from the body of the inebriate for many hours after he has ceased drinking, are evidences of this.

Now as to means of relieving this condition. First, the neurasthenic must eat carefully and take no stimulants of any kind. And—a matter of very grave importance in this connection—he must so regulate the bowel movements as to take care of the waste materials which have accumulated. This does not mean once a day, but three times a day. When food is introduced into the stomach a peristaltic wave is set up which travels the

entire length of the alimentary canal, and which, when not thwarted, unloads the waste materials from the body.

In making observations of these movements Doctor Cannon, of Harvard University, studied the action of the alimentary canal in a cat by means of the X-ray. He watched the food pass from the stomach into the alimentary canal, and from the alimentary canal into the colon. Here he found two movements. One was a constant movement from the middle of the colon upward, the purpose of which is to retain the fluid portions of the food in the cecum until absorption has taken place. The second movement came at regular intervals and was a downward movement, larger and stronger than the other.

When the unusable residues finally reach the lower part of the colon, they should be promptly expelled; if this is not done, the result is constipation, the worst evil that afflicts humanity, the most dangerous of all forms of intoxication the body knows. We might, indeed, call constipation a veritable Pandora's box of mischiefs, for malignant germs, scores of varieties of them, thrive there, each kind producing its particular poison, and making possible a great variety of symptoms of chronic intestinal activity. Professor Bouchard has shown that often the contents of the intestines consist of one-half bacteria, and these poisons, which are retained in the body, affect not only the skin, which becomes tainted and discolored, but also the nerves and the brain, the very seat of neurasthenia.

Neglect to bathe the skin, allowing it to become foul, is considered a hideous and unhealthful thing—yet an unclean covering skin is far less objectionable than a foul inside skin. The body, remember, is merely a double tube with a covering skin and an inside skin—the lining of the alimentary canal. Now, if the covering skin becomes foul, much of the impurity is cast off—by perspiration and in various other ways; but if, on the other hand the lining skin is allowed to become foul, the impurities are absorbed into the blood and the body is poisoned.

In order to cure neurasthenia, you must clean up the body and keep it clean. A man once came to me and said, "Doctor, tell me just what to eat. I want to be cured, and if you tell me to eat sawdust, why, I'll eat sawdust. I will do just what you say for three weeks; but at the end of that time I want to get back to my regular life." There is no hope for that sort of a neurasthenic. He has not yet reached the point where he is willing to be cured and stay cured. The most important thing for the neurasthenic is to be delivered from bad habits—from cigars, from tea and coffee, from beefsteaks—and to train the body into a condition in which it will throw off the wastes that are constantly accumulating.

In this connection let me caution you to remember that when the bowels are not active the kidneys have to carry off a great many of the poisons which accumulate in the colon, with the result that these delicate filters are ruined. How long, think you, would a Pasteur filter remain intact and in working condition if every day a quantity of filth were poured into it?

## Menu for Lincoln's Birthday Dinner

### MENU

#### Soups

Protose Chowder Tomato Soup

#### Entrées

Broiled Protose—Mushroom Sauce  
Nuttolene Fricassee Corn Roast

#### Vegetables

Baked Potatoes—Savory Cream Sauce  
Glazed Sweet Potatoes  
Boiled Onions Creamed Egg Plant

#### Relishes

Split Rail Salad Sweet Apple Butter  
Celery Radishes

#### Breads and Beverages

Sweet Cider Yogurt Buttermilk Grape Juice  
Kaffir Tea Minute Brew

#### Dessert

Sanitarium Mince Pie  
Log Cabin Pudding—Custard Sauce  
Mixed Nuts Apples Oranges

### RECIPES

#### Potato Chowder

$\frac{3}{4}$  pint sliced potatoes  $\frac{1}{2}$  small onion  
1 pint boiling water  $1\frac{1}{2}$  cups milk  
1 teaspoon salt  $\frac{1}{2}$  cup cream

Put the potatoes to cook in the boiling water with the salt and sliced onion. When tender put  $\frac{2}{3}$  of them through a colander and add to the remaining sliced potatoes. Add the milk and cream, reheat and serve. This quantity should make one quart.

#### Broiled Protose

Cut the protose in 2-ounce slices. Put into a pan and bake in a hot oven until browned.

#### Mushroom Sauce

2 tablespoons chopped onion  $\frac{1}{4}$  cup mushrooms  
1 tablespoon extract  
2 tablespoons butter 1 teaspoon salt  
2 tbs. tomato puree  $\frac{1}{2}$  cup brown sauce

#### Corn Roast

2 eggs 1 can corn  
 $\frac{3}{4}$  cup milk 1 teaspoon salt  
 $\frac{3}{4}$  cup cream  $\frac{1}{2}$  teaspoon grated onion  
 $1\frac{1}{4}$  cups granola

Mix ingredients in order given. Let stand for 20 minutes. Bake 30 to 45 minutes.

#### Creamed Egg Plant

2 quarts egg plant 2 tablespoons flour  
2 cups water  $\frac{1}{2}$  teaspoon salt  
1 cup milk  $\frac{1}{4}$  teaspoon celery salt  
2 tablespoons butter

Cook the egg plant in the water until tender. Make a white sauce of the milk, butter and flour. Add salt and celery salt. Cook until it thickens, then add to the egg plant.

#### Split Rail Salad

1 cup apples  $\frac{1}{4}$  cup English walnuts  
 $\frac{1}{2}$  cup celery 1 cup cooked mayonnaise

Mix diced apple, celery and walnuts with the cooked mayonnaise and serve on a lettuce leaf. Serve with cheese straws split to represent split rails.

#### Cooked Mayonnaise

1 egg 2 tablespoons butter or oil  
2 tablespoons water  $\frac{1}{4}$  teaspoon salt  
2 tablespoons lemon juice

#### Mince Pie

$4\frac{1}{2}$  cups chopped apples 1 cup raisins  
2 cups minced protose  $\frac{1}{2}$  cup molasses  
 $\frac{1}{2}$  cup prune marmalade  $\frac{1}{2}$  cup sugar  
 $1\frac{1}{3}$  cups fresh boiled  $\frac{1}{2}$  lb. butter ( $\frac{1}{4}$  cup)  
cider made from apple juice cooked  $\frac{1}{2}$  teaspoon cinnamon  
down from  $6\frac{2}{3}$  cups  $\frac{1}{3}$  teaspoon nutmeg.

This makes two pies.

#### Glazed Sweet Potatoes

1 dozen sweet potatoes 4 tablespoons water  
(small) 1 tablespoon butter  
 $\frac{1}{2}$  cup sugar

Boil in salted water with skins on for 10 minutes. Remove skins, cut in halves lengthwise and cook in buttered pan. Make syrup by boiling for three minutes the sugar and water, then add the butter. Brush the potatoes with syrup and bake until brown, basting with remaining syrup.

The kidneys are delicate filters, and in loading them down with poisons that come from putrefaction we ruin them. A man in perfect health, with sound kidneys and a sound liver, may be able to tolerate these poisons for a long time, but he is constantly undermining his health, and will reach the time when his body will not stand the damage any longer. Like a battleship on fire—the fire burns and continues to burn, but after a while it gets to the magazines and the ship blows up. So it is with the man who goes on with his bad habits—eventually the disease processes reach the vital point and he collapses.

Neurasthenia is the name applied by medical men to a group of nervous symptoms which varies more or less with each individual case. The cause, in most if not all cases, is general poisoning, of which the nervous symptoms are only consequences. The cure consists in a return to nature, living the simple life.

## Prominent Clergyman Visits Sanitarium

REV. C. GOLDER, D. D., of Cincinnati, was a visitor to the Sanitarium during the early part of the month, being attracted by reports that had reached him concerning the Sanitarium and its work. Doctor Golder is identified prominently with the German Methodist work in this country, having introduced into America the German system of deaconess' work. He is in charge of the Bethesda Hospital, the Scarlet Oaks Sanitarium, The Dorcas Home, and a dozen or more deaconess' homes in and around Cincinnati. While here he made a study of the institution and expressed himself as much pleased with what he saw. Since returning home he has reiterated his pleasure in a letter in which we find the following: "You have a great institution, and I admire your system, as well as the beautiful spirit I found everywhere."

## SOME GYMNASTICS FOR GENERAL PHYSICAL DEVELOPMENT

By F. E. Miller, Physical Director, Battle Creek Sanitarium

EXERCISE from ten to fifteen minutes each morning, preferably on rising. Finish with a cool or cold shower, spray, or wet towel rub.

1. Stand erect, feet eight inches apart, head and neck drawn well back; hips back, chest up. Alternately flex and extend fingers—(a) arms at sides; (b) arms side horizontal; (3) same as 1; (4) starting position, arms down to side. 12 to 16 times.



Exercise 27, for increasing height; feet flat on floor

zontal; (c) arms front horizontal; (d) arms vertical. 12 to 16 times.

2. (1) Hands on shoulders; (2) rotate arms forward, and move to side horizontal, palms up; (3) rotate arms backward from side horizontal; (4) palms turned backward. 12 to 16 times. Return to starting position.

3. (1) Hands on shoulder; (2) move to side horizontal, and under arm pits to shoulders; (3) repeat with arms to vertical; (4) and under arm pits. 12 to 16 times.

Take deep abdominal breathing exercises, forcing air to upper part of chest, relaxing abdominal muscles and exhaling—10 seconds inhaling, 10 seconds exhaling.

4. Raise arms to side—horizontal (arm straight), bend arms with (1) hands front of chest, elbows well back; (2) straighten arms over head to vertical. (3) same as 1; (4) starting position, arms down to sides. 12 to 16 times.

5. (1) Raise arms to front horizontal, fists clenched; (2) move arms to side hori-

zontal; (3) same as 1; (4) starting position, arms down to side. 12 to 16 times.

6. (1) strap stand; bend trunk forward from hips at 45 degrees, legs 20 inches apart, hands in front of chest, elbows well up and back. (2) swing arms to side horizontal, and back in horizontal plane as far as possible. 12 to 16 times. Repeat deep breathing exercises.

7. Hands on hips; rock on heels and toes. 16 to 40 times.

8. Hands on top of head; bend knees (full squat). 14 to 20 times.

9. Jump to stride; stand slowly, feet about 24 inches apart, and return feet together. 20 to 30 times. Breathing exercises.

10. Place hands on floor; jump backward, drawing knees well up between arms. 16 to 24 times.

11. Bend trunk forward and straighten



Exercise 27, raising body on toes

upper front of back going down and coming up.

12. (1) Arms over head to vertical; bend trunk to left side (feet 24 inches apart), touching floor with left hand, right arm overhead; (2) straighten body and repeat to right. 12 to 24 times. Repeat breathing exercises, trying to lengthen time of inspiration and expiration.

13. (1) Squat, placing hands on floor; (2) extend left leg sideward, then right leg,



Exercise 26, for constipation. First position

then both. 12 to 24 times. Execute same forward, then backward.

14. Front rest; arms straight, body facing downward and toes resting on floor. Chin three to ten times. Raise first left then right leg 12 times.

15. Lie face downward, arms at sides of body; raise first left, then right leg, straight, then both.

16. Hands on hips; raise body from floor with chest well off the floor.

17. Bend head forward and backward. 12 to 16 times. Turn head sidewise left and right. 12 to 16 times.

18. Lying on left side, raise right leg. 12 times; then hip 12 times; then body, with right hand on hips, 12 times. Repeat same on other side of body.

19. Lying on back; breathing exercises. Draw left knee well up to chest, assisting with hands, 12 to 16 times; same with right knee, then with both knees.

20. Lying on back: (1) Arms over head; swing body up to sitting position; (2) let body fall slowly to lying position. 12 to 16 times.

21. Raise both hips, body resting on heels and shoulders. 12 to 16 times. Breathing exercises.

22. Raise first left then right leg, keeping knees stiff, 12 to 16 times; then same with both legs.



Exercise 26, second position



23. (1) Place hands on floor; raise body, resting on heels; (2) place hands on floor; raise left leg, resting body on right heel; (3) place hands on floor; raise right leg, resting body on left heel. 8 to 12 times.

Breathing exercises while sitting on floor; inhale while raising arms to vertical; relax, dropping arms to sides.

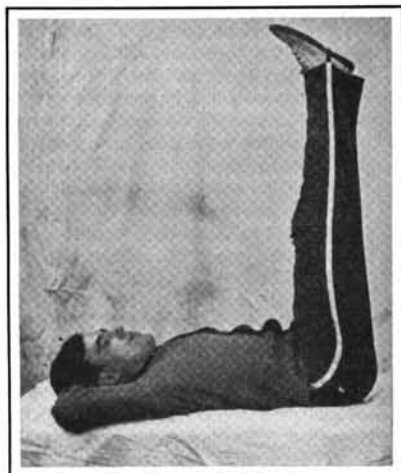
24. (1) Sit on floor; hands back of body about eight inches. (2) raise heels about eight inches and spread legs. 12 to 24 times.

25. (1) Lying on floor, swing body to sitting position, drawing knees up in front of chest; (2) let body fall slowly to lying on floor. 12 to 16 times.

26. Place ordinary chair well up under hips and back; flex legs and thighs well up in front of chest (see Illustration on page 4). Extend legs as in Illustration on page 4. 12 to 16 times. Good for constipation and toning abdominal walls.

27. Stand against wall, with feet firm on floor, then rise on toes, with chest high.

When exercising, be sure to have the room well ventilated, and breathe nothing but pure air, as the purer the air the better the results. Use the method of exercises given above wisely, as out of it you can make slow, light, quick or heavy work, as the state of your constitution and temperament may demand.



See Exercise 22

To illustrate: if you are of a nervous temperament, do the exercises slowly. If very fat, or of a phlegmatic temperament do your work more quickly. If you are in a fairly normal condition, work vigorously enough to make the body perspire. If you wish to grow very strong and gain showy muscular development, work hard, slowly and long, and put strong action into each exercise.

Take a cool sponge bath immediately after exercising; after drying with an ordinary towel spend five minutes massaging the body, especially the upper and lower limbs.

To prevent any soreness, practise very lightly and for short periods of time the first week; afterward moderately increase your working time, until you can do the exercises the number of times suggested. If you practise these exercises daily, you will become more active, strong, and enduring.

(Continued on page eleven)

## Parlor a Popular Place in Winter

ONE of the most charming spots in the Sanitarium is the large parlor at the north end of the building. This room is sometimes neglected in the summer, when the patients are outside in the sunshine, but it comes into its own in winter. Probably its greatest drawing card is the large open fireplace, where always a fire is burning. Here all day long a semi-circle of chairs will be drawn about the great fire and the patients spending hours of solid comfort, with only time off for meals, lectures, and treatment.

The quietness of the parlor is another of its admirable features. It is large and commodious and it takes a big noise to make itself heard. The large rocking chairs with which it is furnished have been provided with the idea of rest, and the high backs have plenty of room to lay the head upon. In

the evenings the usual lectures are given here, but even if there are no lectures some one may be playing the piano, or a traveler may be telling yarns of his voyages, rehearsing experiences in the orient, affording contrast to the snow and cold which are just outside the warm room. In one of the small parlors to one side a game of checkers may be in progress, with a small group of checker fans gathered around watching the game.

Last winter the presidential election had not yet been taken and this formed the one absorbing topic of conversation. It was not infrequent to hear in the lobby a man say to another, "Come into the parlor and let's talk it over."

And thus from early morning until late night, the parlor is a popular place for patients who would sing or play, compare travel, literary, social or political notes, run off a rubber of checkers, or just rest.



## NORMAL SCHOOL OF PHYSICAL EDUCATION

### A Splendid Opportunity for Men and Women

The Normal School of Physical Education offers a practical two years' course to Physical Directors and those who wish to fit themselves for the profession. Each school year comprises thirty-five weeks and an eight-weeks' summer course.

This school enjoys many extraordinary advantages because of its affiliation with The Battle Creek Sanitarium. The equipment, including laboratories, indoor and outdoor gymnasiums and swimming pools, playgrounds and athletic field, is unsurpassed.

In addition to the regular studies, students of the school have special advantages in the study and practice of Physiology, Anatomy, Hygiene, Chemical Analysis, and the various methods of treatment which have made this institution famous.

Tuition for full year \$100, including Summer School; for rest of the year, \$75. For Summer Term alone, \$40; without electives, \$25. Board \$3.00 to \$3.50 per week in addition. Unusual opportunities are given by special arrangement for earning money toward expenses. Two \$100 competitive Scholarships open to High School graduates.

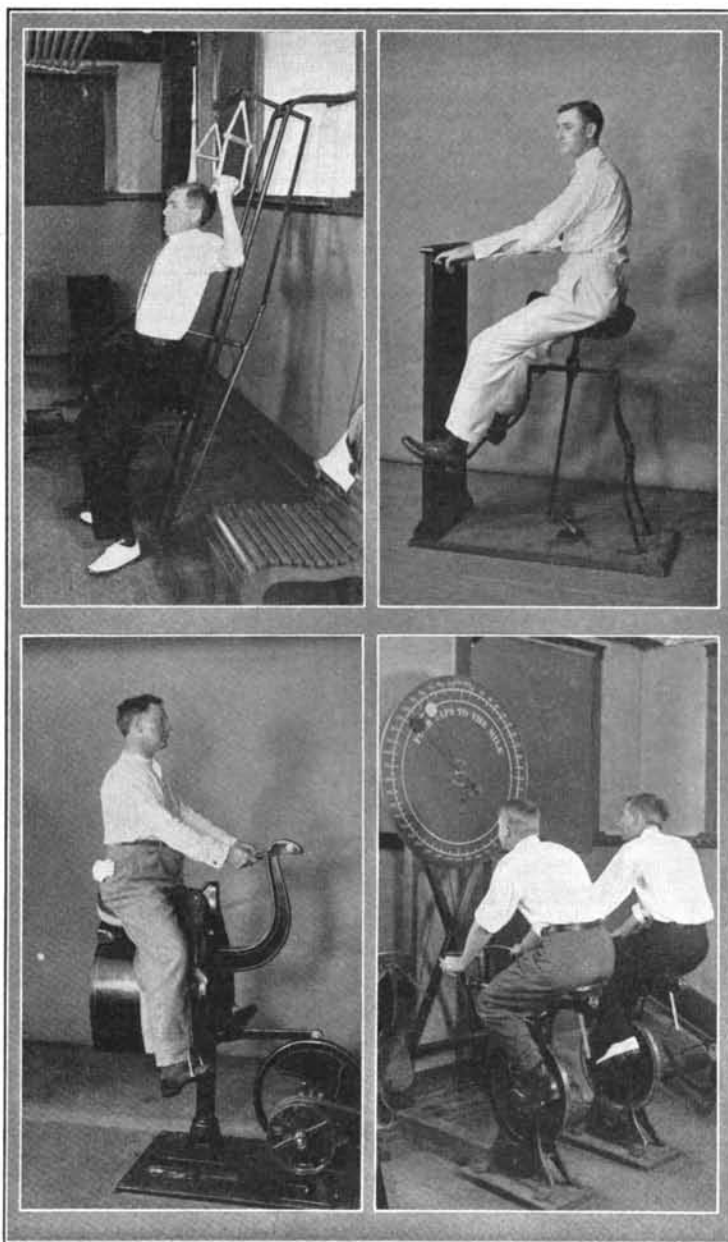
Summer Term, June 30th to August 27th. Fall Term, September 25th to December 20th.

For full particulars and catalogue, address

Wm. W. HASTINGS, Dean,  
THE SANITARIUM, Box B-67, Battle Creek, Mich.

N—S—P—E





## NEW APPARATUS IN THE SANITARIUM GYMNASIUM

THE far-famed man from Mars would find much to surprise him could he visit a morning drill in the gymnasium. After the close of the "Grand March" he would observe men and women taking their places at strange machines, galloping seriously for fifteen minutes without making any progress whatever, or riding a bicycle great distances—which are recorded for one upon an attached dial. The saddle horse is run by electricity and is particularly popular among the children, who enjoy its jolting effects. Two styles of saddles are afforded, for men and for women. Runaways and fractures are impossible for this steed, for the animal is very sensitive to the press of a button.

Bicycles, as one of the patients has re-

marked, are absolutely safe, the tires being guaranteed non-skidding and puncture proof. Instead of watching the road to avoid ruts and rocks one fixes his attention upon a dial which indicates the progress made by the rider. The pedaling is done in much the same manner as with an ordinary bicycle, the resistance being made without fatigue equal to that made with a bicycle along a level road.

Among other interesting machines is the stationary boat, or shell, which is seldom found outside of college training quarters. When one pushes the oars forward they move easily, but when they are drawn back the air is let out gradually which gives the effect of pulling against water.

The Mars person would undoubtedly ask the meaning of strange marks which appear upon the gymnasium floor, for all the world like a map of some outlandish country. If a base ball or basket ball fan he would be delighted to know that these lines marked out a base ball field and two basket-ball courts.

## Impressed by the Courtesy of Employees.

FATHER THOMAS T. RYAN, of Pontiac, Michigan, has just left us, after a two weeks' stay, enthusiastic over the Sanitarium and its method of treatment. "I came here a nervous wreck," he said before leaving. "I am now feeling in the best of condition. I enjoy the diet; how much so you may gain from the fact that I went to Kalamazoo the other day and sat down to a fine restaurant meat menu and confined my meal to non-meat foods. More than anything else, however, I have been impressed with the spirit which prevails among the help. The service is splendid. Everyone is courteous and willing to answer questions and impart information."

## Mr. Meldrum Sets Us Right

MR. JAMES MELDRUM, the prominent English vegetarian propagandist, a guest at the Sanitarium, hands us a copy of the BATTLE CREEK IDEA, for December 15th, containing a sketch of Mr. Meldrum's activities and interests, and makes a few suggestions by way of correction, which are necessary, as he puts it, "to keep up my reputation for accuracy."

"The Scottish Vegetarian Society," says Mr. Meldrum, "is a live body, but it does not run any restaurants or cafés. The splendid Vegetarian café in Edinburgh was started by the late Albert Broadbent, secretary of the English Vegetarian Society, and perhaps the greatest food reform propagandist the world has seen. The vegetarian movement is very strong in Manchester, the headquarters of the Society, which has several good cafés there. In London there is a chain of vegetarian restaurants that are run by Eustace Miles, one near Trafalgar Square being known the world over as a centre of intellectual progress and humanitarian propaganda. Eustace Miles is an ardent vegetarian, a noted scholar of Cambridge University and a successful caterer. He was also for many years the world's champion tennis and racquet player. "The 'Just' system is much in vogue in Germany.

"Among the founders of the Fabian Society were Mrs. Annie Besant, and the late Professor Davidson of America. H. G. Wells is only a recent member, like Jerome K. Jerome and Forbes Robertson. The official work of the Society is confined to the fields of economics and sociology, but its attribute is sympathetic to vegetarianism and all branches of health reform for the individual and the community."

Dr. Bills—There is nothing serious the matter with Freddy, Mrs. Buggins. I think a little soap and water will do him as much good as anything.

Mrs. Buggins—Yes, doctor. An' shall I give it to him before or after his meals?



An 11-year old Sober Paragon chestnut tree in bearing; this tree bore one bushel of chestnuts last fall.

### The Paragon Chestnut

(Continued from page two)

the best variety of pecans to the bitter nut hickory.

The most remarkable paper was an illustrated lecture by Mr. Coleman K. Sober, of Louisburg, Pennsylvania, in which he threw upon the screen his whole eight hundred acre farm of paragon chestnuts. Mr. Sober made the remarkable statement that the chestnut blight had been hovering around him since 1902, but that it caused him neither loss nor worry. Two weeks later I visited the remarkable farm described by Mr. Sober, to see for myself how one man, without any aid from the State, was, single-handed, suc-

cessfully fighting the most dreadful tree disease that has ever been known.

I saw the square mile of paragon chestnut growth and the orchard surrounded by wild native chestnut woods, the latter being rapidly destroyed by blight, while the former had only eight native trees affected, or one tree to each one hundred acres. The State blight inspectors had just finished their work of inspection, so I was in a position to know that Mr. Sober's statements at the convention were modest enough. The paragon chestnut in this day of high food prices has a peculiar interest, especially in a thinly populated country. The nut is about the size of the European product, and almost as sweet as the American. It will grow anywhere in southern

(Continued on page eleven)

## Many Times Better than a Turkish Bath—

### Tones the Entire System

You can't be healthy unless you sweat. Business men—busy women—don't get enough exercise and sunlight to make them perspire as nature demands. Consequently their bodies clog with poisons. Sooner or later this clogging brings disease and debility. The Battle Creek Electric Light Bath is a speedy relief and sure prevention. Used in Sanitariums and Hospitals the world over.

## Battle Creek Electric Light Bath



now in thousands of homes, installed in bathroom or bedroom—simple, always ready, gives a thorough bath at a cost of 4c—no attendant needed. Rests every muscle, refreshes brain and body. An invaluable regulator of the Family Health.

#### Book of Treatments Free

Send for it. Explains how to overcome nervous troubles, rheumatism, stomach, bowel, liver and kidney disorder—obesity and anemia. Professional women use the Battle Creek Electric Light Bath for its wonderful tonic and skin beautifying results.



"The Electric Light Bath is superior to a hot air or vapor bath because the former produces radiant heat, the latter convective heat."

McIntosh, "Hand Book of Medical Electricity."

**Frees the Body from Poisons—Used in Great Sanitariums**

Battle Creek cabinets are built to last a lifetime—large upright and small folding styles. Send for Free book of Home Treatments and full details. Every cabinet Guaranteed and shipped on

**10 Days Trial**

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## The Battle Creek Sanitarium and Hospital Training School for Nurses

The Sanitarium School offers a two-year course of instruction in nursing for men. Diploma entitles the graduate to registration as a trained nurse. Courses of study include, besides ordinary medical and surgical nursing, the many scientific methods of treatment for which the Sanitarium is noted.

An unequalled opportunity for practical experience as well as thorough theoretical instruction; an excellent preparation for a medical course.

*Only men of good character and habits admitted.*

Prospectus describes fully the course and requirements

For particulars address

**The Battle Creek Sanitarium and Hospital Training School for Nurses**

Box A-67

Battle Creek, Mich.



A. M. WEBB, Esq., a prominent attorney of Fort Atkinson, Wis., is with us at present.

DR. W. O. ROOP, of Dayton, Ohio, who specializes in skin diseases, is taking treatment at this institution.

AMONG the recent arrivals at the Sanitarium we notice the Hon. B. F. Keller, U. S. District Judge, of Charleston, W. Va.

HON. H. M. WOLCOTT, Vice-Consul General of the United States in Mexico City, is a guest of the Sanitarium. Judging from the dispatches just now to hand the Sanitarium is a somewhat quieter place than the Mexican capital in which to reside.

THE Sanitarium basket ball team, composed of employees of the institution, has gained a local reputation as an exceedingly fast aggregation, their latest victory being over the Battle Creek Y. M. C. A., which has won many important victories, one of them over the Albion College team.

DR. E. W. HANLON, of Los Angeles, a member of the faculty of the College of Physicians and Surgeons of that city, visited the Sanitarium recently for the purpose of investigating the facilities and principles employed here. He expressed much pleasure at the results of his investigations.

MRS. MARY A. FOSTER, of East Cleveland, Ohio, whose husband was a prominent and much esteemed physician, has been a patient at the Sanitarium for a few weeks. This lady returned to her home on the 11th inst., greatly improved in health and a thorough convert to the principles and methods she learned while here.

DR. L. J. COPPEGE, from the African Congo region, arrived at the Sanitarium about the first of the month with his invalid wife, whom he brought the entire 13,500 miles in a helpless state from a peculiar form of neuritis. We are glad to say that there is every prospect of a good recovery for this estimable young lady.

DR. W. O. JOHNSON, of Korea, is a patient at the Sanitarium. This gentleman was located in Seoul during the past few months and was called upon to attend the Christians who were awaiting trial for participating in a conspiracy for overthrowing Japanese authority. These prisoners were subjected to very cruel treatment to extort from them such confessions as would incriminate themselves and others. The charges were utterly baseless in truth, though the treatment to which the people were subjected was not an

unusual proceeding in that country. The strain upon Doctor Johnson's strength was very great and he is now seeking to recuperate.

MR. H. J. PATTEN, of Evanston, Ill., was a visitor at the Sanitarium for a few days, coming to see his wife, who is a patient with us.

WORD has been received from Drs. W. H. Riley and Mrs. Riley, enroute to southern Europe. A letter was posted at the Madeira Islands, stating that the voyage had been an enjoyable one, and that both were well. Doctor Riley was pleasantly surprised to find that one of his patients was a fellow-passenger whose stateroom adjoined his own.

ONE of the Sanitarium laboratories reports that in January, 1912, the average number of cases examined there daily was fifteen, and the average number for the year was twenty-five per day. January, 1913, shows a daily patronage of twenty-seven. This may be taken partly as showing the increasing patronage of the institution at large and partly as showing the increasing use to which the laboratories are being put.

DR. A. J. MACNAMARA, of Cleveland, has paid his wife, who is a patient at the Sanitarium, a brief visit. Doctor MacNamara is a physician of high standing, and took a genuine interest in looking into the methods employed at the Sanitarium.

DURING the week ending February 9th, there were 135 arrivals registered at the Sanitarium. This is an indication of the large patronage which the institution is enjoying at a time of the year when people naturally prefer to remain at home. The fact that we are living in a world of sick people is more and more forcibly impressed upon us. Many of those coming now are desperately ill, and it is a great joy to see them built up day by day until they can return homeward rejoicing in new-found health and strength.

THE basket ball team of the Normal School of Physical Education met the Northwestern College Team on the floor of the Sanitarium Gymnasium last Saturday night, and was defeated by a 43-17 score. It was a brilliant match, described by one authority on basket ball as probably the "classiest game ever seen in Battle Creek." The score by no means represents the splendid work of either team. The game, too, was played under intercollegiate rules, whereas the Normal men had never played anything except under the "A. A. U." rules—they had not even had opportunity for a single practice under the collegiate rules, a fact which was the largest factor in their defeat.

DR. J. T. CASE has received notice of his election as a Fellow of the Royal Society of Medicine.

PROF. M. H. McLEAN, a member of the faculty of the Chicago University, and more recently associated with the business management of that great institution, spent two weeks at the Sanitarium recently in company with his estimable wife. These friends were not here as patients, but being interested in health matters came here to observe and to experience the benefits of the Sanitarium régime. They reported themselves as greatly pleased with their observations. Mrs. McLean is a daughter of N. W. Harris, the well-known Chicago capitalist and philanthropist.

BISHOP COLLINS DENNY, of Richmond, Virginia, has arrived at the Sanitarium in company with Bishop E. E. Hoss, of Nashville. These gentlemen are in responsible positions in the Methodist Church South. Bishop Denny was with us for a time last summer, but was unable at that time to remain as long as he desired to do. Bishop Hoss holds an important place in his church, having edited the *Southern Christian Advocate* for many years, and traveled extensively in all parts of the world in the interests of the church work. Both are celebrated preachers, and eminent in Christian counsels.

BISHOP JOSEPH C. HARTZELL, who has charge of the work of the Methodist Church in Africa, is spending a month at the Sanitarium recruiting his health and strength previous to returning to his arduous work in the Dark Continent. We are glad to be able to report that he is making good progress. He has had seventeen years in Africa as presiding bishop and his work has done very much for the benefit and enlightenment of the people there and in opening the land to Christianity. His work has extended from one extremity of the vast continent to the other. The Bishop is thoroughly in harmony with Sanitarium teachings and methods and finds much benefit in them in his great labors. It is expected that he will be able to occupy the Chapel pulpit on the 18th instant.

DR. CHAS. A. STAUFFACHER, with his wife and child, called at the Sanitarium on February 5th, enroute to East Africa, where they are going as medical missionaries under the Methodist Board. Doctor Stauffacher obtained his medical education in connection with the Medical College here, finishing in Chicago. For over a year he has acted as assistant to one of the Sanitarium physicians, having the missionary field always in view. Their home will be at Inhambane in Portuguese East Africa, but the doctor's work will have quite a wide range. A few of the friends came together in Hussey Cottage to bid these friends farewell. Bishop Hartzell, who was present, spoke briefly of the work to which Doctor Stauffacher is going. Doctor Martin in behalf of the Sanitarium family presented a fine microscope, and a kodak of the best pattern, a gift of Mr. Chamberlain, of Dayton, Ohio. All wished the little party a safe voyage and an affectionate farewell. They have gained the confidence of a large circle of friends here.





One of the daintiest advertising booklets we have seen has just come to our desk. The front cover and the large two-page "spread" give a general idea of the decorative make-up of the book, but the color work—a beautiful riot of greens, purples, blues, reds, and oranges, all tastefully combined—cannot, of course, be reproduced. The book calls attention especially to the summer advantages of life at the Sanitarium, containing pictures of tennis, golfing and other outdoor recreations.

## THE BATTLE OF THE BACTERIA

OUR publishers today are leaving no excuse for the layman to be uninformed about the causes of disease and how to care for his health. Besides the scores of books that are written on the subject every year, every magazine editor who wishes to educate as well as to entertain his readers aims to have at least one article every month featuring health and hygiene. In the February *Cosmopolitan* is a study of the struggle which is going on constantly between the friendly and the unfriendly bacteria, showing that the dangerous character of the unfriendly germs is due not so much to the malignancy of the germs themselves as to the fact that we harbor the germs and encourage their activity by cultivating wrong conditions within our bodies. Says Mr. Stoddard Goodhue, in the article referred to, "the vast majority of all deaths are due to the invasion of the human body by definite and tangible foes, which are no less real because they are of microscopic dimensions. The chief aim of medical science in our day is to combat these microbes, either by preventing their access to the body, or by making the body proof against them if they do find entrance. Thus when we say that a person has consumption we mean that a microbe of a definite species, which we name the tubercle bacillus, has lodged in the lungs, and is flourishing there. Similarly typhoid fever is a condition induced by colonies of the typhoid bacillus in the large intestine; diphtheria means a poisoning of the system by the secretions of a colony of Klebs-Loeffler bacilli in the throat, and so on.

"We speak of the microbes that produce these untoward results as 'malignant'; but of course this is a biased view of their activities. The bacilli may cause the death of their host, but it is by no means to their advantage to do so. They have colonized in his lungs or digestive tract or throat because

they found lodgment there convenient, and they can multiply and flourish only in a warm place. So if they increase with such ill-judged rapidity as to cause the death of their host, they must presently die also, being powerless to escape. Instead of malignant, we might better describe these microbes as foolish. There are sundry wiser members of the tribe that have learned to colonize the human body without being obviously harmful; at least without causing the death of their host. Some fifty different species or varieties of these peaceful microbes may be found on occasion flourishing in the salivary juices of the mouth; and legions of them are always present in the intestinal cavity. Their host, far from being made violently ill by them, is blissfully oblivious of their existence.

"Chief of all means of keeping the body fit and resistant to the colds which it harbors are sunlight and fresh air, inasmuch as a prominent channel by which microbes find entrance into our bodies is the air we breathe. Bacteria exist by millions in every pinch of dust of the city street; they swarm in the dust that the whole family inhales when the housemaid sweeps or beats a carpet. They settle on bread as it comes from the bakery. We cannot possibly hope to escape ingesting a certain number of them. But there are ways in which we can minimize the number and in large measure avert the danger. To that end, it should be known to everyone that the one thing which no hostile bacterium can face unflinchingly is sunlight. The beneficent rays of the sun, which give life to ordinary plant-cells and set them in action, blast the living content of the bacterial cell like shafts of lightning.

"There follows the obvious moral: Let there be light in your household wherever and however you can manage it. Keep your

children out in the sunlight. If you live in the city, utilize the housetops. Also let the outdoor air, sterilized by sunlight, into your dwelling day and night. Open-air hospitals cure thousands of advanced cases of tuberculosis. High up in the Alps children are kept naked in the sunlight, out of doors, when the ground is covered with snow. Such heroic treatment must be worked up to gradually, of course; but in the end the children enjoy it; and it cures infections that resist every other remedy. Open-air treatment in the sunlight, combined with judicious exercise, the toning effect of cool spray-baths, and the right food and plenty of it, will cure almost any case of tuberculosis in its early stages. And the tubercle bacillus is more resistant than most others of the tribe."

## The Normal School Again Wins From Albion College

THE Normal School of Physical Education played a return game with Albion College in the latter's gymnasium, and won by the close score of 19 to 17. The game was fast and sensational throughout. Both squads showed a brilliant defensive play, which was the cause of a large number of fouls. Herke of the Normals shot a basket from the center of the floor in the last minute of play, tying the score. With the count 17 to 17, overtime was played, and the visitors won the game when Offinger threw two foul baskets. McKay, Offinger and Herke starred for the Normals, while Evans and Dillon featured for the collegians.

## Jessie Alexander Gives Readings

AN interesting program of readings was given in the gymnasium on Tuesday evening, February 4, by Mrs. J. A. Roberts ("Jessie Alexander"), of Toronto, Canada. The following numbers were rendered:

1. "A Coaching Trip in Scotland"; 2. "The Song in the Market Place"; 3. "The Tay-Table"; 4. "Our Christmas"; 5. "A Scene from Romeo and Juliet"; 6. "Incidents in a Canadian School Class Room."

To high qualities as an elocutionist, Mrs. Roberts adds that of a most pleasing personality. She identifies herself very closely with the character she is impersonating, and the result is that this is portrayed vividly, and realistically. The audience on this occasion showed marked appreciation of these characteristics, and the recital was greatly enjoyed.

Young Doctor—Why do you always ask your patients what they have for dinner?

Old Doctor—It's a most important question, for according to their menus I make out my bills.

"What you need, madam, is oxygen. Come every afternoon for your inhalations. They will cost you sixteen shillings each."

"I knew that other doctor didn't understand my case," declared the fashionable patient. "He told me all I needed was plain fresh air."



## The Battle Creek Idea

PUBLISHED SEMI-MONTHLY AT  
BATTLE CREEK, MICHIGAN

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Six Months . . . . .	.50
Three Months . . . . .	.25
Per Copy . . . . .	.05

VOL. VI FEBRUARY 16, 1913 No. 4

### Sour Milk for Beauty

In her beauty department in the Chicago *Tribune*, Miss Lillian Russell advocates the use of sour milk as an aid to beauty, through its beneficial effects upon the health. The "great European physician" mentioned by Miss Russell, is, of course, Metchnikoff, to whom more than any other scientist is due the popularization of the Bulgarian bacillus, a lactic acid germ, tablets prepared from cultures of which are very popular in Europe, as Miss Russell points out, and which, as Yogurt in this country, has been found to be of great service in combating intestinal auto-intoxication.

"A great European physician has discovered that the germ in sour milk is the purest germ in all the world. He has stated that his discovery is of more value to the human race than that great discovery of Pasteur for the cure of hydrophobia.

Tablets are made of the sour milk germ and sold to the public. But in France mothers may obtain the tablets free for their personal use, so wonderful do the scientific physicians consider them for the benefit of the future race.

It is not necessary to take sour milk in tablet form, for any one may take a bottle of milk, keep it in a warm room over night and drink it in the morning, with a slice or two of rye or graham bread.

"The theory is, that the germs contained in the sour milk destroy all impure germs in the stomach and intestines.

"By drinking the sour milk each morning in lieu of any other breakfast, a person so purifies the stomach, bowels, and blood, that nothing they may eat for luncheon or dinner will harm them. But no other food should be eaten before noon than the sour milk and brown bread.

"I tried this treatment one summer when I was in Paris, and enjoyed great comfort from it, as I had been suffering from intestinal indigestion for several months previous to my trip abroad.

"The sour milk treatment has many other benefits, for women especially, for it not only regulates the system, but the complexion becomes white and clear within a very few days, the breathing becomes deeper, and the whole system tones up.

"I would advise every woman and girl to take the sour milk treatment for six to ten weeks every year, or even longer. It is quite easy to become accustomed to it, and when the results begin to prove themselves by clear

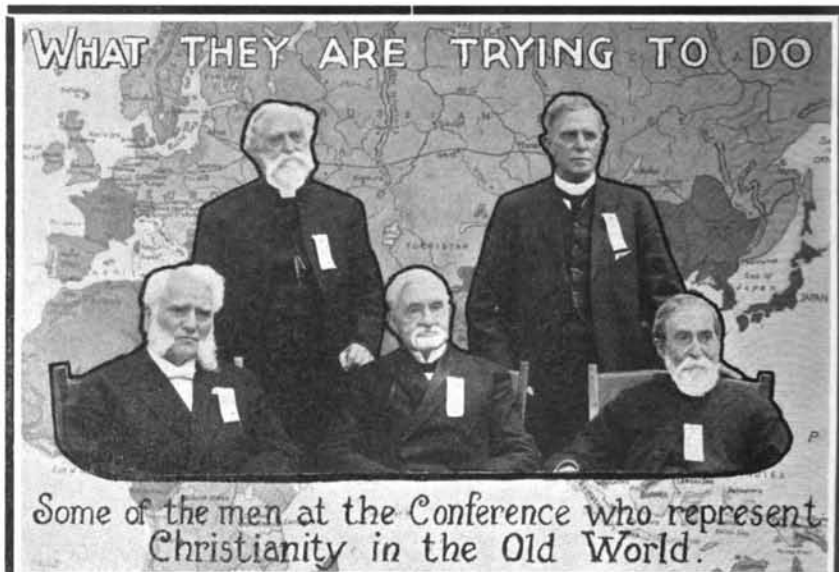
complexions, perfect digestion and circulation, it becomes harder to leave off the sour milk for breakfast than it was originally to become accustomed to the habit."

All that Miss Russell says is true, although identical results are not obtained with ordinary sour milk as with Yogurt tablets, either in the dry form, or taken as Yogurt buttermilk, since the *bacillus bulgaricus*, from which Yogurt is prepared, is more vigorous, and combats auto-intoxication to a far greater degree than does the ordinary sour milk germ.

### The Problem of Prolonging Human Life

In a recent essay on "Metchnikoff and Tolstoy," the eminent English scientist, Sir Ray Lankester, K. C. B., F. R. S., describes in an admirably clear manner the efforts being made by Professor Metchnikoff, of the Pasteur Institute, Paris, to solve the problem of longevity.

"Metchnikoff is now devoting all his attention to the possibility of prolonging human life," says the writer. "The facts seem to show that if we ate and drank only what is best for us, and led lives regulated by reason and knowledge, we should nearly all attain to eighty or even one hundred years of age, having healthy minds and healthy bodies. We should die quietly and comfortably at the end, with much the same feeling of contentment in well-earned repose as that which we now experience in going to sleep at the end of a long and happy day of healthy exercise and activity. Metchnikoff thinks that the cause of too early death may be ascertained and when ascertained avoided or removed. In 1870, in a little book on 'Comparative Longevity,' I distinguished what we may call the 'possible life' or 'potential longevity,' of any given human being from his or her 'expectation' of life. Potential longevity has been well called our 'lease' of life. It is probably not very different in different races of men or individuals, and is



The Fifth Medical Missionary Conference—the largest and most aggressive Inter-denominational Medical Missionary Conference on record—has just been held in Battle Creek. The big auditorium of the Sanitarium was crowded with interested listeners. Brilliant men and women from China, India, Africa—everywhere, spoke in the most convincing terms of the great good that is being accomplished in this noble field of endeavor.

An interesting account of this big conference appears in the February issue of THE MEDICAL MISSIONARY. Don't miss this interesting number. To introduce the magazine to you, a free copy will be mailed to any address on request.

"The Receding Moslem Wave"—a thrilling article on the Turkish Refugees, by Rev. J. P. McNaughton.

Official Organ of the Medical Missionary Association.

## THE MEDICAL MISSIONARY

BATTLE CREEK, - - - MICHIGAN, U. S. A.

probably higher than King David thought, being one hundred to one hundred and twenty years, and not merely seventy years. We all, or nearly all, fail to last out our 'lease' owing to accidents, violence and avoidable, as well as unavoidable disease; so that seventy years is named as our tenure when the injury done to us by unhealthy modes of life and by actual disease are considered as inevitable. Metchnikoff proposes to discover and to avoid those conditions which 'wear down' most of us and produce 'senility' and 'death' before we have really run out our lease of life."

## Home Gymnastics

(Continued from page five)

The exercises that weary you most quickly are the muscles that need exercising most.

The exercises described above are for the average man or woman. Take them quickly and vigorously in the morning, followed with a quick, cool sponge bath, and they will stimulate. Taken before going to bed and done slowly, they prove a good sedative, especially if they be supplemented with a bath.

### Special Development

For special development do the exercises that affect the weakest portion of your body, because the body should be developed by moderate and light exertions rather than dangerous ones, giving the weakest portions chief attention, and more frequently subjecting them to movements adapted to their invigoration and growth. Exercise each part of the body until slightly fatigued. Do not tire out a muscle. Avoid unequal development. The action of the heart is made weak by too much or too little exercise. Overwork, either mental or physical, makes one cross and irritable.

### Correct Breathing

The first essential to successful exercising is correct breathing. The correct method of breathing is the abdominal or diaphragmatic, which is assisted by the ribs. The diaphragm is a dome-shaped partition separating the chest above and the abdomen below. As soon as we take a deep breath the diaphragm descends and flattens out at the sides, thus pressing down the abdominal organs below; as a consequence of this, the exterior surface of the abdomen assumes a rotund, convex appearance. When expansion occurs, the pressure on the abdomen is released and its surface loses its roundness of outline as a result of the diaphragm resuming its original position. We wish to lay great stress on the shape of the abdomen during respiration, as one frequently sees people take an inspiration, hunch their shoulders up, draw in the abdomen, and then expire and force the stomach out, under the impression that they are breathing correctly, whereas the exact opposite should take place. In correct breathing there should be no movement of the collar-bones or shoulders, merely a forward movement of the breast-bone, more especially the lower part, combined with rib movement, and the alternate enlargement and diminution of the abdominal walls.

The reason why the diaphragmatic form of breathing should be cultivated is not

difficult to understand, for below we have the broad bases of the lungs resting on and encompassed by soft and resilient structures. Here the lungs have full play, for their movements are not hampered as they are above by close opposition to great blood-vessels, and are not surrounded by a case-ment of bone.

### Breathing Exercises

Hold arms at side-horizontal, knuckles upward, weight of body on balls of feet, heels together. As you stretch your arms side-wise as far as possible, take a quick, deep breath, inaudibly, always through the nostrils, pushing the abdomen out as you inhale for a few seconds; as you exhale, draw the abdomen in, at same time bringing arms to front-horizontal. Also take as deep a breath as possible, then bear down for a few seconds, so as to increase the tension of air in upper chest. On exhaling use a small tube, as blowing through the tube increases the depth of respiration. Ordinary inhaling does not reach the lungs, and scarcely enters the upper part of the lungs at all; it holds the breath, forces oxygen to the remotest parts and brings the air closer to the blood, and aids in the exchange of gases; it brings

active pressure to bear on all diseased, weak, unused or inflamed portions of the lungs and air passages. Whenever oxygen and carbon meet in the lungs, it is fatal to diseased germs. Repeat exercises 8 to 12 times.

## Paragon Chestnuts

(Continued from page seven)

Michigan, and will yield twelve to twenty times as many pounds to the acre as will wheat. No more delicious flour can be found than chestnut flour, though it is almost wholly unknown in this country. In Europe, however, the chestnut is so cheap that it has no more value than the sweet acorn has in America. Moreover, it is a food that we especially need for our children. I once examined the teeth of six hundred newly arrived Italian emigrants who had never seen a tooth brush, much less used one, and the remarkable fact was, that not one had a bad tooth, and the chestnut was the cause of this remarkable condition.

The improvement of our native nut trees is a healthful occupation, and Mr. Sober, who has engaged in this work for many years, is as full of life and energy as a man of twenty, and does not at all look his seventy-two years.



## COURSE for DIETITIANS

There is an ever-increasing call for trained Dietitians and Culinary Supervisors. A growing interest in the science of Domestic Economy and Hygiene has created this new and dignified profession.

The Battle Creek Sanitarium School of Health and Household Economics offers very unusual opportunities for training for those desiring to fill positions as Dietitians in Hospitals, Sanitariums and other Institutions. Courses of study include advanced cookery, dietetics, hygiene and institutional methods and management.

Nowhere are such exceptional advantages for training in all branches of Domestic Science work to be found. The unsurpassed facilities of the Sanitarium, including the splendidly equipped laboratories, offer unusual advantages for practical experience and useful observation. Graduates are in great demand.

Students are given a special opportunity to meet a large part of their expenses by employment of a character that will aid them in their training, by arrangement. For prospectus address—

### THE BATTLE CREEK SANITARIUM SCHOOL OF HOME ECONOMICS

Lenna F. Cooper, Director. Box C-66, Battle, Creek, Michigan.





IN THE PALM GARDEN

VIEW OF THE MAIN BUILDING

IN THE DINING ROOM

## The Three R's for Health-Seekers

**REST — RECREATION — RECUPERATION**

You Will Find Them All at the Battle Creek Sanitarium

**R**EST—real rest, not simply rest in bed or absolute quiet, but the rest of perfect comfort and 20th century appointments and service—the rest of agreeable conversation with charming friends—of pleasant sauntering in lobby, foyers, porches, palm garden and lawns—of communion with Nature in her best moods—and when needed, the rest of massage rubs and soothing baths.

**R**ECREATION—real recreation, not simply fun and sport and games, entertainment and diversion of every kind, but re-creation of body and mind—actually making a new man or woman out of you by ridding you of your poisons and worn-out tissues (by gymnastic exercise, swimming, sun baths and all the rest), and building you up with new pulsating blood created from delicious, wholesome food.

There is no "Best Time of Year" for a visit to the Sanitarium. Equally careful, scientific attention is given guests all the year round.

**R**ECUPERATION—real recuperation, not simply bolstering you up and giving you a temporary feeling of buoyancy by drug stimulation—but complete cure by seeking out the causes of disease (through diagnosis), removing them, and stimulating Nature to complete recovery by baths, exercise, massage, vibration, electricity, and all the other modern scientific measures—and finally, insuring permanent results by educating the patient to live correctly the rest of his life.

Send for Souvenir Portfolio of 60 views in and around the Sanitarium. Address Battle Creek Sanitarium, Box 500, Battle Creek, Mich.

## FIGHTING THE HIGH COST OF LIVING WITH THE POTATO

THE Michigan Dairy and Food Department have published a very practicable pamphlet on the subject of "Food and Food Values, with Suggestions as to How to Reduce the Cost of Living," the object of the bulletin being to "give the consumer immediate partial relief by pointing out the value and price of various foodstuffs, their uses in building up the body and the cheapest foods that are available for those purposes. A study of the science of food values and application of the same will effect large reductions in the cost of living."

Discussing the subject of the cost of protein, the bulletin says, "Most people depend on meat for the protein element. But a day's ration of protein in beef, pork or lamb would cost 18 cents. The common white or navy bean contains a large amount of protein, and a day's ration of protein in beans would cost less than 5 cents.

"Other cheap sources of protein are as follows, the price in cents being the price of 3 1/3 ounces of protein in the foods named, which is the amount needed by a healthy man at hard work. Cottage cheese, 9 cents; skim milk, 14 cents; cream cheese, 16 cents. The figures here given should not be entirely relied on for many of the foods having a high protein cost have also a large value in fats and carbohydrates and both must be considered in making up a ration. We desire at this time, however, to call especial attention to the value of beans as food. They have a very large available quantity of protein exceeding meat in that respect and the price is very low."

The Department has done the Sanitarium the honor of quoting extensively from a pamphlet written by the Superintendent on the subject of the potato, describing it as "the best article that has ever been written on the subject." The bulletin quotes the following paragraphs which, probably new to the reader, will be not only interesting, but also profitable at this time of the year when the cost of foodstuffs is unwontedly high.

"The potato is not only an easily digestible foodstuff but possesses much higher nutritive value than is generally supposed. According to Gautier, about one-fourth of the weight of the potato is food substance, consisting chiefly (nine-elevenths) of starch. Of the remainder, three-fifths are protein, the tissue-building element, and two fifths alkaline salt in combination with citric and malic acids, the acids of the lemon and the apple.

"From a dietetic standpoint, the potato is perhaps slightly deficient in protein, though this statement would be disputed by some physiologists, whose experiments appear to demonstrate that the amount of protein contained in the potato is quite sufficient for ordinary bodily needs.

"As already noted, the potato is not rich in protein, although the amount of this element in the baked potato reaches the Chittenden standard, 10 per cent of the total nutritive values, a proportion which in feeding many thousands of persons, those in health as well as invalids, at the Battle Creek Sanitarium, we have found amply sufficient. The writer adopted personally a

very low protein standard in early life and has adhered to it for more than forty-six years, and with great benefit. Nevertheless, if a larger amount of protein is required, it may easily be obtained by the addition of milk or eggs, substances which while increasing the proportion of protein also add to the fat necessary to render the potato a complete food. Half a pint of rich milk will thus balance a pound of baked potato; or an equally good balance may be made by adding to a pound of potato two ounces of white bread (two ordinary slices) and an ounce of butter.

"What the potato lacks in fat and protein, however, it makes up in salts, which constitute nearly five per cent of its dry substance and are perhaps its most characteristic quality from a dietetic standpoint and one of its chief excellences. These salts consist chiefly of potash, and in the ordinary form in which they are supplied do a most important service in maintaining the alkaline condition of the blood, which is essential to good health and resistance to disease. Meats contain a very great excess of acid-forming elements and tend to acidify the blood. Cereals have some tendency in the same direction. The lowering of the alkalinity of the blood by acid-forming foods, especially by the free use of meats, is unquestionably one of the chief causes of the rapid increase in chronic diseases, the mortality from which has doubled within thirty years, causing a loss annually of 350,000 more lives than would occur if the average citizen was as healthy as he was thirty years ago. This is probably also one of the chief causes of arteriosclerosis, or, in other words, hardening of the arteries."





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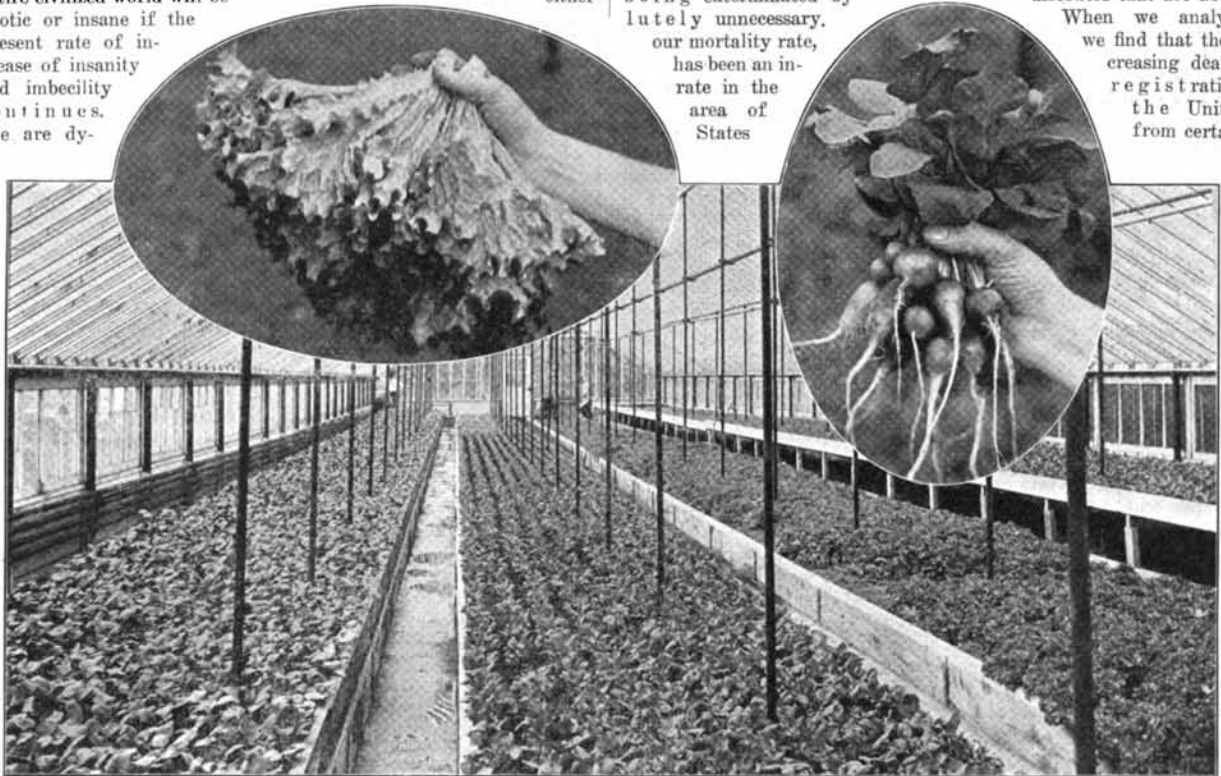
# DOCTOR KELLOGG'S THURSDAY NIGHT LECTURE

## THE WORLD'S NEED FOR THE BATTLE CREEK IDEA

THOUGHTFUL students of human life are becoming more and more convinced that the human race is dying; that before the present race of men and women the only prospect is extinction, for there are ample indications that within the next four or five hundred years the entire civilized world will be either idiotic or insane if the present rate of increase of insanity and imbecility continues. We are dy-

year a million and a half people die in this country. A catastrophe that wiped out one of our mightiest cities would be regarded as appalling. Yet scarcely any one comments on the fact that every year enough people to populate a city the size of Philadelphia are being exterminated by disorders that are absolutely unnecessary. our mortality rate, has been an increase in the area of States

When we analyze we find that there is a creasing death-registration the United from certain



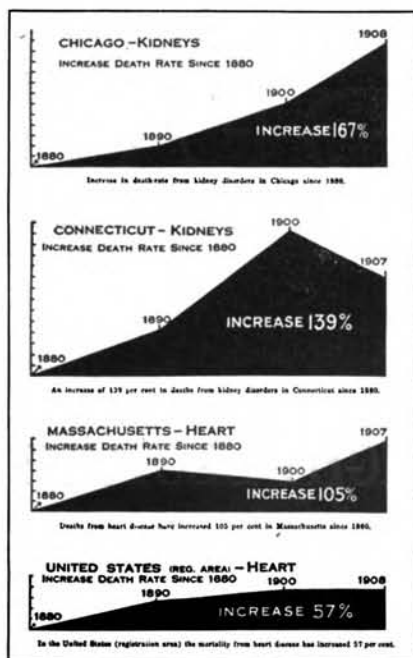
A glimpse inside one of the four large greenhouses in which are produced the delicious lettuce and other vegetables used daily on the Sanitarium tables. Sanitarium doctors urge the patients to eat every meal something fresh from the soil that has not been damaged by cookery.

ing! Disease is multiplying—and especially chronic disease, all chronic maladies increasing at a dangerously rapid rate.

A few months ago the whole civilized world was horrified by a terrible catastrophe at sea—the loss of the Titanic. In a few brief hours 1500 lives were lost, yet every day in the United States alone, 1780 lives are lost from diseases that can be easily prevented. Every

specified diseases, while there has been a decrease in other diseases, such as old age and bronchitis. In seven years, for example, there has been a decrease of 35 per cent in deaths due to old age; 32 per cent in bronchitis; 11 per cent in tuberculosis; 33 per cent in pneumonia; 15 per cent in typhoid fever; 43 per cent in diphtheria; 35 per cent in meningitis, and 30 per cent in gastritis. All these





DIAGRAMS SHOWING GROWING MORTALITY RATE FROM CHRONIC DISEASES

are acute diseases, but old age, which is not an acute disease, also shows a decreasing death-rate which is rather misleading, for on the face of it it would indicate that the race is longer lived than formerly, whereas there is far from ground for encouragement.

Now in 1901 to 1905 the number of people who died in the United States from heart disease was 40,000; in 1905 to 1908, this number had increased to 65,000 people, an increase of more than fifty per cent. Angina pectoris is another terrible malady, from which between 1901 to 1905 two thousand people died each year, the increase gaining until in 1909, when 3,841 died from this disorder, an increased mortality of more than fifty per cent from a disease of degeneration, a disease that is an outgrowth of wrong habits of living—the use of tea, coffee, alcohol and other poisons. In the State of Massachusetts during thirty years apoplexy increased 135 per cent, far more than doubling. In Chicago, diseases of the kidneys increased 167 per cent; that is, where one hundred persons died from Bright's disease thirty years ago, thirty years later 267 people died. In the entire registration area of the country, which covers more than half of the United States, the increase in kidney diseases and Bright's disease in thirty years has been 131 per cent; this means that where one hundred people died thirty years ago from these disorders, 231 people are dying today.

Indeed, deaths due to chronic diseases are increasing more rapidly at the present time than acute diseases are diminishing—that is, the death-rate per thousand above the age of forty. Below this age the death-rate is decreasing because we are saving the lives of the babies. To show that this is true, I cite the fact that in 1880 the death-rate of persons below 14 years of age was 13 and 14 in a thousand, while at the present time,

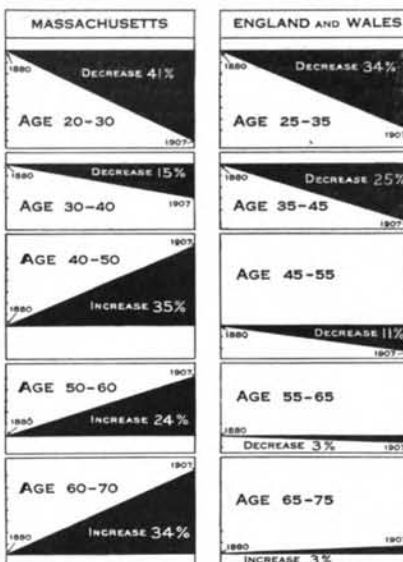
or in 1910, the death rate was 11.1 per thousand, so that there is a gain of 2.3 per cent.

To offset this, however, there has been since 1880, a steady increase in the mortality rate of people whose age is over 40 years—to be exact, the death-rate among this class has increased 46.8 per cent during the past forty years, while below forty, the death-rate has decreased but 13.2 per cent. Thus, while people under forty years of age have a lower death-rate than they had thirty years ago, yet people who reach the age of forty have far less time to live than they had thirty years ago.

These facts show unmistakably that the race is dying out, that it is degenerating. Another evidence is the decrease in the birth-rate. Now the vigor of any race is indicated perhaps more by the birth-rate, by the power of the race to perpetuate itself, than in any

#### GENERAL DEATH RATE—ADULTS.

NOTE INCREASE IN MASSACHUSETTS DEATH RATE, AGES 40 TO 60 AND BEYOND AND DECREASE IN ENGLAND AND WALES DURING SAME PERIOD OF LIFE



COMPARATIVE INCREASE IN MORTALITY IN MASSACHUSETTS AND PART OF GREAT BRITAIN

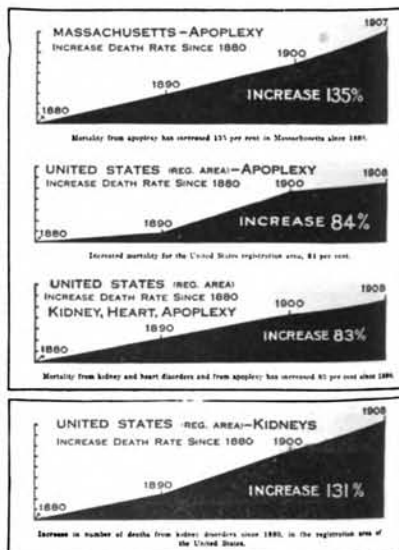
other way, yet it is a fact that in almost every country in the world the birth-rate is rapidly decreasing. The birth-rate in Chicago, for instance, has decreased 25 per cent in the last 20 years; in New Zealand, the decrease was 24 per cent; in the United States 20 per cent in twelve years; in New South Wales the decrease in the birth-rate was 30 per cent between 1880 and 1892. And Europe tells the same story: from France, from Germany, from England and other countries is coming the story of a falling birth-rate and of consternation in the minds of the statesmen as to what the future of their lands must be unless some means is discovered of checking this ebbing tide of life.

Another very patent evidence of race decay is the fact that we are losing our teeth, for defective teeth mean more than mere decay. They indicate a defective organism; they

point to a body that is on the way to disintegration and decay, and the fact that the entire civilized race is rapidly losing its teeth affords unmistakable proof that the entire civilized race is degenerating.

Now the gorilla does not have trouble with his teeth. He lives on a natural diet and gets all the fresh air and sunshine there is to be had, with the result that he is a healthy specimen of animalhood. The same principles of living that apply to the gorilla apply also in large part to man; what is good for the gorilla is also good for the human; what a gorilla can eat, a man can eat; what a gorilla can digest, a man can digest and thrive upon. And the best place in the world to learn to eat is not in a college or university laboratory, but in the forest, observing some wise old gorilla or chimpanzee. Sitting at his feet for a few days and studying his diet, one learns more about dietetics than the wisest professor in the world could teach him.

No gorilla would take into his stomach the indigestible things that enter the human stomach; no chimpanzee would for a moment look at our daily bill of fare—that old fashioned boiled-dinner which many people think to be the most wholesome thing in the world, for instance, with its splendid juicy beefsteak, with its mustard and pepper, horseradish and peppercorn and all the other condiments that are supposed to be valuable for giving an appetite and thus helping along digestion. Would our forest friends think for a moment of indulging in tobacco and alcohol and tea and coffee and patent medicines, and all the other forms of poisons which modern men and women saturate themselves with? Why, do you know that the poison dose of the average citizen of the United States, including men, women and children is 368 grains a year. Now a daily dose of caffeine is six grains, enough to kill a cat. A daily dose of nicotine is six grains, enough to kill a dozen men if taken all at once. Can any one wonder that



INCREASE IN MORTALITY RATE FROM CHRONIC DISEASES

## SWEETS FOR THE SWEET—THE FORMS OF SUGAR THAT ARE BEST ADAPTED TO CHILD NEEDS

ALL natural children are fond of sweets, said Doctor Kellogg in a recent Question Box lecture, and so far from the appetite being unnatural, it is as normal as the appetite for water. The ingestion of the elements which constitute the properties of sweets occupies a very large place in the human economy, so that to deprive children of this class of foodstuffs is depriving them of a very essential element in their diet.

One should, however, be very careful in the selection of sweets. Best of all forms of sweets are sweet fruits, which are entirely wholesome. Among them may be mentioned peaches and pears and apples and cherries—indeed, there is nothing better for children than fruits like these. When they are in season watermelons are particularly good, provided the child is taught not to swallow the pulp—this injunction is quite as important for adults to bear in mind as children. Watermelon pulp is not good to swallow; the melon is simply wood, and water and sugar, and while the individual should take the water and sugar, yet he does not need the wood, so it should be rejected as waste.

Another sweet for children is the sweetness that comes of eating dry bread. Do you know, there is nothing sweeter on the table than a piece of dry bread? Zwieback is particularly sweet. As a matter of fact, bread is nearly all sugar. It is made up mostly of starch. When this is chewed in the mouth the saliva acts upon it, converting it into maltose. All the starch of oatmeal, wheat, corn and other cereals is converted into sugar in the process of digestion, so that the toddling child who eats bread at dinner time and chews it thoroughly gets plenty of sugar of the right kind.

Again, the tomato is almost entirely sugar; sugar, that is, in the form of starch, and starch is simply one form of sugar—it is carbohydrate and is converted into sugar during the process of digestion.

Meltose is another sugar that is comparatively uninjurious, and good for children. Maltose, you know, is the sugar formed by the process of digestion, the saliva converting starch into maltose. We have maltose on the table in the form of what we call "meltose," to use the trade name. It is simply starch that has been converted into sugar by the diastase of malt; the malt is

made to act on starch so as to convert it into sugar; the malt sugar which you find on the table, therefore, represents digested starch. Malt honey is another form of the same sugar.

And this kind of sugar children can eat with perfect freedom. Cane sugar, on the other hand, is a poison, what we might call a "drug-food." It has food value, but it is a drug food because it is an irritating food. Cane sugar is not natural to the human body. It is found in grasses, in corn, in roots and in other things which are the natural food of herbivorous animals, such as cows, oxen, sheep and goats. But it is not found to any extent in fruits and cereals and those foods which are natural to man. For example, cane sugar is found in trees, but man does

not live naturally on twigs or leaves of trees, as do herbivorous animals. Cane sugar, too, is found in the sap of the cherry tree, but when this cane sugar comes along, just when the green cherry is ripening, the cane sugar is in the sap and as it enters the cherry is converted into fruit sugar, a natural sugar found in all kinds of fruits: in figs, in grapes, in apples, in plums, in pears: in fact in all kinds of fruits. All fruit contains fruit sugar ready to be immediately absorbed into the body and utilized by the system in the building of the body, in maintaining life and in supporting the energies of the body.

In London a year ago I found that the famous Professor Herschell and other London specialists were making large use of malt sugar, or recommending it very highly for the use of persons suffering from gastric hyperacidity. It may be taken an hour after the beginning of the meal or a little later.

There is, indeed, no more wholesome food than this product, because it is already as

(Continued on page eleven).

## VICE-CONSUL GENERAL TO MEXICO COMMENTS ON MEXICAN SITUATION AND ON THE SANITARIUM

SPECIAL interest is given by recent events in Mexico to the presence at the Sanitarium of Mr. H. M. Wolcott, Vice-Consul General to Mexico City. Mr. Wolcott left Mexico City so recently as January 30th, and at that time everything was quiet and it was with considerable surprise that he first learned of the new revolution. To a representative of the IDEA Mr. Wolcott said, relative to the situation:

"The problem is a very difficult one. Madero was a man of high ideals, and had the welfare of the people at heart. Some of his colleagues, however, were men of a different type, and in consequence, he had been very much hindered in the carrying-out of the promised reforms." Speaking of the general conditions, Mr. Wolcott said:

"The common people are ignorant. They have been kept down with a stern hand. But the worst feature of their life is the result of the consumption of the national alcoholic drink. This is pulque, made from the agave, a plant belonging to the cactus family. It is cultivated very extensively, as it can be grown in almost any soil, and in connection with other crops, such as corn and cereals. It requires not much water, and only a little attention. Thus it can be sold very cheaply, for even as little as one cent a quart; and a quart is sufficient completely to intoxicate an ordinary man for eight or ten hours. The laboring classes have so little to fill their lives, so little to look forward to, that they consume it in large quantities."

In support of the view as to the great degree in which social conditions were responsible for the amount of alcoholic drinking, Mr. Wolcott quoted the opinion of a recent, and well qualified writer on Mexico, to the effect that, after seeing the life of the people, one does not wonder why there is so much drinking, but rather why so many re-

main sober, adding, "the ordinary run of Mexican will never amount to anything until the sale of the pulque is restricted."

Concerning the Sanitarium, Mr. Wolcott expressed himself very heartily. "I was here last March," he said, "but could then stay only ten days. Not feeling up to standard, I came back on my vacation. I have derived almost immediate benefit, and feel much better altogether. Everything is very delightful here. I find the diet agreeable. For the first few days when here last year, I missed the stimulating properties of meat and coffee, but this was not so noticeable on the present occasion. If available for one traveling, I should be glad to continue the system. I am particularly impressed with the employees, and the general atmosphere of cheerfulness they give to the place. I think the Sanitarium a grand institution. We certainly owe a great deal to it for the work it is doing."

## Teaching People to Get Back to Nature Most Important Work

THE value of the Battle Creek Sanitarium as an educational rather than a healing institution, is what particularly struck Mr. N. W. Sanborn during his stay of nine weeks. Mr. Sanborn is a lawyer of Ashland, Wisconsin.

"Teaching people to get back to nature," he said, "is the most notable idea in connection with the institution, and it is a lesson which most of us, especially business and professional men, need to learn. We unconsciously get more and more into artificial lines of living and do not have an awakening until we get pretty well played out. I am taking home with me much valuable experience and I hope to profit by it all my days."

we are degenerating, that hardening of the arteries is increasing, and that heart diseases are increasing in prevalence? The disaster would be less ominous if the evil effects stopped with the individual using these poisons, but the fact is that the degenerative conditions are transmitted, passed on from one generation to the other, visiting the iniquities of the father upon the children unto the third and fourth generation—not to the fifth and sixth generation, for the simple reason that there are no fifth or sixth generations.

# INDIAN CLUB SWINGING

By F. E. MILLER,  
Physical Director at the Battle Creek Sanitarium

ONE of the most popular and at the same time beneficial forms of exercise taken in the Sanitarium Gymnasium is Indian club swinging. Most of the patients who come to Battle Creek (and we suppose this is true among most professional men), are troubled with weak abdominal muscles, and for these and other muscles situated above the waist line Indian club work is of the utmost value—that is, if the exercises are taken properly. If, on the other hand, little thought is given to the work, the benefits that come of a well-planned course of activity will be lacking.



STARTING POSITION

Club swinging is a helpful form of exercise for either sex, being light in character, and offering no temptations to overdo; it does not produce breathlessness, as do some forms of exercise, but helps the circulation of the blood and builds up the body without undue straining of the larger muscle groups.

In using clubs, select those that are well balanced, a hollow club about the size of a solid three-pound club being best. The weight will be from one and a quarter to one and a half pounds, length from eighteen to twenty inches, and width four and one-half inches.

The position of the body should be as follows: shoulders back, head erect, chin in; all swinging of the body or turning from the left to the right should be avoided, unless it is absolutely necessary. Throw the chest well forward, with the hips slightly backward to avoid striking the knees with the clubs.

In holding the clubs, place the fingers so that they can manipulate and guide the clubs in the directions desired, always keeping the clubs in line with the forearm. Grasp the club with the hand, allowing the knob to touch the wrist; the first finger should be straight in order to keep the club in a straight line with the forearm (this applies to all elementary swinging and full arm circles). For the more advanced movements, however, let the clubs slide from the elemen-

tary position to holding the knob loosely with the thumb and first two fingers. Revolving the club in the hand will assist in making smooth and rounded hand circles.

## Exercises

1. a. Starting position as in Figure 1. Left arm at side horizontal; swing left arm from left side horizontal; swing to the right side 180 degrees. b. Repeat same with right arm. c. Alternate. d. Both at same time. Repeat all movements eight to sixteen times.

2. a. Starting from position given in Figure 1, make full arm circle to the left. b. Starting from position given in Figure 1, make full arm circle to the right. c. Alternate. d. Make both movements at the same time.

3. Reverse movement described in Exercise 2 by going to the right, repeating all exercises given under Exercise 2.

4. Start from position shown in Figure 1. a. Make full arm circle to the left, with left arm, same as in exercise two, adding hand circle back of left shoulder. b. Repeat the same with right arm. c. Alternate, then with both arms at the same time.

5. Starting position as in Figure 1. a. Make full arm circle to the left, with left arm, same as in Exercise 2, adding hand circle in front of left thigh. b. Repeat the

same with right arm. c. Alternate, then with both arms at the same time.

6. Alternate Exercises 4 and 5.

7. Starting position same as in Figure 2. a. At left side of body, level with shoulder, make hand circles, on outside of arms; then make full arm circle with both arms to left. b. Repeat same, starting at right side of body. c. Alternate, making the hand circles on opposite side of body; then make full arm circles.

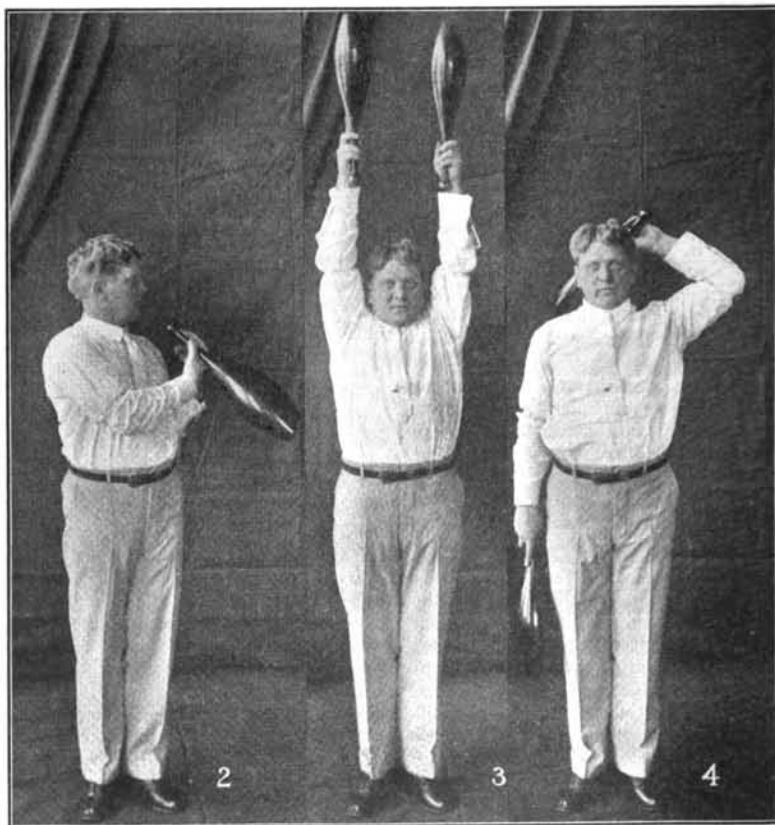
8. Starting position same as Figure 1. a. With both arms at left side of body, make full arm circles to the left, then add hand circles in front of thighs. b. Repeat same on the right side. c. Alternate, combining with hand circles at left and right sides of body.

9. a. Full arm circles, starting at the left side of the body, and adding hand circles back of shoulders (when beginning movements on the left side, make the directions toward the left; when starting at right side, execute the circles toward the right). b. Repeat same on right side.

10. Alternate Exercise 9, adding hand circles at left and right sides of the body.

11. Combine Exercises 8 and 9.

12. Starting position same as in Figure 3. a. Make left hand circle back of left shoulders (Figure 4), while the right arm makes a full arm circle in front of the body. b. Repeat with other arm. c. Alternate, crossing clubs in front of the body after each circle in front of the body and in back of the



FIGURES 2, 3 AND 4

head. d. Repeat movement without crossing the arms in front of the body.

13. a. Make two hand circles back of left shoulder, and two in front of the body with the right, before crossing arms in front of body. b. Repeat same with other arm. c. Alternate. d. Cross clubs back of head and front of body.

14. Alternate Exercises 12 and 13.

15. a. Make hand swing on top of fore arm straight forward, and touch the left foot



FIGURE 5

or toe to forward left. b. Arms at sides of thighs, and heels together. Repeat same on other side, and alternate.

16. a. Same as Exercise 15, moving arms and legs sideward left. b. Repeat same with right arm and leg. c. Alternate. d. Repeat same, jumping to walk-stride position, legs twenty inches apart, repeating first left foot forward, then right.

17. a. Hand swing on top of arms, arms at the side of the body level with the shoulders, clubs resting on forearms; touch left foot sideward left. Arms down to the sides of thighs with heels together. b. Repeat movement on right side. c. Alternate. d. Jump to stride stand, legs twenty inches apart.

18. a. Swing clubs back of shoulders, raising arms forward to vertical and placing the clubs over and back of the shoulders, toe touching backward left. b. Repeat same to right side. c. Alternate.

Various combinations can be made by taking several combinations of the different groups. For example: 1. Toe touching sideward left, arms front horizontal. 2. Toe touching backward, cross clubs over head, bend head backward while inhaling. 3. Exhale, toe touching sideward left, arms front horizontal.

## BISHOP JOSEPH C. HARTZELL GIVES THREE REASONS WHY SANITARIUM IS PREEMINENT

BISHOP HARTZELL, one of the most venerable and beloved bishops of the Methodist Episcopal church, has spent a few weeks with us, resting and recuperating, and giving the family of Sanitarium guests and helpers of the benefit of his long experience in Christian work. Before leaving he gave expression to his estimate of the Sanitarium, stating that in his opinion the work of the Sanitarium was unique in three particulars: ideals, organization, and teaching.

"The Sanitarium is absolutely right when it insists on the necessity of a wholesome body for a healthy spirit," said the Bishop. "The old conception of the inherent degradation of the body, leading the early Christians to 'mortify the flesh,' worked incalculable mischief, and I am glad to see the Sanitarium upholding the sacredness of the body as a temple of the soul.

"The organization of the Sanitarium seems to me without an equal. Everything goes on like clock-work. Then there are all the lectures and entertainments that fit in with treatment hours—all this must require the most careful planning.

"I have been very much impressed by the

## Prominent California Physician Finds Equipment Complete

THE number of prominent physicians who come to Battle Creek to inspect the Sanitarium indicates the ever-widening reputation the institution is gaining. One of our recent visitors was Dr. E. W. Hanlon, of Los Angeles. Doctor Hanlon is a specialist in diseases of the stomach and intestines, and was for some time lecturer on these diseases in the University of Southern California, at Los Angeles, resigning that position at the beginning of this year. He has spent a considerable time in Europe in pursuance of his medical studies. In a conversation just previous to his departure, Doctor Hanlon stated that he had greatly enjoyed his visit. He had found those with whom he had been associated in his inspection of the Sanitarium very courteous and accommodating, being especially impressed with the X-Ray and electrical departments, and the laboratories.

"As far as the equipment of these go, they exceed in completeness anything I have seen. There is every facility for doing good work, and, I judge, doctors who are capable of doing it." Special mention was made of Doctor Case's work in the X-Ray department. "This," said Doctor Hanlon, "is well known to physicians, and ranks among the highest."

The Doctor declared it as his opinion that apart from the value of the work possible with such an adequate equipment, the great mission of the Sanitarium consisted in teaching right methods of living. "Undoubtedly," he added, "the great number of people eat too much, and too much of the heavier foods. Here they are educated along right lines in this respect, and impressed with the value of fresh air, and exercise. They are taught that if they are to be well, they must discipline themselves, and live right."

educational feature of the place. It is wonderful that young men and women can come here and receive so practical an education in so many different lines—there are such splendid facilities for thorough training in nursing, domestic science and physical education. Nothing, it seems to me, has been left undone to make it really a university."

## The Social Hour Gives Interesting Programs

THE Social Hour, the object of which is to promote the spirit of sociability, has been resumed. It is now under the direction of Miss Margaret J. Quilliard. Miss Quilliard has entered very enthusiastically into the purpose of the gathering, and has enlisted the cooperation of a number of talented persons, who have, with generous readiness, responded to her call. Five sessions have now been held, an interesting program having been given on each occasion as follows: January 16th and 23d, "Incidents of My Travels," by Rev. W. D. Powell. On January 30, a lecture was given by Mr. Meldrum, of London, England, on the affair of Captain Dreyfus. Special interest was given to this from the fact that Mr. Meldrum was one of those who assisted in bringing about the release of Captain Dreyfus. A special gathering was held Wednesday February 5th, when Mrs. Roberts, of Toronto, again delighted a large audience with a number of readings. Miss Mina Babcock sang a selection of songs, accompanied on the violin by her sister, Miss Lillian Babcock, and on the piano by Mr. Ransom. Last Thursday a mixed program of music and readings was given. The attendance has been large at each session, and the enjoyable character of the social hour gives the promise of its becoming one of the most successful of the Sanitarium's many ways of providing entertainment for its patrons.

## THE VERY IDEA

Customer—Give me some Roquefort cheese. Waiter—Sorry, sir; it's just run out.

Customer—Well, when it comes in, grab it and bring a piece here.

"Mrs. Bayes is simply mad on the subject of germs, and sterilizes or filters everything in the house."

"How does she get along with her family?"

"Oh, even her relations are strained."

A man of sporting type was traveling by rail when he had as fellow travelers for some distance a couple of Scotch farmers who had been South on business. The sporting man presently began talking about dogs, a subject that did not interest the agriculturists very deeply.

"I have a dog with a wonderfully keen scent," he said, "and just permit me to tell you that one day after I left home he broke his chain, and although I had been away for hours he tracked me and found me merely by scent. What do you think of that?"

"I think," replied the heavier of the twain, with a yawn, "ye ocht tae tak' a bath!"





The Dining Hall.

It is usually accompanied by a full and hearty meal, and the patient is encouraged to eat as much as he can, and to eat with a good appetite. The patient is turned out to his family and his business with renewed energy, increased efficiency and a generally more cheerful perspective of life and what it holds out to him.

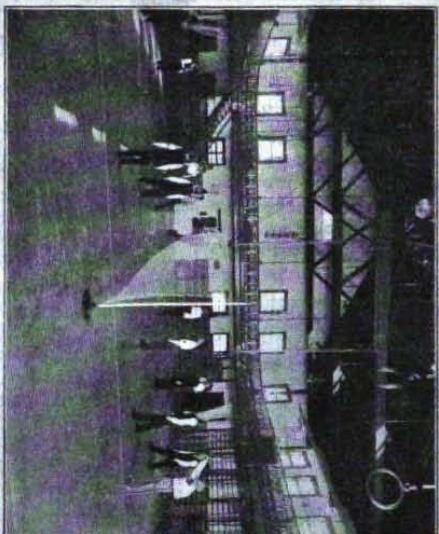
This is accomplished in a scientific, systematic and at the same time pleasant and enjoyable manner. On his arrival at the sanitarium, experts on health, hygiene and physique take him in hand and subject him to a complete and searching examination. A careful, painstaking inventory is taken of his vital organs—his health assets are examined, totaled and a balance struck, so that the physician and health expert in whose care he has been placed, may know what deficiencies they must supply.

He is then taught the basic fundamentals of life and gradually he acquires back what he had perhaps believed lost to him forever. And so it is with the tired, nervous wife and mother. The Battle Creek Sanitarium is as zealous in the conservation and restoration of health to womanhood as it is to mankind and each sex is given equal care and consideration.

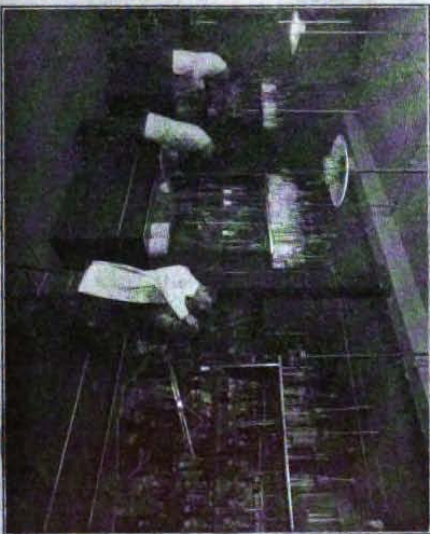
Perhaps, however, the most profound testimonial to the worth of this wonderful health resort, is in the fact that physicians come here from far and near to recuperate from the strain to which their profession subjects them, that they might return to their work and their patients, better equipped to combat the problem with which they must contend.

How does Battle Creek Sanitarium accomplish such wonderful results?

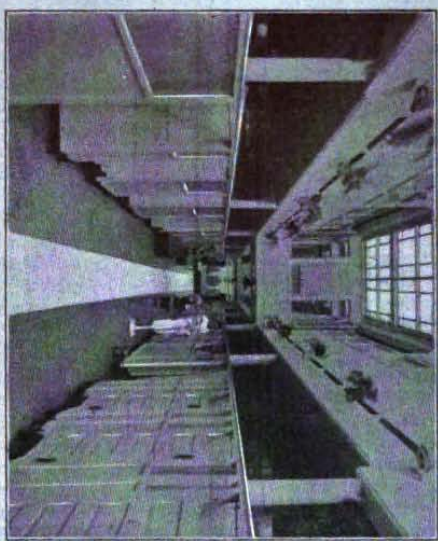
This is perhaps best answered with the statement that this sanitarium is not only one of the most efficient and most completely equipped health institutions in the world, but it is also one of the most delightful pleasure resorts which could be conceived as an adjunct to a health institution.



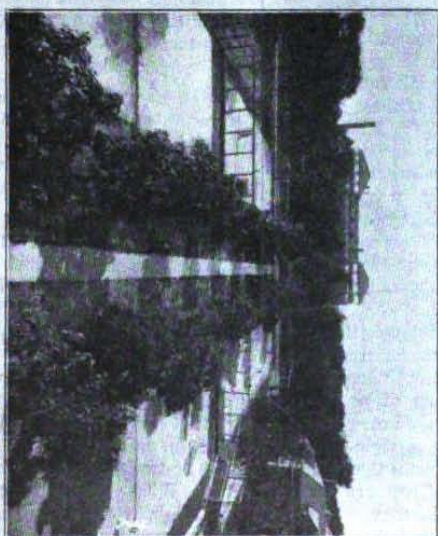
The Gymnasium.



A section of the Laboratories.



Corridor in Men's Bath Department.



Tennis Courts adjoining the Annex.

From this small beginning, Battle Creek Sanitarium has gradually brought together under one roof, the most powerful curative and recuperative measures known to science, and by patient, persevering effort, minutely studied, adapted, correlated and gradually worked them into an harmonious system in which each is made to render its own peculiar, specific service with the greatest degree of efficiency.

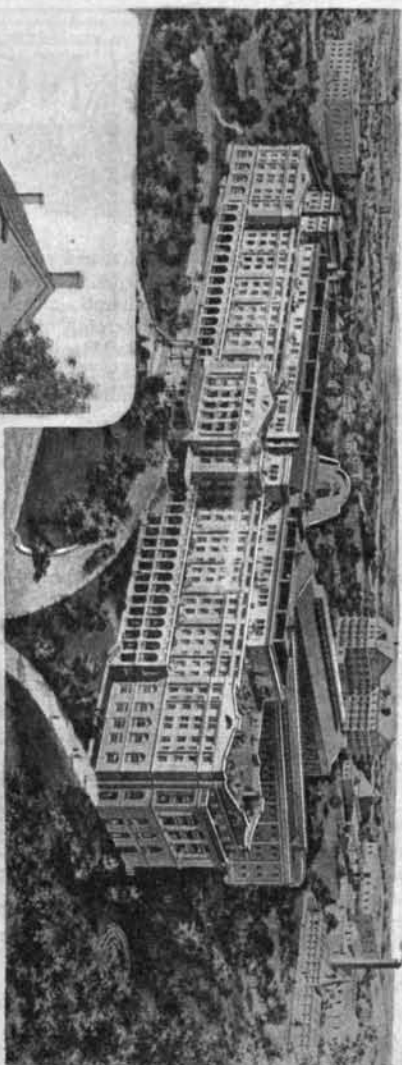
Wonderful as have been the achievements of this institution in the past, its management is not content to rest on its laurels and proceed along established lines. The sanitarium is constantly on the lookout for new methods, new equipment, new anything that will serve to make the service on behalf of mankind more effective and more efficient.

## Had a Small Beginning

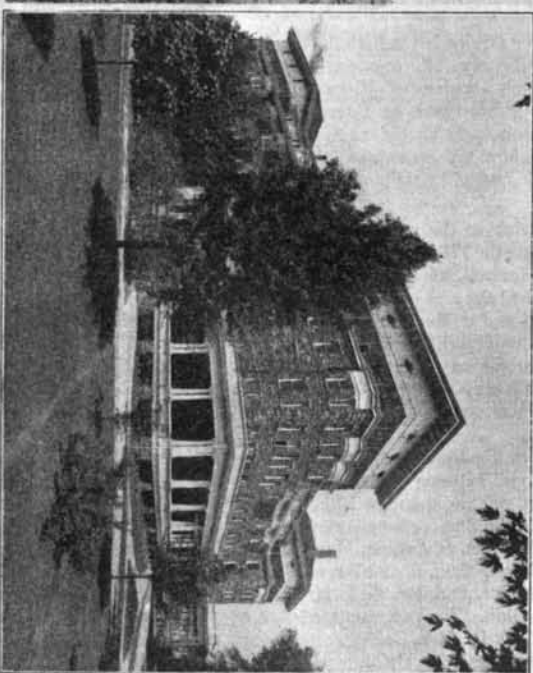
Foreign institutions are constantly under study and personal observation and as quickly as new methods and systems are evolved, they are added to the curriculum of Battle Creek Sanitarium. Battle Creek has done and is doing for Michigan, what famous curative methods have done for Old Country resorts.

An evidence of the extent to which the part the Sanitarium is playing in the great wave of health education is sweeping the country is the fact that magazine and newspaper editors are ever ready to place before their readers those principles for which the Sanitarium stands. Just recently the Editor of the *Detroit Saturday Night*, one of the leading weeklies of the country, sent a representative to Battle Creek, for the purpose of telling his readers just what the basis of Battle Creek work really is. The above full page story is a reproduction of the article as it appeared before the *Saturday Night* readers.





Battle Creek Sanitarium—Main Building—and the "Sanitarium" in 1866.



The Annex.

## Battle Creek Sanitarium - - Michigan's Famous Health Resort

ONE of the interesting customs among the Chinese is the method of employing and compensating a physician. The medicine man receives his pay just so long as his "patient" remains well. Immediately he becomes ill, the doctor's fees are discontinued. In other words, the Chinese physician is paid for keeping his subject in good health—for teaching him how to live so that he will not become ill.

This is one of the most important functions of the world famous Battle Creek Sanitarium—teaching men and women how to live. True, it takes the time and the cost and returns them to their homes and families rejuvenated and again fit to cope with life's battle, but it is in the conservation of health that this magnificent institution finds a tremendously important field of activities.

Battle Creek Sanitarium might well be termed "Michigan's Great University of Health." One need not be broken in health and physique to become a logical candidate for the sanitarium's ministrations. This wonderful health university teaches men and women the beauties of life—it teaches this by pointing the way to that mode of living that makes it possible for one to appreciate bountiful nature.

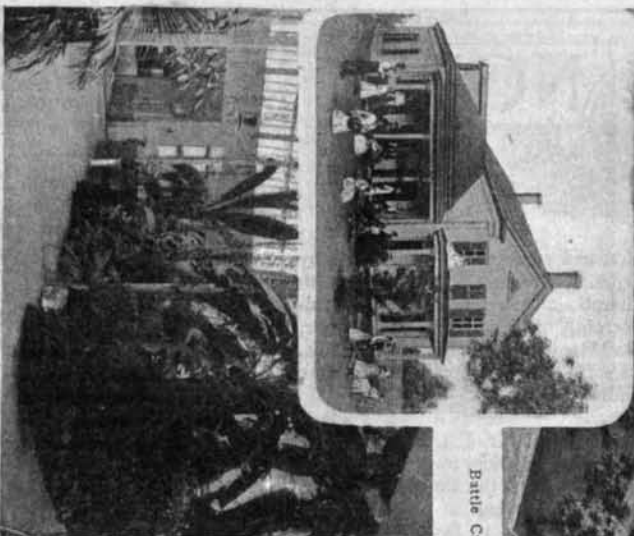
Battle Creek Sanitarium adheres religiously to the principle that the mind and the spirit must be trained in the direction that makes for cheerfulness and optimism, else the work of increasing one's health efficiency will be retarded.

Accordingly, it has provided two magnificent institutions, the main building and the annex, each surrounded with every device and appointment that will serve to entertain and enlighten. It is this delightful social air of Battle Creek Sanitarium that one remembers, even long after he has perhaps forgotten the health benefits derived at this institution.

The spacious lounging rooms and parlors, the attractive dining hall, the beautiful conservatory and wide expanse of grounds all make for physical comfort and contentment, while the musicals and entertainments, the parties and dances and other forms of recreation and amusement, all carried on right in the sanitarium, place the subject in that frame of mind and spirit that is conducive to the best results in health treatment.

It would hardly do to attempt to here enumerate the many devices that are employed in Battle Creek Sanitarium's health building and health instructions. There is not sufficient space on this entire page to explain the countless bath systems, both water and electric light treatments, the various forms of massage, the radium and X-ray treatments, applications of heat derived from various sources, and the many other treatments, each designed to meet a specific particular need and each applied by experts long trained in their new and application.

The Conservatory.



### Teaches One How to Live

The sanitarium teaches one how and what to eat; how and when to sleep; how and when to indulge in fruitful, rejuvenating recreation; how to make the most use of one's *own* energies and ambitions.

# The Battle Creek Idea

PUBLISHED SEMI-MONTHLY AT  
BATTLE CREEK, MICHIGAN

## SUBSCRIPTION RATES

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Six Months . . . . .	.50
Three Months . . . . .	.25
Per Copy . . . . .	.05

VOL. VI MARCH 2, 1913 No. 5

## Foes to Efficiency

STODDARD GOODHUE, writing in the March *Cosmopolitan*, makes the statement that of the two hundred thousand inmates of institutions for the insane in this country, fifty, perhaps seventy-five, thousand "owe their mental illness wholly or in part to habits of alcoholic indulgence that at one time were doubtless thought by them to be as harmless as your use of alcohol 'in moderation' seems to you now."

One need not go to the hospital for the insane, however, to see the dire effect upon the mind of alcohol and other poisons. Every moment of the day, says Mr. Goodhue, we are reminded that the brain is "not the well-gear, well-ordered, well-trained and well-disciplined mechanism that it might be. We are constantly suffering from fits of memory, faulty decisions of judgment, vacillations of will, and false inferences from perfectly clear data. You forget to mail your wife's letter; fail to do the promised errand; overlook an appointment; fritter away your time at your desk. Your mind becomes vague and fatigued after an amount of work that should have served merely as a stimulus. You allow your attention to be distracted by incidental noises; you are worried over trifles, bemoan mistakes that are beyond repair, give way to bursts of temper that are more mind racking than any amount of legitimate work, and finally end the day with a feeling that you have not really accomplished half that you set out to do."

Now all of these symptoms bespeak a state of mind which is far removed from the ideal of efficiency that peculiarly marks present day social and industrial life. In the case of the insane, Mr. Goodhue traces the disorder back chiefly to alcohol; in the case of the inefficient mind, the causes mainly at work are alcohol and tobacco. "You smoke far more than is good for your mind and body," says the writer, "charging your system with the nerve-poison nicotine; or you steadily impair your brain power and subject yourself to the danger of mental deterioration by habitually taking alcoholic beverages. You know, probably, that tobacco is injurious to you; yet you cannot forego the gratification of your senses even for the sake of clearness of mind. You have probably been told that scientific tests have proved that alcohol, even in small quantities—a bottle of beer, a glass or two of wine, a cocktail, or a highball—definitely and measurably decreases the amount and quality of mental action. Your

observation tells you that a drink of liquor tends to flush your face and momentarily exhilarates the mind. You might correctly infer that your brain is similarly flushed, and that the abnormal activity excited must result in quick reaction. Thousands of observations prove that such excitation, due to alcohol, if persistently repeated, may result in hardening of the arteries, with liability to rupture or the formation of clots, to be followed by the degeneration of the brain tissues. Yet you prefer to take this chance rather than deny yourself the transient and illusory sense of well-being that a drink of liquor gives you."

Thus is the ill-deserved reputation for increasing mental power that alcohol has long enjoyed being broken down, not alone by temperance workers and discerning doctors, but by mighty magazines which have at heart the education of the great public which they serve.

## Radium Emanation Pioneered by the Sanitarium

THE radium emanation method, introduced in America by the Battle Creek Sanitarium, is to be used at the great Johns Hopkins Hospital in Baltimore. The *Chicago Examiner* for January 31st contained the following announcement:

"A department for the treatment of diseases by the inhalation of the emanations from radium will be established at the Johns Hopkins Hospital within the near future. So far as is known, this will be the first medical institution in the United States to adopt this treatment."

The *Examiner* is in error in supposing that the Johns Hopkins Hospital will be the first to introduce this method of using radium. This method was introduced in this country by the Superintendent of the Battle Creek Sanitarium, through whose efforts the system was established in the institution a year ago the present month. The method has been employed in several hundred cases during the year and with good results. Radium is of course not capable of working miracles, but it has appeared to produce decided benefit, and in some cases the good results have been exceedingly striking.

The radium department of the Sanitarium embodies various improved methods of application which were first used here, some of which have the endorsement of Sir William Ramsay, the great English scientist, whose recommendation of this new method appeared a few weeks after they had been installed here. Radium emanation is not a cure-all, but it is a valuable remedy in certain special cases to which it is adapted.

## Dr. Colver Talks About Glasses

DR. B. N. COLVER, in charge of the Sanitarium eye, nose, and throat department, gave a very helpful talk in the Parlor the other evening on the subject of the anatomy of the eye, explaining why glasses are necessary, and the conditions for which they are prescribed.

"There are six reasons for the use of

glasses," said Doctor Colver. "In the first place they correct abnormalities in the length of the eye. By abnormalities in the length of the eye, I mean this, that in a person who is myopic or near-sighted, or hypermetropic, or far-sighted, the eye is longer or shorter than normal, and we put on a lens which bends the rays of light more or less to correct this abnormal condition of the eye.

"In the second place, glasses correct astigmatism, or inequality of refraction in the various axes of the eye. This astigmatism may be due to the curves of the cornea or of the lens.

"Or the glasses may be applied for the purpose of correcting muscle 'imbalance' that is, cases in which the various muscles which regulate the movement of the eyes do not coordinate. Glasses also equalize vision of the two eyes. It is a fact that a very large proportion of people see better with one eye than with the other, seeing with one eye an object at a distance of twenty-five feet which, with the other eye they see at twenty feet, or vice versa.

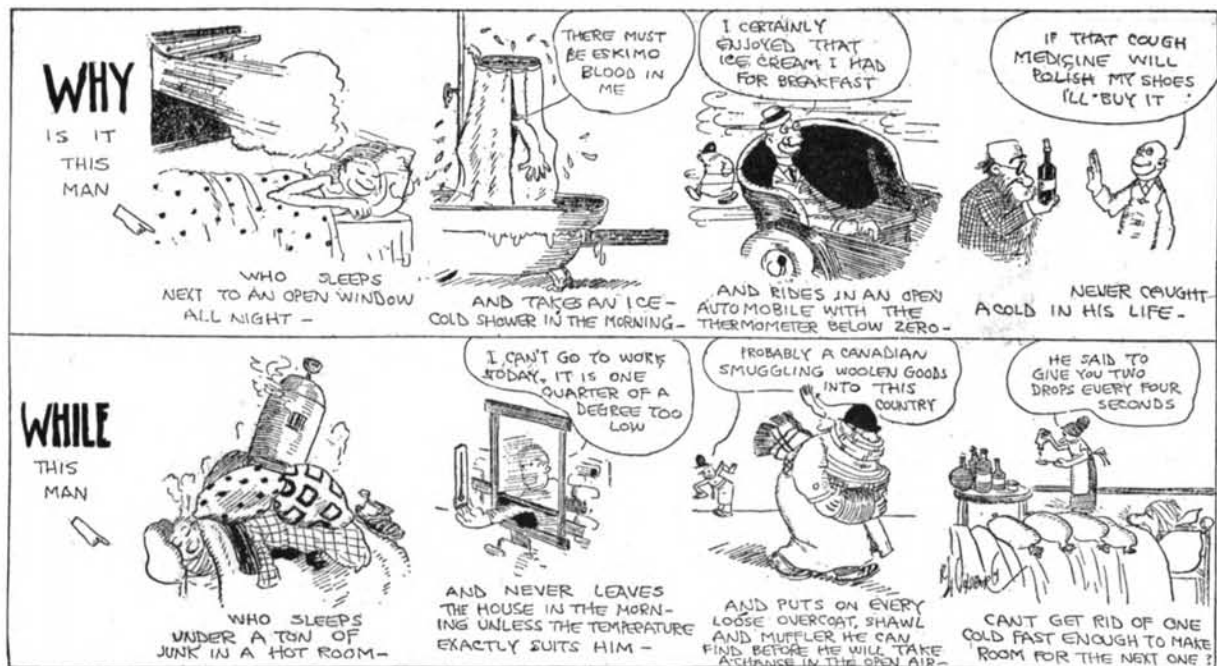
"Tinted glasses for sensitive or inflamed eyes are also prescribed for some cases. The sensitiveness may be internal or pertain to the retina. The first tint in use was blue; later on gray or smoked glasses began to be used; in addition to these two glasses these tints are now being used: amber, or yellow; amethyst, or violet, and chloryphyll, or green.

"The sixth condition for which glasses are prescribed is universal: the change in vision due to advance of age. Every one needs to put on glasses between the years of forty-three and fifty. An exception is the person who has been near-sighted, or who has needed glasses for both far work and near work, and who, at the age of about forty-five years, finds his eyes changing so that now he does not need the glasses at all. Another exception is 'second sight.' That is, a person who has worn glasses or has not seen well without glasses, finds some day that he can see better without his glasses. This means that there are changes constantly going on in the lenses of the eyes, which are becoming more spherical, very often a symptom of cataract."

## The Wriggleness of Vinegar

ANY one who heard Doctor Kellogg describe vinegar in the Question Box lecture the other night will not soon be anxious to indulge in the condiment. "Cider vinegar," said Doctor Kellogg, "is a dilute acetic acid, containing, besides, many other things. For instance, if it is a really good cider vinegar it has vinegar eels. If the vinegar is adulterated—made out of sulphuric acid for example—there will be no eels in it, because the vinegar eel will have nothing to do with vinegar of that kind. In pure cider vinegar, however, the eel thrives, and by means of a magnifying glass may be seen in any quantity. It has been claimed with a good show of authority, that these creatures take possession of the intestines and rule there, which is not an especially comfortable thought. One is not going to relish vinegar when he recalls that it introduces into his system hundreds, and even millions, of minute





## WHY IS IT ?

The above cartoon by Goldberg, taken from the *San Francisco Call*, answers its own question—the open window is the secret of the first man's immunity from colds.

wriggling animals. The acetic acid, moreover, is very irritating to the delicate lining of the stomach, and interferes with the action of the saliva upon the foods, which makes the use of this condiment injurious in every way."

DOCTOR: "Well, my fine little fellow, you have got quite well again. I was sure that the pills I left you would cure you. How did you take them—in water or in cake?" Small invalid: "Oh, I used them in my pop-gun."

### Early Symptoms of Bright's Disease

ONE of the earliest symptoms of Bright's disease is increased blood-pressure. When the blood-pressure is about 100 to 110 one may feel reasonably certain that his condition is as it ought to be, but when it rises to 130 or 140, or even higher, one should look out for Bright's disease. It may not be present as yet, but it is bound to come unless precautions are taken to avoid it. An examination of the urine at this time will usually show indican or indolacetic acid; that is, poisons produced by putrefaction in the intestines. These poisons when they circulate in the blood cause contraction of the blood-vessels, and, when circulating through the kidneys, affect the kidneys, and later on produce degeneration and Bright's disease.

The first thing to correct is the diet. The individual should stop eating foods that tend to putrefy in the intestines; above all, meat must be eliminated from the diet, as also

eggs. Plenty of water should also be used, to encourage the elimination of any poisons that may be produced. Every possible means should be employed to increase the activity of

the skin, for when the kidneys become diseased, the skin also becomes affected, becoming dry and inactive, and losing much of its eliminative power.

## SWEETS FOR THE SWEET

(Continued from page three)

simulated and also assists the assimilation of other foods. It may be taken on fruits of all kinds. Strawberries eaten with malt sugar in place of cane sugar are very delicious, the flavor of the malt sugar combining perfectly with the flavor of all kinds of fruits and cereals. As I have already remarked, it can also be used in much larger quantities than cane sugar, so that one can depend upon it to a greater extent for a part of his food supply.

Ogata, an eminent Italian physician, made an experiment on dogs, making an opening in the side of the dog's stomach so that he could see inside and observe the digestive processes in operation. He found that a five per cent solution of sugar, one part in twenty, produced irritation of the stomach, causing it to be ejected, while a ten per cent solution of sugar brought about such irritation that the dog howled violently and suffered so intensely that the Doctor gave up the experiment. Think, then, of what is happening to a little girl who eats candy in large quantities—in at least a ten per cent solution. Many, many children have become sick and diseased as the result of the candy habit, and there is no question but that the pernicious habit is ruining the health and teeth of the American people.

Cane sugar works injury in still other ways. For one thing it lacks the lime which is to be found in natural forms of sugar, and which is essential to the building up bone structure, with the result that the body of the child is deprived of one of the essentials of its growth and development. More than this, to supply the lime deficiency, the teeth are drawn upon, being worn down to furnish lime for the growing system, and the consequence that the teeth decay, becoming tender and brittle.

### Adulteration of Candies

A still further argument against the use of sweets is the fact that most candies today are adulterated; especially is this true with regard to the cheaper varieties, the kinds which most children eat. Most of these cheaper candies are made from glucose with saccharine added for increased sweetness and coal tar dyes for coloring. All of these substances have a most deleterious effect upon the child's body, as is evidenced by the extreme nervousness and scrawiness so characteristic of the type of child who eats chiefly of the cheapest sweets, the children of the poorer homes in our cities, quite a different type of child from the country boy and girl, who eat comparatively little candy or other forms of cane sugar.



## The BATTLE CREEK SANITARIUM

### THE FIRST STEP TOWARD HEALTH

A thorough-going diagnosis is always the first and most essential step in health building. The patient's entire organism must be studied with the same care and precision that a master watchmaker inspects the mechanism of a costly timepiece. The Battle Creek Sanitarium System comprises as one of its basic features, the most complete and exact methods of examination known to modern medical science. Each case is passed along from one expert to another and the investigation is made so thorough-going that every defect and disorder is recognized and the cause determined. Chemists and Bacteriologists examine kidney and bowel excretions; other specialists study the heart, lungs, stomach and other vital internal organs by the aid of delicate diagnostic devices . . . a complete and accurate "inventory" of the whole body is made. Many business and professional men have adopted the plan of visiting the Sanitarium every year especially for this thorough physical examination.

In addition to the special medical advantages, the Sanitarium offers many unique opportunities to health seekers. The new and attractive diet system, the physical culture classes, the School of Health, the interesting health lectures; swimming games and drills—these and many other health-winning features fill every day's program with useful entertainment in which all participate with zest. Guests have here the combined advantages that can be derived from favorable climatic conditions, attractive surroundings, scientific methods, and close and conscientious medical supervision, with interesting lectures and health classes, physical culture and health training.

### SEND FOR THIS BOOK

A free copy of booklet "THE MEASURE OF A MAN," "The Reason Why," and illustrated Sanitarium prospectus will be mailed on receipt of coupon. Tear off and send it today.



THE BLOOD TEST



THE STRENGTH TEST



BACTERIOLOGICAL EXAMINATION



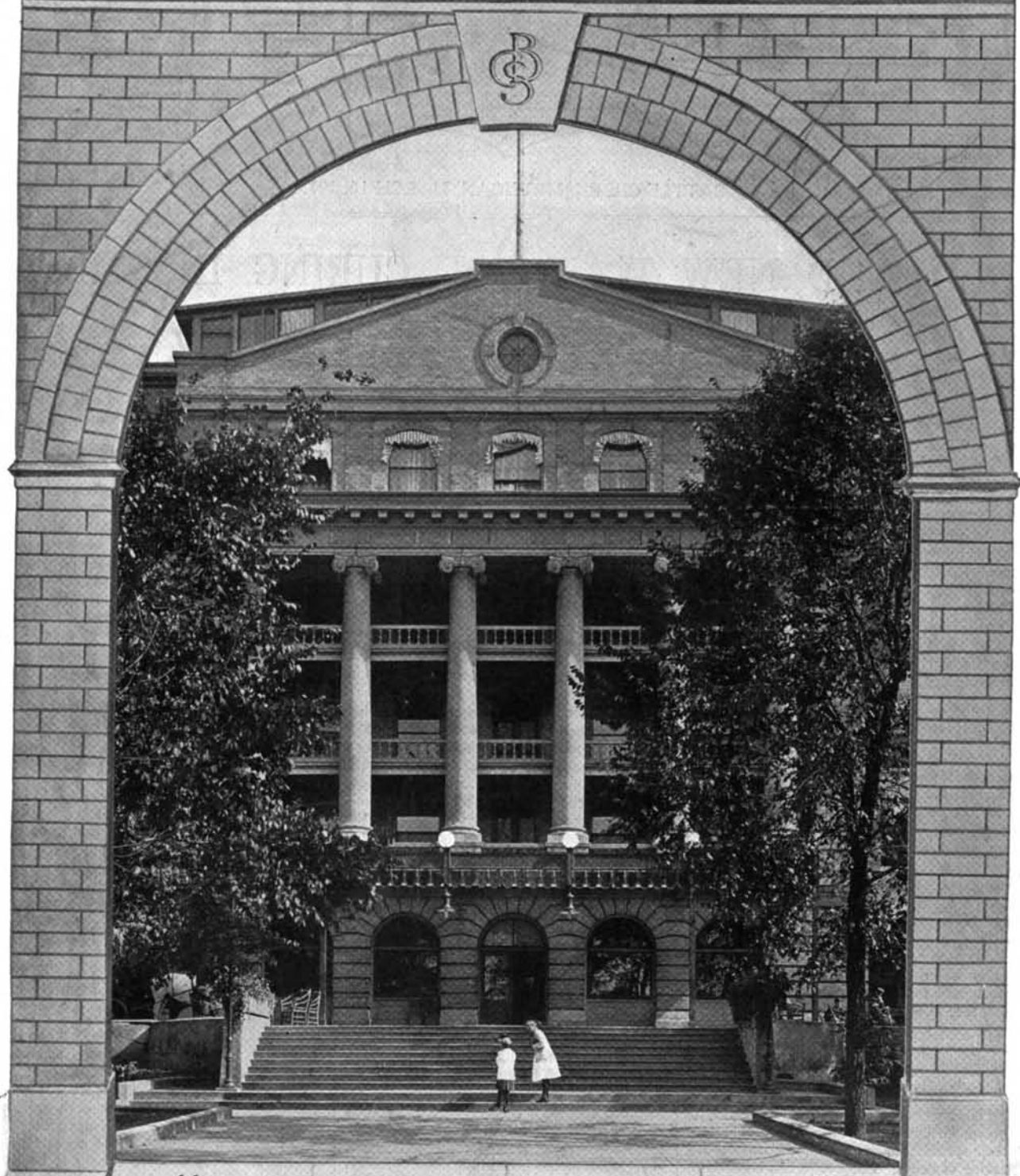
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THE SANITARIUM  
Battle Creek, Mich.

Send the free booklet, "THE MEASURE OF A MAN," and illustrated prospectus, "The Reason Why."

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# THE BATTLE CREEK IDEA



“The Temple of Health”

Vol. 6

MARCH

No. 6

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## OLD AND NEW WAYS OF CURING INSOMNIA

THE Question Box, a few nights ago, contained an interesting question as to the cure for a case of insomnia of fifteen years standing, with headache. When Doctor Kellogg replied that "the only cure for insomnia is sleep," and that "sleep is Nature's best restorer," and that "sleep will cure insomnia and a great many other ills," the audience perhaps felt that they were listening to truisms, but when the Doctor came to elaborate, it was seen that the statements contained profound truth. "Every sick person ought to be in bed at least nine hours a day," said Doctor Kellogg, "for it is only when asleep that one is really getting well. Children grow only when asleep. Plants grow in the night and not at all in the day time. Plants, like animals, gather food during the day, working during the day, but growing in the night time.

### Counting Sheep

"Now a very old cure for insomnia consists in counting sheep jumping over a wall. I suggested this to a man one time and he tried it, but he found that they all jumped over the wall at once, and he could not keep them going in procession, so he got to worrying about the sheep, and consequently he could not fall asleep. The idea behind the plan is all right, for many people cannot sleep because they fancy they cannot sleep, and because they try to sleep, when if they only ceased trying they would fall asleep without any difficulty. They try so hard to go asleep that they keep awake. One should aim to keep his mind off that idea, and counting sheep, or trying to count one-hundred backwards will sometimes accomplish this purpose. But by all means, forget the things that are keeping you awake.

### The Drug Habit

"Most people can break their insomnia by giving up habits that introduce poisons into their system. Important among these is the taking of drugs. Many have had occasion to go to their doctors and say, 'Doctor, your medicine kept me awake all night. There must be some poison in it.' Now that is the very thing the medicine does contain, and when one goes on year after year, constantly

doping, constantly taking medicine for ills that no medicine can cure, the system is bound to become filled up, clogged up with poisons, until one finds himself utterly incapable of sleep. The poisons which result from decaying foodstuffs in our intestinal canals are quite as vicious as those contained in drugs. A practical demonstration of this is the fact that after a heavy meal late at night, while one goes to sleep very readily, yet he awakens a short time afterwards and is unable to sleep for the greater part of the night. With our meals, too, we take into our bodies anti-sleeping poisons, such as tea and coffee. Coleridge once wrote very beautifully about the cup which cheers, but not inebriates, but the fact is that tea does inebriate. Tea makes a person so drunk that he cannot sleep. Alcohol and tobacco are also poisons, and play a prominent part in sleeplessness.

"The person suffering from insomnia has this experience, that his head is hot, while his feet are cold. Several causes may be at work. Perhaps the circulation may be unbalanced. One may be wearing tight shoes, or have gotten the feet wet and chilled; warm underwear may not be worn, or the individual may be improperly clad otherwise, as a result of which the feet become cold and the brain congested. In this condition, one should take a hot water bag to bed with him. In other cases, one complains of hot feet, in which case, a cold water bag is beneficial, the cold having the effect of reflecting the blood to the brain, affecting the arteries of this organ and cooling it off as well.

### Gravitation

"In cases where the head is hot, relief may sometimes be obtained by calling upon gravitation, and raising the head of the bed six inches or a foot. For the opposite condition the head may be lowered—one time in Italy I saw a sight that interested me very much. I observed some poor Italian boys lying under a hot midday sun in the month of May, on a side hill with their heads downhill, sleeping in that hot sun. When I came to investigate the matter, I observed that the boys were half starved, and found that they could sleep better with their heads down hill than

uphill. This gave me a hint and when I came home, I found that anemic persons who could not sleep under normal conditions could often fall asleep easily when the head of the bed was placed low enough so that the blood would of itself run into the head and nourish it.

"A simple expedient in the case of a congested brain is to get the blood from the head into the abdomen by a moist abdominal bandage. Wring a towel about two yards long out of cold water, or half of it out of very cold water, wringing it dry and winding it around the body. Then cover it with a dry flannel and this with a mackintosh so as to keep the heat of the body in. This bandage will soon become warm and act like a poultice, keeping the skin very warm and driving the blood down into the skin and into the viscera of the abdomen. All the vessels of the abdomen will be filled with blood and this will bring the blood from the head. This explains why it is that sleep follows immediately after a full meal—the stomach in order to do its work of digestion draws the blood from the head, thus removing any congestion that may be present at that part. Another means of getting asleep is the use of the tub bath. Have the tub filled with water at from 92 to 95 degrees. Keep it cool, just at the natural temperature. Stay in the tub until you fall asleep. This may require three or four hours, but eventually drowsiness will come over you and you will fall asleep, and find it the most delicious sleep you ever experienced.

### Increasing Use of Hydrotherapy

"A most remarkable example of the sedative effects of the use of water is found in the increasing use of hydrotherapeutic measures in insane asylums for patients who cannot sleep. The Superintendent of the Kalamazoo Hospital for the Insane once told a wonderful story of his experience with the use of water. 'We used to use a great deal of chloral,' he said. 'We bought it by the barrel, but now we find that while we have three times as many patients as we had twenty years ago, we use less chloral and other sleep-producing drugs in a whole year than we used to use every week. When a

## MILK—FOOD VALUES AND STERILIZATION

A Five-o'clock Talk by Miss Lenna F. Cooper, Sanitarium Dietitian

THE importance of the milk question will be understood when I say that sixteen per cent of the total food consumed by the people of the United States consists of milk or milk products, and especially when we consider that many children under one year of age owe their entire existence to the use of milk. Let me read a statement from a government bulletin as to the great importance of a pure milk supply: "There is an important moral side to the milk question which must not be ignored. We may have the right—a very doubtful right, to be exact—to neglect the dangers to which we, as adults capable of judging and acting for ourselves, are exposed; but we have absolutely no right to neglect the conditions that cause suffering and death among children. The failure to act and to act quickly and unceasingly until a safe milk for children, at least, is within easy reach of every mother, may be characterized as barbarous, if not criminal, indifference. It is an offense against the innocent, unquestioning confidence which children repose in their adult friends.

"Under our present conditions of civilization the importance of milk is second only to that of air and water. Without milk thousands of children who grow to useful maturity would starve before they completed the first year of their lives. The excellent work done by Dr. George W. Goler, of Rochester, proved beyond doubt that thousands of lives are annually lost through the use of impure milk. The reform his praiseworthy and untiring energy brought about in Rochester, by no means a very large city, reduced the mortality among children under five years from 7,451 for the ten years ending in 1896 to 4,965 for the ten years ending in 1906. This shows a saving of 2,486 lives, among which 1,554, or 62.5 per cent, were children under one year old, that is, had not passed the period of life during which milk forms the most important element of their daily food."

Now let us study for a moment the composition of milk. In the first place, it has been

called the "perfect food," which is correct in a limited sense, for it contains all the food constituents necessary to maintain life—fats, proteins, carbohydrates, mineral salts and water. But to say that it is a perfect food for the adult, or even for the infant, is really not a correct statement, because the proportions in which the various elements are present are not adapted to the human system, although it is perfectly adapted to the use of the calf, for which nature intends it.

Milk again, may be classified as a liquid, but this is a misnomer, for it is a

When it enters the stomach it is acted upon by the rennin and hydrochloric acid, causing it to form in small masses or curds. It also becomes solid when left standing for some time, or exposed to warmth. We are all familiar with the souring of milk, and will recall that sour milk is almost a solid mass, due chiefly to the precipitation of the casein of the milk, or in other words, to the curdling or souring process. In fact, milk contains about 86 per cent water and far less water than many of our common fruits and vegetables, which contain from 85 to 95 per cent water. Of this solid matter we have the proteins, fats, sugar and mineral matter.

Let us study for a moment a quantity of sour milk. If this were heated slightly we should soon see the solid matter separating from the liquid portion. In other words, we

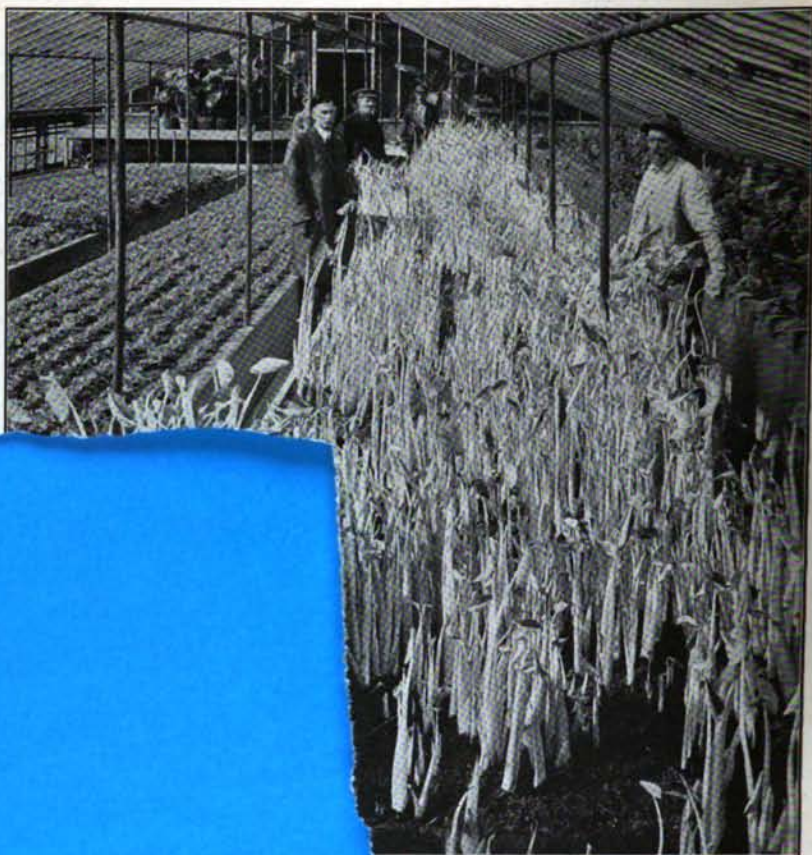
patient does not sleep,' he went on to say, 'we put a wet cloth on him somewhere and he falls right off to sleep.' The Doctor referred especially to the wet sheet pack, which is especially valuable for this purpose. This consists of wrapping the entire body in a sheet wrung very dry out of cold water, but it must be wrapped about very tight; then a dry warm blanket wound around very tight so that the wet sheet is brought in contact with the skin at every point. In five minutes' time there will be a glow of warmth and the effect will be that of a poultice; sensations of nervousness will be soothed away and quieted, and the water will soak into the skin, saturating the nerves with water so that they lose their sensibility. You may have noticed sometimes that the contact of some irritating surface keeps one from sleeping soundly. In the neutral bath, one has the softest kind of bed clothes all about him, softer than a bed of down."



should have formed the curd and the whey. In the curd we have casein and fat, and removing these we have whey. Bring the whey to the boiling point and we shall find a precipitate very much like the white of egg. This is the albumin or lact-albumin, or milk albumin, which composes part of the protein. We have two kinds of protein: casein, which composes about 3.3 per cent of the milk, and albumin, which is about one-seventh as much as the casein. The casein is much more difficult of digestion than the albumin. By evaporation the whey becomes a very sticky substance due to the presence of the milk, or lactose.

#### The Function of Proteins and Fats

Now, if we analyze the whey still further and burn the sugar we have left only a grayish white powder.



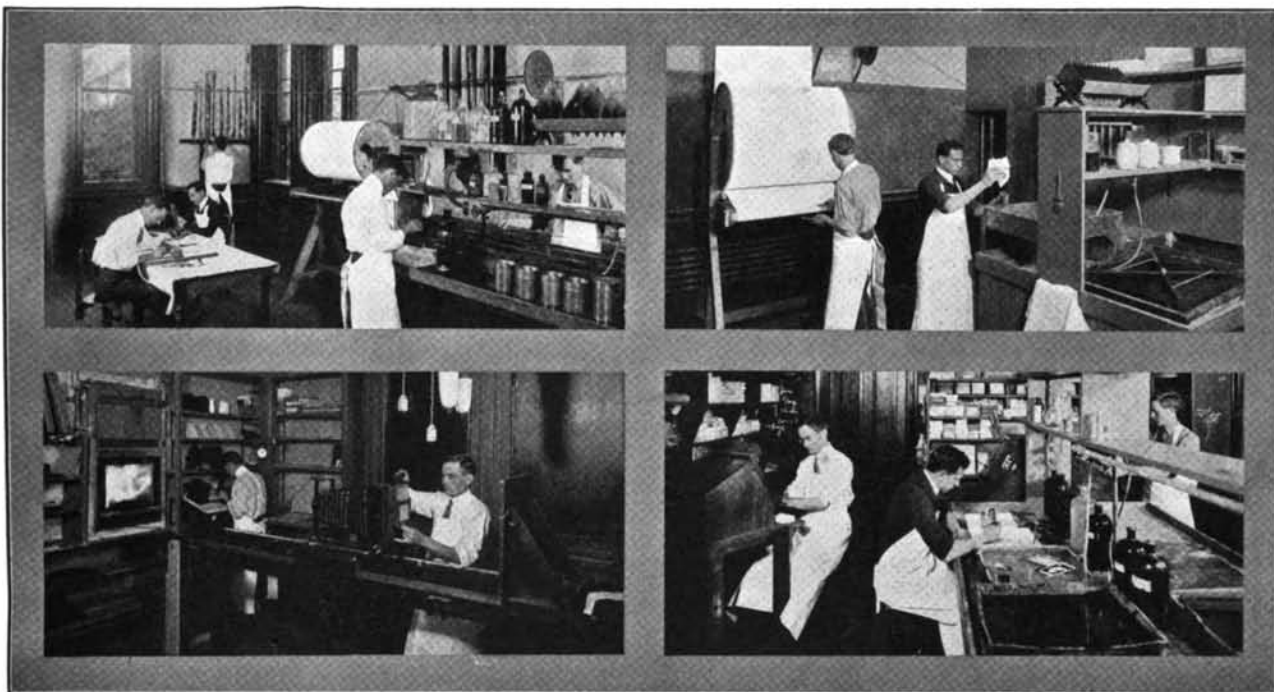
g in a Sanitarium greenhouse.

#### Sanitarium Green Houses

"Of course, it is necessary in a sanitarium that the food be as palatable as possible. Besides, it is the constant effort of Dr. J. H. Kellogg, the superintendent of the Sanitarium, to provide as large a variety in the diet as possible. He has recently added to the menu a new vegetable, dasheen, which the United States Department of Agriculture is anxious to introduce into general use. The plant somewhat resembles the potato, and some people find it very palatable. The green shoots can be used like asparagus, while the tubers can be served as potatoes or be ground into flour. The Sanitarium has taken the entire product of dasheen of the Government Experiment Farm at Brooksville, Florida, last year. This amounts to more than a car load. It is planned to raise a considerable amount of this vegetable in the greenhouses for winter consumption. An experiment will also be made in growing it out of doors, the plants being started in the greenhouse."

The Sanitarium, by the way, is harvesting its first crop of dasheen. The accompanying photograph shows the plants, beautifully blanched and ready for the cutting. The stalks are cooked in much the same manner as asparagus, and are voted a remarkable success by the Sanitarium guests. They have a delicate, individual flavor, unlike any other vegetable, though the root when baked is not at all unlike the Italian chestnut in flavor.





### SANITARIUM PHOTOGRAPHIC DEPARTMENT

ONE of the busiest places in the whole Sanitarium is the Photographic Department, which is located on the third floor of the College Building. It seems that not only do the patients and visitors have a weakness toward the photographic art, but many phases of the Sanitarium itself necessarily employ it. Thus the X-ray department must to a considerable extent depend on the photographs made, and while much of this work is done in the X-ray department, there is still much left for the main photographic department. And then there are the many photographs that are made into cuts for use in the Sanitarium advertising. All this work, as well as the cuts which are used for the BATTLE CREEK IDEA, is done in the photographic department. Rapid work is often required to enable the printers to have the paper ready for publication on time, and from long experience the Department is well trained in hurry-up methods. During the summer months six helpers are necessary to care for all the work.

The busiest months for the department are, of course, July, August and December, the last named because of the large Christmas trade that comes in. In the months of June, July and August the Sanitarium grounds present so many beautiful backgrounds for groups and outdoor scenes that the temptation to use the kodak is very enticing. Hundreds of amateur films and plates are developed, and some very beautiful pictures are taken by comparatively inexperienced people who wish to take home with them a reminder of their visit to the Sanitarium. Figures for this year are not yet obtainable, but during the year of 1911 there were printed and put out by the photographic department 29,279 picture postcards. These were not the cheap trashy kind that are so generally seen in store windows, but finely finished photo-

graphs. Of course it would take considerable time to even print a picture card with ordinary methods, but with the modern apparatus found on the third floor of the College Building the work is hastened remarkably. By means of a remarkable printing machine a high rate of speed is obtained, and very often one hundred cards are printed in seven minutes. The machine is automatic and as each post card is placed in position a lever worked by the foot drops a cover and turns on the strong electric light. On releasing the foot the light is shut off and the postcard is dropped to make room for another.

Of other kinds of pictures there are each

day put out from three to four hundred, many of them amateur, but many also made for Sanitarium use.

One of the newest things in photography may be seen here—"stereo pictures," which are done in color. The camera is fitted with a color filter and takes the picture in the ordinary way, but the process of development is different, for when the picture, or what corresponds to the plate in the ordinary process, emerges from the final solution, the colors are printed as they really occur. No further steps are necessary. This, of course, is the only print that is taken and cannot be printed from as can a regular negative. But the beauty of these pictures as they are held up to the light is a revelation.

### REARING A FAMILY ON A LOW-PROTEIN DIET

MR. J. F. BREAZEAL, of the Bureau of Chemistry, U. S. Department of Agriculture, Washington, D. C., contributes to the February number of the *Forecast* an article which he entitles "Vegetable Diet for Children," wherein he describes how a family of four children are being brought up on a low-protein diet. The method as described by Mr. Breazeale is simplicity itself: "I give my little fellows all the good wholesome foods their appetites demand, and would not lay down any law for others to follow. I do believe, however, that the trend of public sentiment is against meat and that the great men and women of the future will be raised largely upon a vegetable diet." It is a safe venture that children brought up on a diet such as Mr. Breazeale outlines will never choose, when choice is possible, a meat diet. Here is the article:

"My family consists of four children, John aged six, Lucretia and Mary aged four and three respectively, and baby Edward, who is just eighteen months old. They are

as hearty and as happy a little crowd as can be found in Virginia and have been raised almost exclusively on a vegetable diet.

"Under the term vegetable diet, I include all vegetables, fruits, milk, butter, cheese and eggs. I am not a crank on the subject of vegetable diet, neither am I practicing a fad upon my children. If I thought they needed anything else than vegetables I certainly would give it to them, but 'the proof of the pudding is in the eating.' They are as sturdy a little lot as I ever saw, have never been sick in their lives and none of them has ever tasted medicine. Having stopped eating meat myself several years ago on account of my health, my whole family have gradually followed suit. For a while we would have a chicken or a duck for the children occasionally, say once a month, but we have long ago stopped even this. The children express no desire for meat and I believe they would not eat it under ordinary circumstances if it were given them. I am firmly convinced that, as a general rule, chil-

dren are given too much meat, and I am demonstrating it to my satisfaction. Our only system is to place plenty of good wholesome food before our children and allow them to eat all they want. Above all they are never told that anything they eat will make them sick, because we never put before them food that is unwholesome. We live simply ourselves and there is never anything on the table that they cannot eat.

"We live out on a farm in Virginia, for we long ago realized that the city is not the place to raise a baby. We cultivate and can all our own fruits and vegetables. This year we canned in glass over eight hundred and fifty quarts. By using vegetables in this way our garden is made to last twelve months in the year and we can have every vegetable that grows in this latitude served on the table on ten minutes' notice. The babies are usually ready for the vegetables.

#### Ready For Strenuous Play

"They wake up bright and early after the strenuous work of the preceding day—no day is quite long enough for them to finish all the work they have on hand. They are dressed quickly, and in the warm weather I might say lightly, and make a rush outdoors to round up the cats. All stray cats are welcome at our house. By the time mother has their little breakfast ready they are usually on hand with a very good appetite.

"It has been my experience that children want a very simple breakfast. Ours always get a big glass of milk warmed to about the temperature of the body. This they always enjoy. The rest of the breakfast is varied from day to day. Oat meal and cream is their favorite breakfast dish and they like cereals best when they have been cooked over night in a fireless cooker. They are given all the eggs they will eat. Any one of these dishes with their glass of milk makes a good breakfast for them. We never encourage our children to eat when they are not hungry and frequently the milk is all the breakfast they take.

"After breakfast they go to kindergarten, where they remain until twelve o'clock. They are then brought home to lunch and permitted, if they desire, to go down cellar and select from our canned stock what they want, usually bringing back a quart of some vegetable and a quart of some fruit. For example, a quart of carrots gathered and canned when they are young and tender, and a quart of peaches, or kohl rabbi and cherries, or lima beans and stewed apples or green peas and strawberries, or maybe a quart of asparagus. These with bread and butter and another glass of milk make them a substantial mid-day meal. After lunch comes the real work of the day. In the summer this time is devoted chiefly to collecting worms, potato bugs, caterpillars and the like. They have never been told to be afraid of these things and with the exception of a few insects which have "pins in their tails," all worms, bugs, insects and caterpillars are "nice." The caterpillars are brought up to the tank to drink or turned out in the grass to graze or put in a dark place to encourage them to turn to butterflies. It is sometimes hard on the caterpillar, but the little fellows have been taught to love and protect all of

## THE KAIL BROSE OF AULD SCOTLAND

IN the course of his interesting remarks on Scotch songs in the Sanitarium parlor the other day Mr. Meldrum, an honored guest of the Sanitarium, read the "Kail Brose of Auld Scotland," a song written by Alexander Watson, and which runs as follows:

When our ancient fore-fathers agreed wi' the laird  
For a spot o' guid ground for to be a kailyard,  
It was to the brose that they paid their regard,  
Oh, the kail brose of auld Scotland,  
And oh for the Scottish kail brose.

When Fergus, the first of our kings, I suppose,  
At the head of his nobles had vanquished our foes,  
Just before they began they'd feasted on brose,  
Oh, the kail brose, Etc.

Then our sodgers were dress'd in their kilts and short hose,  
With bonnet and belt which their dress did compose,  
And a bag of oatmeal on their back to make brose,  
Oh, the kail brose, Etc.

In our free, early ages, a Scotsman could dine,  
Without English roast beef, or famous French wine;  
Kail brose, when weel made, he aye thought it divine,  
Oh, the kail brose, Etc.

At our annual election of bailies or mayor,  
Nae kickshaws of puddings or tarts were seen there,  
But a cog of kail brose was the favorite fare,  
Oh, the kail brose, Etc.

But now since the thistle is joined to the rose,  
And the English nae langer are counted our foes,  
We've lost a guid part of our relish for brose,  
Oh, the kail brose, Etc.

In the following lines Mr. Meldrum very kindly describes brose for the readers of the IDEA—for the non-Scotch readers, that is, for no one with Scotch blood in his veins but knows brose as he knows his "parritch."

"The words of this song were written by a

patriotic tailor in Aberdeen who resented the constant playing of 'Oh, the roast beef of old England' by the band of the English regiment in garrison there after the rebellion. They were set to that old English melody and became popular. Since time immemorial brose and kail brose have been staple dishes of the Scottish. When Jeffrey and his comrades started the famous *Edinburgh Review* on rather slender resources they told their friends they were 'cultivating literature on a little oatmeal'; and their great success is now a matter of history. And when the Highland regiments won England's battles in Europe and India it may be largely credited to the brose and oatmeal 'parritch' on which for centuries the youth of 'Caledonia, stern and wild,' were raised.

"Brose is made simply and quickly by pouring boiling water on coarsely ground oatmeal. Kail, or kale, brose is the same, plus vegetable broth, in which the chief ingredient is kail, the gaelic for colewort, a kind of green, leafy cabbage without a head. In some parts of Scotland and Ireland this is also known as "curlies." Pease brose is another favorite variation and is made by pouring boiling water on pea flour. Scotch porridge—parritch or paraitch—is more digestible by ordinary stomach, as it is well boiled for several hours. In the olden days it was parritch for breakfast, oatcake (very hard or brittle) and cheese for dinner, and brose for supper; milk and buttermilk being generally used.

What is known as "Athole Brose" was a very different dish, being honey dissolved in whisky. Food reformers will be glad to

these creatures and I have never known them to intentionally hurt these little animal friends. Now that the cold weather has come and the bugs and worms have all gone to sleep they spend their time digging holes in the yard, sliding down the hay-stacks, playing on their see-saw, or pulling each other up and down the lane in their little wagons. An apple barrel is always open to them and a great part of the time they hold a half eaten apple in one hand while they work with the other. There is nothing in the world like out-of-door exercise for growing children. In this way they work up an appetite and are ready to take dinner with me when I get home at six o'clock. For dinner they have exactly what I have. Eggs and all kinds of vegetables enter into our diet. A poached egg served on a shredded wheat biscuit which has been moistened with hot milk or water is given them whenever they will eat it. Lima beans, canned when young and tender, are one of our staples, and they are delicious, too. We buy unpolished rice by the bushel and give them all of this they will eat. They are also very fond of macaroni (snakes as they call it), which we prepare with cheese or tomatoes—this is very nutritious. We also often have potatoes, beets, snap beans, okra and summer squash. We can our spring onions when they are young and tender and serve them during the winter with butter or cream dressing. The

babies eat them greedily. We also can sugar pumpkins or winter squash for them. When properly prepared corn is one of the most delicious vegetables that grows. We can it extensively and serve it fried in soup and corn pudding. The old-fashioned cow pea, canned just before it ripens, while it is yet soft, and served either alone or with tomato sauce, make a nutritious and palatable dish. We also prepare large quantities of soup stock for the children. Tomatoes, okra and corn, either singly or mixed in varying proportions, form the basis of the soups.

It is a mistaken idea that most people have that meat is required to give a child strength. Many nuts and some vegetables are richer than meat in food value. The value of a food is due mainly to three ingredients, protein, fat and carbohydrates (sugar and starch). The following table will indicate the relative food value of a few vegetables in comparison with meat:

	Per Cent Protein	Per Cent Fat	Per Cent Carbo.	Heat Units Per Pound
Walnuts .....	17.0	63.0	16.0	3285
Beefsteak .....	19.0	19.0	0	1130
Peanuts .....	26.0	38.0	22.0	2500
Ham .....	16.0	39.0	0	1940
Dry Navy Beans .....	23.0	2.0	60.0	1600
Cream Cheese .....	26.0	33.0	2.5	1950
Wholewheat .....	12.0	2.0	74.0	1750
Eggs .....	15.0	10.0	0	700

know this strong variety of brose is now almost unknown in Scotland; though some lament the physical decadence due to the increased consumption of white bread, cane sugar, strong tea and various luxuries. As the song says 'We've lost a guid part of our relish for brose.'

"Am I very sick, doctor?"

"You sure are—you have scarlet fever."

"Just my luck."

"What's the matter?"

"Why couldn't you make it yellow fever? Then it would have matched the wall paper."

## WELL-KNOWN MUSICIAN AT THE SANITARIUM

A GUEST well known to many about the Sanitarium is Professor O. A. Morse, Dean of the Conservatory of Music of Morningside College, Sioux City, Iowa. Professor Morse holds a prominent place in the musical life of his State and city. Morningside College, the founding of which was largely due to Bishop Lewis, of China—a missionary highly esteemed at the Sanitarium,—who became its first president, is the largest in the State outside of the University, and its Conservatory of Music is exceeded in size only by that of Des Moines. In addition to his position there, he is Dean of the American Guild of Organists of Iowa, and also organist of the First Presbyterian church, the largest

## Stay at Sanitarium as Good as a Post-Graduate Course, Says Successful Michigan Physician

A TALK with Dr. T. N. Rogers, of Sault Ste. Marie, Michigan, reveals him as a man of progressive ideas. This is evident in his manifest "aliveness" to the trend of the best modern medical science. He has long recognized the importance of drugless therapy, and has practised it in its well-established features. Further, he has read papers—subsequently published—advocating its use, before the Michigan State Medical Society.

Doctor Rogers' recent visit to the Sanitarium was prompted by a desire to study at

first hand its methods, and to secure some of the appliances used here. For several years he has employed the X-ray, static electricity, and vibration in his practice, and will now add to that equipment a number of appliances which he has ordered from the Sanitarium Equipment Company.

While here he inspected every department, and his impressions were uttered in a tone both sincere and emphatic. "It is a wonderful institution," he said, "the best equipped, and most scientifically arranged and managed on this continent. I have found it larger and better in every way than I had anticipated from hearing and reading. I believe every department to be equipped with the latest and best appliances procurable. Then, too, each department is in charge of an expert. The diet, I consider to be beneficial, and it is sufficiently liberal in variety and quantity to supply the needs of anyone. It is better than meat. Meat is not a necessity. This I discovered long before I came here, and am now more than ever convinced of the fact.

"The Sanitarium offers great educational facilities. It is as good as a post-graduate course, because it takes up much that is not included in the medical school course, and because of the growing demand for drugless treatment. It is on account of the neglect of this last by medical men in the past, that quacks have been so successful.

"I have enjoyed every minute of my stay. I have received not only the greatest courtesy, but extreme kindness, both from the physicians and the helpers. It is my first visit, but I hope it will not be my last."

## Scotch Songs at the Social Hour

THE Social Hour on February 27, was a Scottish event. The program was given by two guests who hold high rank in the arts of entertaining and instructing. Mrs. Alice Wentworth MacGregor, a noted singer of Boston, first rendered in a charmingly delicate and artistic manner two favorite Scotch songs, "Annie Laurie," and "Comin' Through the Rye." This was followed by an interesting and illuminating talk on "Scotch Songs and Sentiment," by Mr. James Meldrum, of London, England, himself of Scotch birth, and further qualified for dealing with the subject by a wide acquaintance with the literature of his native land. Mr. Meldrum briefly reviewed the origin and history, and indicated the significance and characteristics of the songs and poetry of Scotland, illustrating the latter by means of short excerpts.

At the close of the hour, yielding to the entreaties of a number of guests, Mrs. MacGregor repeated the singing of "Comin' Through the Rye," and gave a very beautiful rendering of "Robin Adair."

"AUNT MARY, this is my friend, Mr. Spiffkins."

"I'm sorry, I didn't quite catch the name."

"Mr. Spiffkins."

"I'm really very deaf; would you mind repeating it?"

"Mr. Spiffkins."

"I'm afraid I must give it up—it sounds to me just like Spiffkins."

and most important church in Sioux City. His connection with the Sanitarium in the past has been very close. For a number of years, his father, Mr. G. W. Morse, held a position with the Good Health Publishing Company, and his mother was matron at East Hall. Another link with the institution is supplied by the fact that Dr. J. F. Morse, of Porto Rico, formerly a physician here, is his cousin.

That which most impresses the Professor as regards the Sanitarium is the position it has gained in the public confidence. He illustrated this by a recent experience. "Before coming here," he said, "I consulted my own physician relative to doing so. His reply was, 'By all means go.' Another physician, a specialist of Sioux City, confirmed this recommendation. The Sanitarium has become an established and influential fact." Speaking of this latter characteristic, he said, "Its influence is wide spread. I was particularly struck with this in the dining car of the train by which I travelled to Battle Creek. The menu had such articles as graham bread, cereals, and fruit figuring largely on it. This can be distinctly traced to the influence of the Battle Creek Sanitarium. Moreover, the calls for cereal coffee exceeded those for ordinary coffee. Last year I had occasion to be much in New York, and I found that there is no first class hotel there which has not revolutionized its bill of fare in the direction of the principles of this institution."

## Texas Physician Talks About the Sanitarium

DR. W. ELIZABETH PARKES, of Jacksonville, Texas, has just spent a fortnight at the Sanitarium, taking treatment and studying the methods employed here. "I am very much pleased with everything I have seen," said Dr. Parkes on leaving. "I have been especially interested in the hydrotherapeutic part of the work, also the X-ray and diathermy. I have also enjoyed the diet, and believe it is based on the right idea. I have been studying the Sanitarium System with the thought especially in mind of adopting some of these principles in a small sanitarium which I have considered establishing in Texas, and I believe that most of the methods in use here can be practiced successfully in a small institution."

## Sanitarium Guests Entertained by Miss Hemenway

MISS RUTH HEMENWAY, an instructor in the Department of English, Illinois Wesleyan University, Bloomington, Illinois, and well-known as a dramatic reader, gave a recital in the Sanitarium gymnasium on the evening of March 4. "She has been so often with us, that we have almost begun to consider her as one of our family." In these fitting words, significant of Miss Hemenway's popularity here—a popularity due not only to her gifts as an entertainer, but also on account of a personality giving pleasing expression to high ideals—Pastor Tenney introduced her to the audience on the present occasion. Her subject was that moving story of northwest Canada, "Black Rock," by Ralph Connor. Interest was added to the reading by an introduction in which Miss Hemenway told the origin and purpose of the story, and briefly referred to the author, with whom she is personally acquainted. It was evident that the reader had identified herself with the lofty spirit of the book. The whole presentation was conceived and executed in a manner completely in harmony with this. In consequence it was accomplished with a realism and living appeal due not only to excellent technique, but to the moral earnestness which pervaded the representation of the conditions and the characters.





DR. L. W. TOLES, of Lansing, who has been taking treatment at the Sanitarium has returned home. Before leaving, Doctor Toles stated that he was much better.

MR. EDGAR T. WELCH, secretary and treasurer of the well-known firm of grape juice manufacturers, accompanied by his wife and son, again made a short stay at the Sanitarium recently.

DR. ADELAIDE ELLSWORTH, of Philadelphia, is one of the latest physicians to come here for the purpose of inspecting the Sanitarium, and investigating its system. Prior to her departure, she expressed herself as very pleased with what she saw and learned.

MISS LILIAN GRACE TOPPING, who is in charge of the Florence Crittenden work in the North-West, with headquarters at Fargo, North Dakota, is a guest of the Sanitarium. Her sister, Miss May Topping, of Buffalo, is staying with her.

REV. GEORGE E. GUILLE, of the Extension Department of the Moody Bible Institute of Chicago, who is conducting a Bible Institute at the First Presbyterian Church of this city, is staying at the Sanitarium. On March 8th he conducted the regular Sabbath service in the Chapel.

THE lady physicians of the Sanitarium gave a dinner in the dining room, Friday, February 27, with Drs. Willard E. Park, of Jacksonville, Texas, and Adelaide Ellsworth, of Philadelphia, as guests of honor. The table was laid for twelve, and an enjoyable time was spent.

THERE is no limit to the usefulness of the Sanitarium. Our attention has been called to a statement in an Indiana paper that "Miss ---- went to the Sanitarium at Battle Creek, Michigan, for a week's treatment before going to Chicago to buy spring millinery."

MR. VERNON ARCHIBALD, soloist of the Madison Avenue M. E. Church, of New City, and leading baritone of the New York Mendelssohn Club, America's greatest and most exclusive singing organization, is announced for a recital at the Sanitarium Tuesday evening, April 1st.

THE following prominent physicians were recent guests of Doctor Case: Dr. M. M. Portis, of Chicago, who is connected with the medical department of the University of Chicago; Dr. Harry Dachtler, of Toledo, Ohio, Roentgenologist; and Dr. Harry K. Pancost, Professor of Roentgenology, in the medical department of the University of Pennsylvania, Philadelphia.

Two physicians holding important positions who have spent a day during the past few weeks inspecting the Sanitarium, and investigating its principles and methods, were Dr. Frederic Brush, of New York City, Superintendent of the Burke Foundation which is a hospital for the deserving sick poor of New York City; and Dr. J. N. E. Brown, superintendent of the Detroit General Hospital. Both expressed high appreciation of what they saw and learned in regard to the institution.

HON. H. M. WOLCOTT, Vice Consul General to Mexico City, left the Sanitarium on March 3. "I have enjoyed my stay very much, and am feeling very much better than when I arrived here. I wish I could have stayed longer," Mr. Wolcott said prior to his departure. After a short visit with relatives in Florida, he expects to resume his official duties in Mexico City.

MR. AND MRS. C. W. SUTTON, of Minneapolis, who have been coming to the Sanitarium twice each year for the past six years, are again with us. Since their last visit they have been traveling somewhat extensively, part of that time having been spent on their farm in Minnesota, and the remainder in visits to New Orleans and Panama. On the present occasion, Mr. and Mrs. Sutton are accompanied by their son and his wife, Mr. and Mrs. F. E. Sutton, also of Minneapolis.



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THE SANITARIUM, Box B-68, Battle Creek, Mich.

N—S—P—E

## Ex-Senator Young, of Iowa, Impressed with Magnitude of Sanitarium Work

FORMER Senator Lafayette Young, of Des Moines, Iowa, accompanied by Mrs. Young, arrived at the Sanitarium on February 28. Mr. Young was able to stay only a few days, having a speaking engagement in Ohio early in the present month. Mrs. Young, however, will remain several weeks.

Both highly esteem the Sanitarium, and have been guests here a number of times previously. In speaking of the institution, Mr. Young spoke of the fine main building, referring especially to the fact that it was as nearly fire-proof as any building could be made. He was greatly impressed, too, with the smoothness with which the work, which

is of such magnitude, is carried on. "It is a grand institution," he said, speaking not only of its work of health promoting, but also of the social aspect of the life here. He added that its teaching was becoming very widespread. Before leaving, he stated that if possible, he would return for another stay very shortly.

## High Indian Official Keeps in Close Touch with the Sanitarium

MR. JOHN R. BRENNAN, Superintendent and Special Disbursing Agent of the Pine Ridge Indian Reservation, South Dakota, returned home, after a short stay at the Sanitarium, on February 28. Mr. Brennan holds a very important position, having in his charge seven thousand Sioux Indians, a staff of three hundred employees, and disbursing annually goods and money to the value of several hundred thousand dollars. The Pine Ridge Reservation is a large one, being one hundred miles long, and sixty wide.

Mr. Brennan stated that he had been coming to the Sanitarium every year or two for the past seventeen years. His latest visit was occasioned by the need of recuperation, and a little treatment. From his stay he has derived benefit. "I have had a pleasant visit," Mr. Brennan said. He added, "I keep in close touch with the Sanitarium, and am frequently sending people here."

## The March Good Health

THE *March Good Health* contains as its leading feature a valuable article on the subject of "How the Arteries Harden," in which the Editor points out the causes which underlie the production of arteriosclerosis. "In no other disease are the vicious effects of our modern habits of life better seen than in arteriosclerosis, or hardening of the arteries," says the writer. "Every practising physician finds that a growing proportion of the patients who come to him are suffering from this disorder; and every physician early discovers that there is no hope of cure without a complete change in the manner of living. The diet must be put on an antitoxic basis; the eliminative functions of the liver and other organs must be brought up to the highest efficiency; exercise and other means must be adopted in order to increase the tone and general resistance of the body, and there must be cultivated a spirit of optimism and hope." The *March* article is to be followed in April by an article outlining practical means of preventing the disease and of ameliorating its effects.

Another article that is very timely in view of the fact that in so many communities

throughout the country, local option is to be voted upon at the spring election. The article is written by Colonel L. Marvin and Maus, Medical Corps, U. S. Navy, Chief Surgeon of the Eastern Division, and is entitled "Reasons for Opposing the Restoration of the Army Canteen." The paper goes at length into the physiological and moral phases of the question and must convince any one of the fallacy of the arguments advanced by those who favor the re-establishment of the canteen in the Army. The relation of alcohol to heredity is another article which will be read with great interest, as also the unusually interesting department called "With Our Readers," which contains letters of inquiry written by readers of *Good Health*, with replies by the Editor of the magazine.

## Sanitarium Banquets the American Physical Education Association

THE Sanitarium, on the evening of February 25th, tendered a banquet to the American Physical Education Association, held in the south dining room. The guests were welcomed by Doctor Kellogg in a few well-chosen remarks. The speaking program consisted of a valuable address by Professor W. T. Bowen, of the Michigan State Normal College at Ypsilanti. Professor Bowen spoke on the subject of "Why Play Should be Taught," and in a very instructive manner showed why the play spirit should be cultivated, and how our American life is suffering from the very qualities of mind and heart that come only of the full development of the play and recreation spirits in the minds and lives of the people.

The banquet was preceded by a very interesting gymnasium program consisting of a demonstration in the progression of the teaching of women's games preliminary to the teaching of basket ball, by Professor Bowen, and by a discussion of the advisability of organizing a State soccer league. The aims and scope of such a league were described by Mr. Richard Jackson, Detroit Manager of the A. G. Spaulding sporting goods house. Mr. Jackson spoke at some length of the development of soccer in this country during the past few years, and asserted that Michigan would, if the growing enthusiasm continues at its present rate, be one of the leading soccer States in the country. A State soccer league would very materially aid the propaganda. Representatives were present at the meeting from the Kalamazoo Normal College and from Alma, Albion, Hillsdale

(Continued on page eleven)

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VOL. VI MARCH 16, 1912 No. 6

## The Needs of Conservation

THE strong note in favor of progressive conservation measures sounded by President Wilson in his Inaugural Address gives a special point to a circular just received from Gifford Pinchot, President of the National Conservation Association, in the course of which Mr. Pinchot sums up the most urgent need at present of the national forest work as follows:

1. "Liberal provision for permanent improvements, which enormously increase the efficiency of the protective force as well as open the forests to greater use. Chief Forester Graves estimates that the total costs of the completed protective system of trails and telephone lines now planned will equal about one per cent of the present value of merchantable timber in the forests; and he has asked for one-tenth of this total annually for ten years, or \$500,000 a year.

"2. More men for patrol. The fire loss is still too high. From the standpoint of the value of the property (both public and private, exposed to destruction, one man to 94 square miles is not sufficient and the three cents available to the acre per year for all purposes is too little to spend.

"3. Larger resources for conducting the investigations which underlie scientific use of the forest and range. Just as scientific agriculture is founded on the work of the experiment stations and the investigations of men who have studied crop production and animal husbandry from every side, so the best use of the soil for growing timber and forage and regulating stream flow must await the gathering of fuller knowledge than we yet have concerning the natural forces through whose control man may mold nature to the best service of his needs."

The splendid results achieved by the conservation work thus far carried on by the Government, stimulated by the active propaganda of the National Conservation Association, impels the hope that the incoming administration will not only continue the good work already begun, but extend it into fields not yet touched, but in which the need it quite as imperative as in the matter of the forests.

## Alcoholic Liquor as Food

ONE of the Sanitarium physicians was asked the other day whether any of the alcoholic liquors commonly used have food value. "No," replied the Doctor in question, "nobody takes alcohol for its food value.

Nobody would think of doing it. Explorers who visit the Arctic regions are obliged to take food in a form that they can get into the smallest space, with a maximum of nourishment, food that will enable the men to stand the hardest work and to have the great endurance—consequently they leave alcohol behind. Nobody would think for a moment of putting alcohol into the rations of a man making a dash for the Pole. Experiments have clearly demonstrated that alcohol has no food value whatever. It is burned up in the body just as food is burned up in the body, and that is true of all organic poisons. Strychnia, for instance, is burned in the body; just as is morphia and other poisons which no one would for a moment claim as a food. The same thing is true of beer, concerning which Liebig, the great German chemist said, 'There is less food in a hogshead of beer than there is in a small loaf of bread.' So you can see that if one is going to use beer as food, he will have little time for anything else except eating. If one were to substitute beer for a loaf of bread, he would be obliged to drink a hogshead of beer in order to get the nourishment which he would ordinarily get from the loaf of bread. The only food contained in beer is the little sugar in it that has not yet been fermented, and that is so very small in amount that it is not worth troubling about. A teaspoonful of sugar will give more food value than an entire quart of beer."

## The Tonsils

IN the olden days, said a Sanitarium physician the other night, the tonsils were thought to exist chiefly for the purpose of creating business for doctors. More recently, however, it has been discovered that the tonsils are allied closely to the lymphatic glands and that there is a purpose for their being situated in the throat, where two streams of germs are constantly entering the throat, one from the nose and one from the mouth. Thus the tonsils are like two sentinels standing on either side of the entrance to the lungs, inspecting carefully everything that passes their way. They are defenders of the body, standing at the very portal of the body, to defend it against germs.

Now when the tonsils swell up the throat is sore, a sign that they have captured a great many germs, so many, in fact that they themselves have become damaged, irritated and inflamed by the attack of the very bacteria which they have arrested, as it were. Now the lymphatic glands all over the body are what we might speak of as jails for arrested germs. White blood-cells everywhere are capturing these germs and carrying them to the glands. This is what takes place in the throat, and it is very hard for germs to steal by the tonsils.

Recently it has also been found that the tonsils have another and still more remarkable function. That is, they are concerned with the processes of growth and development. It will be noticed that they are very large in children; observe a small child two or three years of age and you will find that the tonsils are very large, whereas after one

has gotten on in years they cease to be enlarged. It is seldom, indeed, that one finds a person of twenty-five or thirty years of age with large tonsils, while a person of forty or fifty or sixty years old with them would be curiosity.

This shows that tonsils should never be removed unless they are chronically inflamed. If they are in a state of constant active inflammation, and if they are infected, then they should be removed, but a large tonsil should not be removed otherwise, because they are put here for a purpose, for the protection of the child, and especially for the proper development of the growing child.

## Sanitarium Guest Returns After Thirty-Eight Years

A GUEST who is in a position to appreciate the remarkable growth of the Sanitarium, is Mrs. Susan Scott, of Alpena, Michigan. Thirty-eight years ago Mrs. Scott was a patient here for the first and only time until her present stay. At that time there existed no institution in any way comparable to the present. The second building, an extension of the two-story "farm house," the original Sanitarium, was then in use, together with a mere handful of cottages. In addition there was the College Building across the street, but this was very much smaller, additional stories having been added, and extensions made at each end. As Mrs. Scott says, there were only about one hundred patients, and a very much smaller staff of helpers. The forms of treatment, and the number of appliances employed, were also inconsiderable as compared with those now used. All this stands in vivid contrast with the institution as it at present exists—the magnificent main building, the fine Annex, the spacious East, South, and West Halls, together with the score of cottages grouped around the larger structures, which house it; the multiplied method of treatment, and the wonderfully complete equipment of the latest appliances for aiding to recovery of health.

Another feature, and one of great importance and significance, which has grown up since Mrs. Scott's former stay, is the educational work carried on in the Nurses' Training School, the School of Domestic Science, and the Normal School of Physical Education. "It is perfectly marvellous," said Mrs. Scott, summing up her impressions of the changes.

Remarkable, however, as has been the growth of the Sanitarium, it has, nevertheless, been a natural development. Based upon sound principles, with a management responsive to the modern enlargement of knowledge upon the subject of health, it has grown through having to meet a constant and pressing need.

"Do you really believe, doctor, that your old medicines actually keep anybody alive?" asked the sceptic.

"Surely," returned the doctor. "My prescriptions have kept three druggists and their families in this town for twenty years."—*Lippincott's*.



## The Paragon Chestnut

EDITOR BATTLE CREEK IDEA:

Since my article on the Paragon Chestnut in your issue of February 16th, I have received many letters from persons interested in the work of the Northern Nut Growers' Association, inquiring as to their headquarters. If I may answer through the IDEA I will say that Dr. W. C. Derring, Westchester, New York City, is the secretary and will send reports of meetings on application. These reports show what nut trees of the better varieties of European, Asiatic and American trees will grow in various localities and where seeds, trees and scions can be procured, and will tell how to care for trees and prevent tree diseases and insect enemies. The Association will meet this early winter in Washington at a date agreeing with the meeting of the American Pomological Association. Membership is \$2.00 a year.

G. H. CORSAN.

## Banquet of American Physical Education Association

(Continued from page nine)

and Olivet colleges. These institutions plan to form an intercollegiate league, which with the proposed State league will put soccer in a position to vie strongly with Rugby in Michigan during the coming year.

At 8:00 o'clock the guests witnessed in the Gymnasium a very interesting "normal practice," conducted by Victoria Wilhelmy and Bernard G. Bergen, students of the Sanitarium Normal School of Physical Education. The program included a marching drill conducted by Mr. Bergen, folk dancing, conducted by Miss Wilhelmy, apparatus demonstration of horizontal and parallel bar work, Swedish for ladies and men, esthetic dancing conducted by Miss Shea, fence vault, potato race and volley ball competition, and dancing by the junior and senior men.

## The Beneficence of Winter Air

THE recently published accounts by Doctor Cook and Captain Amundsen of their polar experiences make valuable reading in these days of early winter, and recall the fact that the survivors of Arctic hardships and privations, great and perilous to life though they be, always come back to civilization in the finest health. The interesting records of daily experiences published by the various explorers who have spent months and years among the ice floes and blizzards of the polar regions include no mention of gastric woes, colds, influenzas, pneumonias or rheumatisms. The universal experience has been continuous robust health, notwithstanding hardships of the most trying kind, exhausting exertions, and a most unnatural dietary. This extraordinary health, notwithstanding many disadvantages, must be due to the purity and density of the polar air, the absence of dust and dust germs, and the stimulating influence of cold, since these are the only salutary factors which are increased in the polar regions.

It thus appears that a winter near the North Pole is a most effective means of securing a great health uplift, a veritable physical regeneration. These experiences are verified, too, by the wonderful results obtained in the outdoor treatment of consumption, now recognized as the one and only means of curing this malady. The best results are obtained in the cold season and in the coldest climates. Physicians no longer feel it necessary to recommend their patients to remove to a warm climate, but simply to send them out of doors in all climates and in all weathers, finding the coldest climate and the coldest weather the best.

The newest medical science and the most recent human experience have opened our eyes to the surprising fact that winter's cold is not an enemy, but a friend. Jack Frost is not a thief and a robber, but a Good Samaritan. Winter is not a calamity, but an opportunity, a chance to rally our vital forces, to recover the stamina which summer germs have weakened and summer heat has attenuated. The alternation of seasons afforded by the temperate zones is the greatest possible blessing to civilized man. The cold season affords a means by which the disease producing influences of our perverted civilization may, to a very large degree, be counteracted. Civilized man is indeed much better prepared than is the Eskimo to avail himself of cold weather privileges. The polar summer is too short to permit the Eskimo to raise a crop, and so he is compelled to live upon a diet better suited for the Polar bear or the Arctic wolf than a natural vegetable feeder, whose proper home is some thousands of miles to the southward. The igloo in which he lives has no facilities for ventilation, and affords no convenience for baths. His skin garments shut away both light and air from the cuticle and interfere with skin excretion and respiration. The Eskimo emerges from his long winter sleep.

Science and experience have taught us how to support an unnatural covering of the skin without seriously interfering with its functions; how to construct houses to dwell in without making them death traps; how to provide at all seasons wholesome food adapted to our natural needs. Thus the civilized man is prepared to reap all the physical advantages which pertain to crystal-clean, zero air, while he is able at the same time to avoid all of the disadvantages of polar temperatures.

To be able to avail ourselves of winter's blessings we must first of all change our attitude of mind. We have been accustomed to look upon cold as a deadly foe. We must dismiss this idea and become fully possessed of the purpose to attain all the benefits and delights which winter can give. In order to do this it is important to know that to get all the possible advantages of cold air it is not necessary to suffer any discomfort or inconvenience whatever. There are to be no chills, no shivers, no longing for snug warmth and cozy comfort. These things must be provided for by means of extra wraps, hoods, mittens, if necessary supplemented by hot-water bottles or other warming devices. The only thing essential is the breathing of cold, dry, pure air, and perhaps the exposure of the face to the nerve stimulating influence of a zero-cold atmosphere. The hands and feet, the whole body, must be kept warm and comfortable at any expense, otherwise no benefit will be gained. The blood must be kept in the skin and peripheral organs. A cold skin and cold extremities mean congested liver, the stomach and other viscera overfilled with blood and consequently in a crippled condition, and an overworked heart. With an equable circulation and the exhilaration and feeling of reinforced energy and fitness which come from the appropriation of winter opportunities, there is an enormous increase in the joy of living.

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## Milk Food Values

(Continued from page four)

you know, are little plants which require much the same conditions for growth as do the plants in our gardens. They require moisture, first of all, and milk furnishes in this respect a very favorable medium. They also require warmth, which is supplied by milk at the temperature at which it is drawn—if we wish to prevent the growth of the bacteria it is therefore important to reduce the temperature of milk as soon as possible. Further, they require food, which they find in the sugar of milk. Thus we have in the milk an ideal medium for the development of bacteria.

### Changes Due to Bacteria

Now, in milk these organisms bring about certain changes. Just as in our bodies starch is broken down into simpler compounds, for instance, so the bacteria in feeding upon lactose, or milk sugar, changes it into a simpler compound known as "lactic acid," which gives milk its characteristic sour flavor. Since in this country we prefer sweet milk to sour for general use, it is advantageous that milk be kept sweet as long as possible. This may be brought about in the safest way by controlling the number of bacteria, either by preventing their entrance into the milk, or by preventing their growth by means of reducing their temperature. Heat may also be used for destroying bacteria.

Now, some of these bacteria may be capable of producing disease, such as scarlet fever, typhoid fever, and, especially that most dread of all diseases, tuberculosis.

I think we do not realize to what extent tuberculosis may be carried by the use of milk. A European physician who made a study of tuberculosis and its relation to the milk supply made several hundred autopsies and found that 91 per cent of all persons examined had had tuberculosis in some form. Comparatively few had it in its most fatal form, but many of them had tubercular lesions, showing that at some time or other they had suffered from the disease, perhaps unknown to them. But the fact that tuberculosis is spreading very rapidly is a sufficient reason why people should pay more attention to their milk supply. I saw a statement some time ago to the effect that in New York State, where tuberculin had been used by the agricultural station at Cornell University, about 33 1/3 per cent of the cattle tested had been found to be tuberculous, reacting very decidedly to the test. If this is true of New York I see no reason to believe that the same condition does not prevail in other states.

Now there are several means of rendering milk safe, or in other words, of preserving it. The safest is to have the milk clean to begin with. When we consider the surroundings under which ordinary milk is produced, the housewife would shudder at the thought of having any other kind of food prepared under the same conditions. Milk should be prepared under as cleanly conditions as are provided for in the production of other kinds of food.

### Pasteurization

Sometimes we cannot get the best of milk, however, and in this case we must make it as safe as possible. This may be done by the

At the close of Miss Cooper's talk the following question was asked:

Q. Do you advise the use of sweet milk wholly instead of sour milk for baking?

A. It is a little safer. When we use sour milk the degree of acidity is very uncertain. The milk may be more acid than one thinks it is, consequently with the result that one is likely not to get the proper amount of soda for neutralizing it; and it is well not to use soda in any case.

### CREAM OF SOUP

1 can cornlet	1/4 cup butter
1 pint water	1/4 cup flour
1 quart milk	2 teaspoons salt
1 tablespoon grated onion	

Put the cornlet to cool in coldwater for 20 minutes. Add grated onion and salt. Heat the milk in the double boiler. Prepare white sauce of the butter, flour and milk. Turn this into the cornlet, strain and reheat.

application of heat—the germs may be killed by the use of chemicals, but when we add chemicals that will kill the germs, which are little one-celled organisms, we are adding substances that will destroy body tissue, for we must remember that our bodies are made up of minute cells, very similar in structure to the germs. In other words, chemicals which will preserve the milk are poisonous, and on

this account we must eliminate them as a means of making milk safe. Heat and cold are the only safe means of accomplishing this end—cold does not remove bacteria, but merely prevents their growth. By applying a temperature of 145 to 150 degrees for twenty minutes we "pasteurize" milk. By this we mean rendering the milk safe. Not that all the germs are killed, for this is not the case; but pasteurization does kill most pathogenic or disease producing germs, which are more easily killed than other bacteria.

### Sterilization

We may also apply still more heat, bringing the milk to the boiling point and allowing it to boil for several minutes, which will kill almost all the germs of every kind. If we wish to render the milk absolutely sterile we sometimes boil it three days in succession. When we boil it the first day we kill the germs that are present; by boiling it the second day we destroy the "spores," or what corresponds to the seeds of plants; and to make the process absolutely certain we boil it again the third day. This sterilization, however, is rarely employed, for it is seldom necessary, and certainly it is not a thing to recommend under ordinary conditions, for boiling the milk so much changes to a very great extent the constituents. The albumin especially is coagulated and rendered more difficult of digestion. The casein is also altered, fatty globules are affected and the sugar may be partially caramelized. Almost all the constituents are changed by the boiling process. On this account sterilization is not commendable. Pasteurization is much preferable to sterilization, but best of all is, as I pointed out in the beginning, milk produced under cleanly conditions so that it does not require artificial methods to render it safe.

ARE YOU HANDICAPPED IN YOUR DAILY WORK BY

## CONSTIPATION?



Might as well enter a marathon with the shoes weighted or a swimming tournament with the hands tied. The chances are against you. You can't do your best.

## PARA-LAX

offers the best means known of relieving the system of the burden imposed by this disorder. Battle Creek Sanitarium physicians find it more than takes the place of drug laxatives, for it produces quick results and is absolutely harmless.

It's a mild, innocent, agreeable preparation, and the relief it brings can be demonstrated in your own case at our risk.

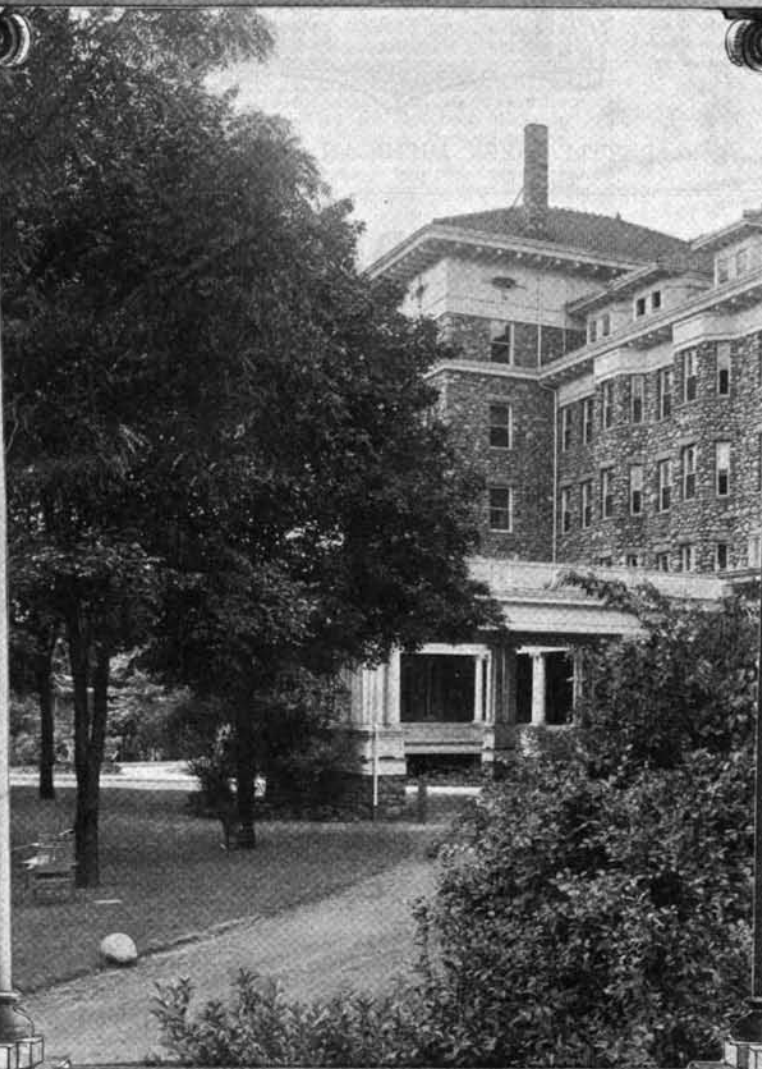
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Battle Creek, Mich.

# THE BATTLE CREEK IDEA



Vol. 5  
No 7

APRIL 1  
1913

## THE SANITARIUM ANNEX





Vol. VI, No. 7

BATTLE CREEK, MICHIGAN, APRIL 1, 1913

PRICE, 5 CENTS

# MAKE WAR ON THE DEADLY TYPHOID FLY

## DOCTOR KELLOGG IN PARLOR LECTURE SAYS FLY-SWATTING SEASON SHOULD BEGIN EARLY

THE time has come to begin fighting the house fly, and we should again remind ourselves that this creature is one of the worst enemies of our civilization. When children were taught the old nursery rhyme about killing the fly, the pretty fly, but, since we have come to know more about the fly, it is "swat the fly, the awful fly."

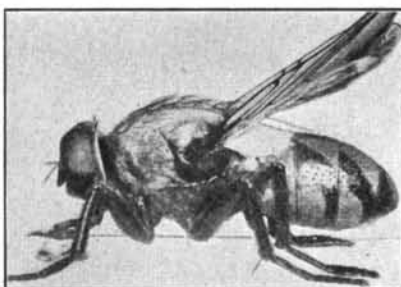
Now the fly does not come into a house unless he is invited; unless provision is made for his development. If we keep a garbage can sitting about the house or premises we should not be surprised if we are bothered during the summer months with swarms of flies; if we have a barnyard close to the house that is not kept scrupulously clean, we afford the fly just the conditions he needs for development by the millions.

Now the fly deposits its eggs in filth because in this way the young maggots find food ready at hand on which to grow and thrive,—one of Nature's provisions for disposing of decomposing matter; the fly is the scavenger of rubbish of this kind, and so plays a very definite part in Nature's economy, but its usefulness proves to be inimical to man, for each maggot grows very rapidly and in a short time develops into myriads of flies.

In experiments conducted at the Agricultural Experiment Station at Storrs, Connecticut, it was found that the number of bacteria on a single fly may range anywhere from 550 to 6,600,000. In the early part of the fly season, the number of bacteria on flies are comparatively small, while later on the numbers are comparatively large. The place where the flies live also determines largely the number which they carry. The average for 414 flies experimented upon was about 1,225,000 bacteria on each fly. It hardly seems possible for so small a bit of life to carry this number of germs.

It has been estimated that from eighty-five to ninety per cent of these flies are born and

reared in ordinary stable manure. The average time from the laying of the eggs in the breeding place until the maturity of the fly is about ten days. The eggs hatch in from fourteen to twenty-four hours, producing the larvæ or maggots. This stage lasts from five to seven days, according to the degree of temperature and the moisture. At the end of this time they enter the pupa stage, which lasts about five days, in which time a remarkable transformation occurs, the fly emerging from the pupa shell in the form of an adult fly, thus completing the life cycle. The average female fly lays about



The fly is well adapted to carrying germs and filth. Every part of his body is covered with fine hairs to which dirt of all kinds adhere.



Eliminate breeding places like this and the fly problem will be largely solved.

120 eggs, these eggs multiplying from ten to twelve times. A simple calculation shows what an inconceivable progeny thus comes from a single egg.

The fly is constantly visiting the foulest places, getting its feet covered with filth and then coming into the house, running around upon bread and dropping into milk, and contaminating everything with which it comes in contact.

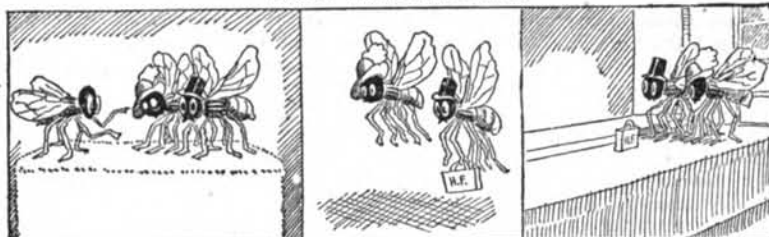
There are several diseases in the spread of which the house fly plays a prominent part. Chief of these is typhoid fever, in which he plays so important a rôle as to justify the name of "typhoid fly." It is safe to say that given an absolutely pure water supply and absolute freedom from house flies, typhoid fever would for the greater part disappear in every community in the United States. It is also true, as Doctor Huber has said, that flies help greatly to swell the infant death-rate. The infant mortality is greatest in fly time. There are few more congenial culture media than milk, especially as it is cared for in many homes. Milk easily becomes contaminated with the excreta of flies and with noxious matter clinging to the feet of the insects.

Tuberculosis also may often be traced directly to milk, as also diarrhea. Another disease with which flies have a very close connection is colitis, the germs of which are carried by the fly in quite the same manner as other germs. If, for example, these flies have access to the colon excreta of persons suffering from colitis, the flies carry the germs of this disease to some one's table, depositing them on a plate of bread or other food.

Every attempt should be made to keep the flies out of the house and out of the food. Every window and every door should be carefully screened, and when the screens have become so old that they do not fit snugly and leave small openings through which flies can enter, new ones should be procured.

## DO YOUR SWATTING EARLY.

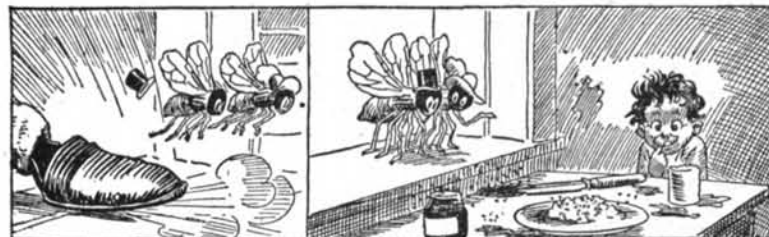
(Copyright: 1912. By John T. McCutcheon.)



A May wedding.

"Come fly with me and we'll pick out a nice dirty house to live in."

"This looks too clean. We can't live in a place that's clean. The people don't like us. That's why the place is so clean."



"I don't like this custom of throwing shoes at newly married people. Let us go elsewhere. Let us go to Swatless Town."

"Ah! This looks nice and dirty. This is where we will feel at home."



Mr. Fly has a pleasant dream of days to come when he will be surrounded by billions of bouncing little flies.

But a vigilant boy scout swats him and he is no more. One swat in May is worth a million in September.

Moral—A swat in time saves 900,000,000 swats four months later.

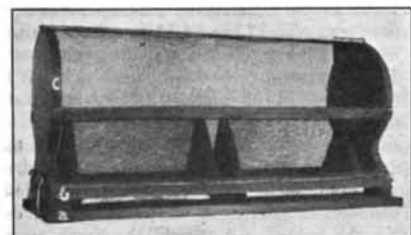
John T. McCutcheon, in the Chicago Tribune, shows why fly swatting should begin early.

Moreover, the surroundings of the home should be kept in a sanitary condition. All kinds of refuse should be either burned at once or kept in covered receptacles. All filth of the farm yard should be carefully enclosed by screens or in boxes kept for the purpose. All food, too, should be protected by wire matting.

Thus the elimination of the fly involves the principal of prevention. The use of fly paper is important, as well as fly swatters and fly traps, but after all, the best work is to be done by preventing the development of the fly, making it impossible for the female fly to deposit her eggs in filth and other natural media for their development.

## AN EFFECTIVE HOME-MADE FLY-TRAP

THE State of Minnesota has recently devised a simple fly trap, which can be easily made by anyone familiar with the use of tools at a cost for material of forty-one cents. The accompanying illustrations will



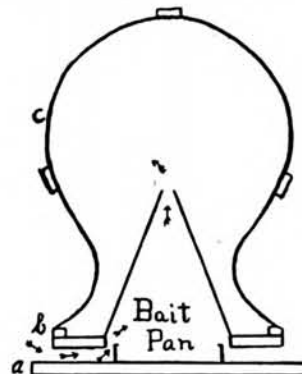
General view of trap.

serve as a guide to any one who wishes to make one.

The upper oval part marked (c) in the first picture serves as a receptacle, which the flies enter by means of an opening in the top of the middle portion (b), which is made of ordinary wire screen and shaped like the roof of a house. Under this is the base board (a), upon which rest two tin bait pans. All three parts are held together by the hooks at each end, as shown. Space between base-board and middle portion (between a and b) about one-half inch, and between this and bait pans through which space flies enter pans, about one-fourth inch. The second picture shows a cross-section of the trap, the arrows indicating how the flies enter the bait

pan and then ascend through the opening above into the large receptacle.

The Minnesota State Experiment Station recorded the number of flies caught with this trap, as follows: Dairy barn, one day, 1,700 flies; two days, 2,000 flies; dining hall, rear of building, two days, 3,000 flies; same place, two days, 3,000 flies; same place, five



Cross section of fly trap.

days 13,000 flies; dairy barn, two days, 1,800 flies; dining hall, rear of building, three days, 6,000 flies; same place, three days, 5,000 flies; same place, one day, 4,200 flies; on the back porch of a dwelling house not far from a stable containing a few horses, two days, 8,700 flies; same place, one day, 12,000 flies; same place, one and a half days, 18,800 flies.

## Notable British Simple Life Propagandists

MR. JAMES MELDRUM, of London and Glasgow, humanitarian propagandist and militant member of the Fabian Society, is an ardent vegetarian and supporter of the food reform movement in Great Britain. His advocacy of this and other causes that make for the uplift of mankind, indeed, has gained for him the name of "Prince of Propagandists." Mr. Meldrum is an honored guest at the Sanitarium, and has very kindly written for the IDEA brief sketches of some of the leaders present and past, of vegetarianism across the water, as follows:

## FRANCIS W. NEWMAN

Francis W. Newman, for many years president of the English Vegetarian Society, was a leader of thought, especially in the fields of philosophy and theology. He died in 1897, at the age of 92. His brother, Cardinal John Henry Newman, was on the opposite side of theological thought, but was equally simple in his habits of life. He died in 1890 at the age of 89.

## FREDERIC HARRISON

Frederic Harrison was born in London, England, October 18, 1831, and is therefore in his eighty-second year. As a scholar, critic, historian, and philosopher, he has occupied a foremost place for two generations, and his voice and pen are still on the active list of workers. He is a good sample of a simple liver and vegetarian; his hobby of gardening also had much to do with

his good health and prolongation of a busy life beyond the traditional three score and ten.

PAUL TROUBETZKAY

One of the greatest sculptors of this or any other time is Paul Troubetzkay. When such a man happens to be a vegetarian the fact is usually ignored by the journalist and magazine writer, as something faddy and derogatory to his genius. A refreshing exception to the rule is an article on this great artist in the February number of the *Metropolitan Magazine*, from which we quote the following: "This big, strong man stood among his masterpieces, as pleased as a small boy at our natural outbursts of admiration, explaining how he worked and how he enjoyed his work. When I asked him which he considered the best piece of all that the studio contained, he hesitated, and then walking up to a roughly molded lamb in plaster he patted it fondly as though it possessed feeling and he confided to me that this to him was superior to all the others. In his best English he explained that he loved animals better than his church, and because of this love was a vegetarian. He cannot bear the thought of destroying life to satisfy the mere greed of the table. Although he never condescends to affix names to his works (insisting that they must be striking enough to name themselves), in this case he made an exception, calling the lamb *How Can You Eat Me?* in the thought that the appeal in the eyes of the newly-born animal might impress others."

DUGALD SEMPLE

Among the younger men and women who have taken up the propaganda of diet and health reform in Great Britain the name of Dugald Semple is one of the most widely known. He has been called "The Scottish Tolstoy," and having come under the influence of that great teacher he endeavors to follow the simple life, which involves the discarding of all flesh foods and stimulants. Living mostly in the open air and on uncooked foods, with a caravan for a house and lecture platform, he is a splendid example of healthy, alert and efficient manhood.

His recent pamphlet on the "Diet Question" contains some good points, and he holds with the late Sir Benjamin Ward Richardson, M. D., that in spite of the long time man has been subjected to an animal diet "he retains in preponderance his original and natural taste for an innocent diet derived from the first fruits of the earth." He therefore condemns that eyesore in our modern civilization—the slaughterhouse—

Mr. Semple ridicules the idea that the roast beef of Old England was a factor in making the empire and points to the significant fact that while the British people have doubled their use of flesh-meat as food during the last sixty years, the physical standard for the army has had to be repeatedly reduced, and the mortality from cancer is increasing by leaps and bounds.

Altogether, the testimony of this new apostle of the better way in health and diet and the results of his eight years' experience are very encouraging, and should prove helpful to the rising generation in its efforts to throw off the incubus of baneful habits and race suicide.

## SOME PRACTICAL HEALTH HINTS

An Address in the Parlor by Dr. A. J. Read

A WISE Creator has wrapped our earth in a huge blanket of air, whose composition is 20.96 oxygen, 79 per cent nitrogen and argon, and about .04 of one per cent carbon dioxide, or carbonic acid gas. The chemical designation is CO<sub>2</sub>. There may be as impurities in the air also a small amount of carbon monoxid, or CO. These proportions may vary somewhat in different localities, with the exception of nitrogen, which seems to be uniform everywhere. It is a striking fact that agriculturists everywhere are spending huge sums for increasing nitrogen in the soil, when the air, the most abundant of all available material, contains 79 per cent of nitrogen, a portion of which at least could be obtained by suitable measures. Air is essential to the growth of plants. Nitrogen is required for body building and repair rather than for producing energy. The nitrogen is collected by certain legumes, as clover, peas, beans, lentils, directly out of the air, and transformed into organic form and made available for the use of man.

The element or constituent of the air which we utilize most directly is oxygen. Oxygen is absolutely essential to human life and animal life. Man lives at the longest only about four minutes without air. This is about the maximum. He can live much longer without food, but it is impossible to live without air. We depend upon oxygen to burn up the poisons; we depend upon the oxides to make available the nutrients which we take into our body. The oxygen of the air must be taken into the body in order that we may keep the blood stream carrying oxygen all around through the circulation and keep the toxins down and destroy waste products which would otherwise destroy life itself.

### Protecting Against Disease

Fresh air is essential to protect the body against disease. We must have about three barrels of air per minute for every individual in the room. But three barrels of air per minute is utterly impossible in the ordinary crowded room or in the ordinary sleeping room. More people die of bedroom climate than any other climate in the room. Man is not naturally fitted to live indoors. The natural man was placed in the Garden of Eden, we are told, to train the vines and trees, and the nearest approach he had to four walls was the beautiful leafy bowers, with air spaces between each leaf. And he had plenty of opportunity of breathing fresh air all the time. But man, with his natural unrest, soon devised the idea of crawling into caves. Then we had the cave-dwellers. Then he got inside four walls and cold houses, variously developed, until we have our modern houses with large windows, but still built so as to shut out the air. No one can expect to shut himself away from the natural demands of the body for oxygen in the fresh air and not suffer for it. The air of the room becomes impure before it becomes deadened. It is very much like a bucket of drinking water from which one might take a glass of water; drinking part of it and throwing the rest back into the

bucket. How many of us would want to drink out of the bucket after such an act. That is precisely what we are doing when we shut ourselves into rooms that are not properly ventilated. We breathe back into the lungs impurities that have been thrown off into the air of the room, and as this operation is repeated the air becomes less and less pure. Besides going into the air, these impurities are deposited on the walls and furniture and the bricabrac, the pictures, the books, and all the things we have in the room to beautify the home. It is perfectly proper to make our homes as beautiful as we can, but always take care to have due regard to the health of the body. Some of the cheap wall papers used are impregnated with chemicals, and these chemicals are given off into the air as well.

### Injurious Wall Paper

I remember an instance that well illustrates the injurious effects of injurious chemicals used in wall paper. A friend of mine—a physician—was called into the country a few years ago to see a beautiful young lady who was gradually sinking. She was a young woman in her late 'teens, unable to enjoy life because of ill health. She was brought up on the farm where everything ought to contribute to good health. The well was found to be all right. Her food was simple, nutritious and abundant. The young lady had sufficient exercise to keep her well. She dressed properly. Nothing could account for this mysterious disease that was preying upon her. Yet she was emaciated, and there was no doubt that she was gradually going down. Her hemoglobin was down to 25 per cent and still dropping. The doctor was just about at his wits' end.

Finally he asked to see the room where the young lady slept. It was a very beautiful little room,—a beautiful green room. Green was her favorite color. Everything was very tasty—a green carpet on the floor, the furniture was trimmed in green, the walls papered with a delicate, beautiful, green tinted paper that was quite full of arsenic and breathing out poison into the room. The doctor prescribed getting her out of that room, giving her fresh air and lots of it. They arranged a sleeping place for her on the porch, and the young lady made a perfect recovery.

### Outdoor Sleeping

People of sedentary habits or who are closely confined in their daily work indoors should not sleep indoors at night. But if one must sleep indoors he should make the room as much out of doors as possible. There should be at least three openings into the room. There should be openings equivalent to having one side of the room open. This may seem to be impracticable, but it is not. Instead of glass windows substitute cheesecloth. This will give you plenty of sunlight in the room and keep away the draughts. I believe the time will come when we shall make more use of cheesecloth windows in sleeping rooms than we now do. By the use of cheesecloth, the fresh air is robbed of a deleterious constituent, namely,



dust and dirt. In the areas of the bronchial tubes of persons living in cities—all around the branchings of the bronchi—we find clusters of soot and dust and dirt that have been breathed into the lungs and have lodged there. It is very desirable to filter the air through the nose, but in sleeping, one breathes more or less through the mouth, hence the desirability of the cheese-cloth filter. The various devices for conducting fresh air to the sleeper are less desirable out of doors. I recommend for winter, out-or-door sleeping.

Another impurity that is very common in the air is carbon monoxid. This is the most important of the impurities of the air. Carbon monoxid is given off by the lungs in exhalation, by our skin, and by all the excretions of the body. Carbon monoxid is given off also by every gas jet in the room. The gas jets in this room are giving off carbon monoxid all the time. There is always a certain amount of leakage. Carbon monoxid is given off by our furnaces and stoves, through defects in the lighting and heating system, in large amounts.

### Mr. J. C. Morgan, of Toronto, Visits Sanitarium

WHILE his work is, in many respects, altogether different, in talking with Mr. J. C. Morgan, of Toronto, Canada, one is forcibly reminded of Judge Ben Lindsey the famous judge of the juvenile court of Denver. There is the same faith in and understanding of children, and a like sympathetic calling forth of the best in them; and, too, there is a similarity of results achieved.

Mr. Morgan is Superintendent of Orphans of The Independent Order of Foresters, a position which makes him "father" to about seven hundred children. Many of these are in institutions in England, Scotland, Ireland, Wales, Norway, the United States, and Canada; many others have been placed in carefully selected private homes. At Oakville, near Toronto, the central home is situated, the children there being brought up under Mr. Morgan's immediate supervision. The history of his work among them is fascinating in its interests. How truly he fulfills the part of parent to them is clearly shown therein, as also it is declared by the affection manifested with marked openness for him, indicated during his stay at the Sanitarium, for instance, by the receipt of letters at the rate of about six every day from his "children."

Added to Mr. Morgan's obvious other qualifications for such a work, is the fact that he is a noted educationalist, having been, previous to resigning in order to accept his present position, for thirty-six years Inspector of Schools in Canada.

This was his first visit to the Sanitarium, and his impressions were very favorable. "I had not imagined that a place could be so thoroughly and admirably equipped for the purpose for which it exists," he said. "The two things that have most impressed me, are the equipment, and the unvarying consideration and courtesy of all connected with the institution."

## HON. J. G. WOOLLEY, ANTI-SALOON LEAGUE LEADER, TALKS ABOUT THE SANITARIUM

HON. JOHN G. WOOLLEY, of Chicago, candidate for president on the Prohibition ticket in 1900, and now allied with the Anti-Saloon League, made the Sanitarium his headquarters while assisting the campaign for local option in Battle Creek and neighboring cities recently.

Mr. Woolley's knowledge and experience causes him to take a decidedly optimistic view of the anti-saloon movement, and, indeed, of reform movements generally. So far as the former is concerned, he is convinced that the fight for the principle is won; there now remains only the working out of details. He illustrated this in the changed attitude of Congress upon the subject as shown by the recently passed Webb bill, forbidding the shipping of liquor into prohibition territory.

Asked for his opinion as to the relation of the work of the Sanitarium to the question of the reduction of the consumption of liquor, Mr. Woolley said: "It must be true that the training given by the institution in the principles of right living has a pronounced effect upon the habit of using intoxi-

cants. The people who come here have many reasons for being earnest in the endeavor to do the right thing; and my opinion is that the impression made is universally so favorable that they become propagandists for wholesome living. Saturation with the teaching given here would result in there being no alcohol question. "The Sanitarium's crusade for the rights of the body is one aspect of the same thing which is going on in many directions—in general education, politics, etc. The work of the former, though less aggressive and less showy than many other forms of the common movement, is undoubtedly most effective, because its operation is constant, and the work is attended with no opposition. A conscious lack of efficiency gives an open mind to the teaching of the institution, and a return to health by means of that teaching makes a person a disciple of it."

Mr. Woolley stated that he had been familiar with the Sanitarium for ten or twelve years, and added: "My impression has grown more favorable with each visit."

### Why Go To Europe?—So Asks Robert Scott

ON his way to the Religious Education Association convention, held at Cleveland, March 10 to 13, Mr. Robert Scott, Editor of the *Homiletic Review*, the well-known religious and theological monthly, paid a flying visit to the Sanitarium. With the practised eye of the journalist Mr. Scott inspected the institution, and his pleasure at what he saw was manifest in a subsequent conversation upon the subject. "It is my first visit," he said, "and it has been a complete revelation. The wonder to me is that people ever go to Europe when there is such a magnificent institution here. The equipment seems modern in every particular, and the service of doctors and nurses is exceptionally fine."

"One thing that impressed me is the atmosphere. While it is a health resort, the guests are the healthiest sick people I ever saw. The atmosphere is perhaps owing to the ideals of the Sanitarium. For it is not simply a money-making concern, but seeks to benefit humanity. I am not a vegetarian, but I have been able to put in two days, three meals each day, and all meals were wholesome and satisfying. My visit has been delightful in every way."

### Bishop E. S. Hoss in the Role of Humorist

It was a happy inspiration that led Miss Quilliard, the Social Secretary, to ask Bishop E. S. Hoss to give a program of "Bits of Humor" at the Social Hour on Thursday, March 13th. The result was a delightfully jolly time, with the cheering and health-promoting qualities attaching thereto. Bishop Hoss possesses a keen and highly developed sense of humor, and from his recol-

lections and wide experience he has gathered a fund of delightful stories. Those related on the present occasion were chiefly illustrative of the humor of the South, and were told in such a natural manner as to add greatly to their interest. The Bishop's service in aiding the object of the social hour—the promotion of an attitude of hopefulness and optimism—was much appreciated. The enjoyment of the hour was enhanced by the very able rendering of two piano selections, "The Mountain Stream," and a variation of some Scotch melodies, by Miss Thomas.

### Organizer McMurtry, of the Independent Order of Foresters, at the Sanitarium

MR. W. J. MCMURTRY, of Toronto, retired Major of the Canadian army, was recently at the Sanitarium for treatment. Mr. McMurtry is now in charge of the organizing department of the Independent Order of Foresters, a position, which on account of the size of the society, and its international range, is one of considerable importance and responsibility.

This was his second visit to the Sanitarium, he having spent two weeks here in December last on the recommendation of Doctor McCormick, of Toronto. Concerning it Mr. McMurtry expressed great satisfaction. "I think it a credit to the State, and to the people conducting it. I have spoken very highly of it, I can assure you," he said.

PATIENT—But, doctor, you are not asking \$5 for merely taking a cinder out of my eye?

SPECIALIST—Er-no. My charge is for removing a foreign substance from the super-fices of the cornea.



Neither pains nor money is spared to make every department of the Sanitarium as efficient as possible. To illustrate, the kitchen has just been supplied with the last word in dishwashers. The device holds four large trays of dishes. Hot water under pressure is directed on to the dishes from every direction, an important feature being the group of four rapidly revolving sprays, shown in the above picture. When the operation is completed the dishes are not only washed, but dried as well.

## The Peanut—A Discussion of Its Digestibility and Food and Economic Value

ONE of the strong arguments brought by defenders of the meat diet is this, that meat gives variety to the diet; that without this variety the menu must become monotonous. This argument might have some weight if it were not a fact that we have at our command dozens of foods which are quite as capable of being prepared in as varied and tasty forms as meat—foods, which, at the same time, would contribute very naturally to a reduced cost of living. Among these is the peanut, which, as Gertrude R. Lombard says in the December *Good Housekeeping*, was in former years, "considered of little value in the diet, being principally eaten salted, as a relish, and in the form of candy. As a result of the growing popularity of vegetarianism, the demand for nuts is increasing and the following data, compiled from bulletins issued by the United States Department of Agriculture, indicate the value of the peanut as an economical and nutritious food.

### Their Cheapness

"Another reason for the increasing demand for nuts, and more especially for peanuts, is their relative cheapness as sources of nourishments and energy. Even compared with such staple foods as bread and beans, peanuts supply protein and energy very cheaply, and so form an economical and satisfactory occasional substitute for meat. For instance, ten cents worth of peanuts at seven cents a pound will furnish more than twice the protein and six times more energy than could be bought by the same expendi-

ture for a porterhouse steak at twenty-five cents a pound. While physiologists consider that a day's rations should furnish the average mature person with 2,250 calories, or units, of energy, ten cents worth of peanuts at seven cents a pound supply 2,767 calories. This, of course, means good peanuts with the shells on.

"One reason for our tardiness in appreciating the nutritive value of nuts is their reputation for indigestibility. The edible portion of nuts, with few exceptions, is greatly concentrated food, containing little water and much fat. In general, too, they are rich in protein; peanuts, for instance, are nearly 30 per cent protein. But, while it is undoubtedly true that nut protein as ordinarily eaten is not so easily or so completely digested as meat protein, yet it is safe to say that the discomfort from eating them is largely due to insufficient mastication, and to the fact that nuts are often eaten when not needed, as after a hearty meal or late at night. The popular belief that a little salt with nuts prevents digestive disturbance is not corroborated by actual investigations, although the salt undoubtedly makes them more palatable.

### Well Assimilated

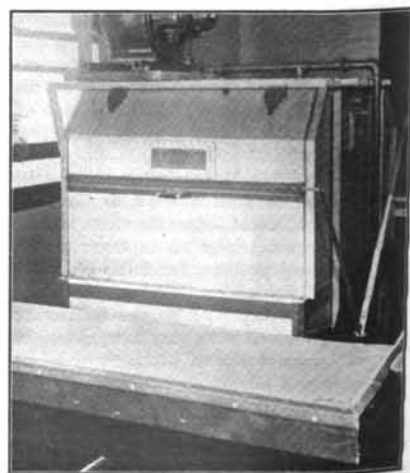
"Experiments with fruit and nut diets have indicated that nut protein is fairly well assimilated by the average healthy person. For instance, a university student, though entirely unaccustomed to such fare, gradually changed from an ordinary mixed diet

to one of fruit and nuts, which he followed for some time without any loss of health or strength. I remember one of our professors at college who enjoyed the reputation for living almost exclusively on a diet of fruit and nuts was one of the most virile and energetic members of the faculty.

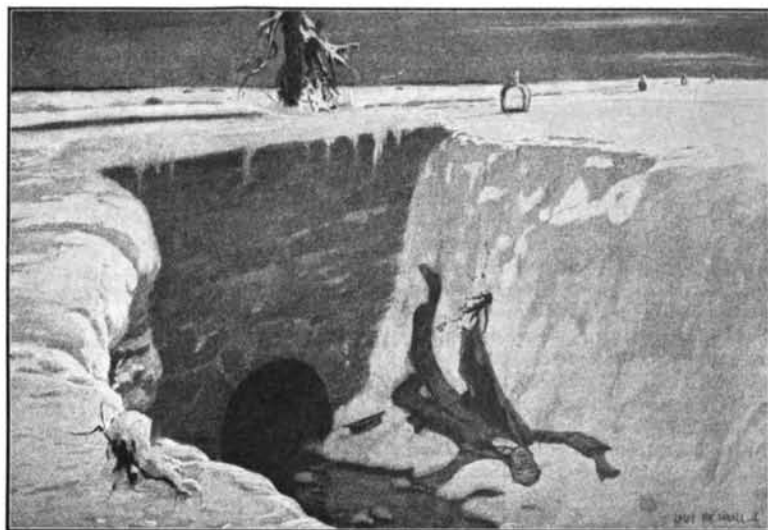
"Since nuts are relished by most persons, are nutritious, and may be readily used by themselves, and in various palatable combinations as an integral part of the diet, they have a legitimate place on the bill of fare. But being such a concentrated food, their proper place in the diet is a matter for more careful consideration than is the case with many of the ordinary food materials. A certain bulkiness of the diet is conducive to its normal assimilation, and too concentrated nutriment is often the cause of digestive disturbance. Therefore nuts like the peanut, rich in concentrated protein, are most advantageously used in connection with more bulky carbohydrate foods, such as fruits, bread, vegetables, crackers, etc. They should constitute an integral part of the menu, rather than supplement an already abundant meal. Persons who wish to live on vegetable foods and dairy products or any form of vegetarian or fruitarian diet can look to the peanut for a considerable portion of their total nutritive material.

"There are a number of prepared nut foods on the market; and while the nutritive material in such special preparations cannot be greater than the nuts from which they are made, the food may be better fitted for ready assimilation. Moreover, nut butters and similar foods give a pleasant variety to the diet, and are relished by many who would not care for the unprepared nut. Peanut oil belongs commercially in the same class as cottonseed and olive oils, and, like them, may be used as salad oil and for culinary purposes. Such oil is practically pure fat, has a very high fuel value and may constitute an important energy-yielding constituent of the diet."

Effective combinations can always be made, says the writer, with other nuts, with popcorn or puffed rice. Too, "mashed turnips or carrots can be made more 'tasty' by stirring in a cupful of peanuts that have been through a meat grinder."



The dish washer closed up and ready for operation.

(Reproduced from *Life*.)

"MILESTONES!"

## THE VALUE OF PLAY

From an Address at the Sanitarium by Professor W. R. Bowen, Ypsilanti, Mich.

THERE is a famous maxim which says, "It is what a pupil does for himself and not what some one does for him that educates." We can safely go further and say that the educative value of what he does will depend on how much vigor he puts into it, and how long he keeps at it. The vim and enthusiasm which children put into play does more than anything else to stimulate and guide their development physically, mentally and morally.

We employ play in education in two ways: first, by teaching everything in the program so that it will be as much like play as possible; second, by teaching forms of play as a part of the program that heretofore were considered only as amusements and not related to education.

*The Play Problem:* How can we justify the use in schools of such activities as story plays, song plays, tag games, and ball games? Is the need a new one, or have the schools always been at fault in this matter? Why should the school provide play rather than the home. Will not the young always play enough any way if they are left to themselves? And how can a grown person teach a child any thing about play? Such questions can best be answered by a brief account of the experiences through which the correct answers have been learned.

*Former Habits of Living:* When our system of public schools was founded 95 per cent of the people lived in the country, lived out of doors, worked out of doors, played out of doors. The natural result of this was that they became healthy and strong. They lacked opportunity for social activities and for reading and study. Schools and colleges were established to meet this need. Naturally plays and games had no place in this system.

*A Change in Life Habits:* The last fifty years have seen a greater change in our manner of living than the race has ever experienced in any thousand years before. Half the people now live in cities and large towns. Industry has become enormously specialized

and a large percentage of the people now live and work indoors.

*The Effect on the Play of Children:* The country child upon removal to the city finds his natural form of play impossible. The city with its streets, houses, walks and lawns was built for grown folks. Children are prohibited by law from playing active games like baseball in the streets, hence the timid are driven indoors to sedentary forms of amusements so that many do not even know how to play, while the vigorous form gangs for thieving and other crimes. Children are now kept indoors at school the greater part of the day from ten to twelve months in the year as compared with three to six months formerly in the country.

*The Playground Successful:* The unqualified success of playgrounds has practically silenced all opposition to directed play. The bringing together the children of all nationalities upon the playground is doing more than any other one thing to Americanize our great foreign population. The physical condition of our city children is improving. Arrests of children are much less frequent where playgrounds have been established.



SPRING IS HERE!

A sure sign of spring is the first game of tennis on the Sanitarium courts. This photograph was taken March 19th.

## Become A Dietitian



**The Sanitarium School of Health and Household Economics trains Dietitians for Hospitals and Sanitariums.**

There is an ever-increasing demand for

## TRAINED DIETITIANS

among Hospitals, Sanitarium and State and private institutions throughout the country.

Nowhere is such practical training and experience to be had. The equipment, including the extensive laboratories of the institution are unsurpassed.

Suitable employment in the Sanitarium provided for those who wish to partly defray expenses in this manner.

Fall term opens Sept. 17.

Catalogue fully describing the course and requirements for admission will be mailed postpaid on request.

Address

LENNA F. COOPER, Director

**The Sanitarium,**

Dept. 69,

Battle Creek, - - Michigan





DR. J. H. HILL, of Jackson, Michigan, is a Sanitarium guest.

DR. PAUL DULITZ, of Detroit, recently took a short period of treatment at the Sanitarium.

DR. ALBERT M. COLE, of Indianapolis, was the guest of Doctor Case over Sunday, March 9th.

MR. AND MRS. E. D. FAULKNER, of New York City, recently registered as guests of the Institution.

DR. E. C. RUMER, of Flint, Michigan, has come to the Sanitarium for a period of treatment.

MR. R. C. PRYOR, of Houghton, Michigan, owner of extensive mining interests in the northern part of the State, is again a Sanitarium guest.

At the conclusion of a business trip to points in Ohio, former United States Senator Lafayette Young, of Des Moines, again made a short stay at the Sanitarium.

THE register for March 11th contains the name of Mrs. Grace Sartwell Mason, a writer, of Carmel, California. Mrs. Mason will be a patient here for several weeks.

DR. W. H. QUIMBY, of Wheeling, West Virginia, who is to have charge of the X-ray department of the new \$250,000 hospital in that city, recently visited Doctor Case and inspected the X-ray equipment of the Sanitarium.

To a large audience, Bishop Collins Denny preached at the vesper service on Sunday March 9, his theme being "The Responsibility of Personal Choice and Action." Bishop Denny emphasized and illustrated the inevitableness of the consequences of both evil and good conduct.

MR. S. F. BOWSER, of Fort Wayne, Indiana, of the Bowser Manufacturing Company, makers of oil tanks, and oil measuring pumps, and Mr. T. F. Mulligan, the mechanical expert of the firm, have been numbered among those who have recently been receiving treatment at the Sanitarium.

ADDITIONS have been made to the Sanitarium ice plant that will have the effect of increasing the output from 25 to 30 per cent, and, it is hoped, bring the refrigerating capacity to twenty tons. No ice has been put up this year. The ice-making capacity is being increased and it is intended to make all the ice required by the Sanitarium from the well water of the institution.

DR. J. A. GOGGANS, a prominent surgeon of Alexander City, Alabama, who with Mrs. Goggans is visiting the Sanitarium, holds the institution in high esteem. He has travelled in this country, and in Europe, but has not discovered any other institution quite the equal of this. "I have been responsible for many coming here," Doctor Goggans said. Doctor Goggans believes that the elimination of meat provides the solution of the problem of eradicating putrefactive germs from the

intestinal tract. Doctor Goggans was accompanied by his mother, Doctor P. P. Goggans and Mrs. Goggans, also of Alexander City.

### Easter Music in the Chapel

A SPECIAL program of Easter music was given in the chapel on Sabbath morning, March 20. The following selections were rendered:

Recitative and Quartet—God so Loved the World	Stainer
Quartet—Awake Thou That Sleepest	Maker
Solo—Easter Dawn	Woodman
Offertory	MR. STEINEL
Solo—My Song Shall Be of Mercy	MR. AND MRS. DREVER
Quartet—This is the Day	MRS. RICE
	Huhn
	Cooper



## NORMAL SCHOOL OF PHYSICAL EDUCATION

### A Splendid Opportunity for Men and Women

The Normal School of Physical Education offers a practical two years' course to Physical Directors and those who wish to fit themselves for the profession. Each school year comprises thirty-five weeks and an eight-weeks' summer course.

This school enjoys many extraordinary advantages because of its affiliation with The Battle Creek Sanitarium. The equipment, including laboratories, indoor and outdoor gymnasiums and swimming pools, playgrounds and athletic field, is unsurpassed.

In addition to the regular studies, students of the school have special advantages in the study and practice of Physiology, Anatomy, Hygiene, Chemical Analysis, and the various methods of treatment which have made this Institution famous.

Tuition for full year \$100, including Summer School; for rest of the year, \$75. For Summer Term alone, \$40; without electives, \$25. Board \$3.00 to \$3.50 per week in addition. Unusual opportunities are given by special arrangement for earning money toward expenses. Two \$100 competitive Scholarships open to High School graduates.

Summer Term, June 30th to August 27th. Fall Term, September 25th to December 20th.

For full particulars and catalogue, address

Wm. W. HASTINGS, Dean,  
THE SANITARIUM, Box B-69, Battle Creek, Mich.

N—S—P—E

## A Story of the Boxer Outbreak

A STORY of peril and privation, of noble endurance of suffering, of heroic and self-sacrificing devotion to duty, was related at the Social Hour, on Thursday, March 20, when Mrs. M. S. Woodward, of Chicago, related her experiences as one of the besieged in the British Legation in Peking during the Boxer uprising. Mrs. Woodward and her daughter had been guests of the American ambassador previous to the outbreak, and, on its occurrence, were prevented from leaving the city, and compelled to take refuge in the American Legation, later being removed to the British, where they remained during the nine week's of siege.

The Social Hour program on this occasion was completed with two piano selections, an Etude by Wollenhaupt, and "Humoresque" by Dvorak, rendered by Miss Josephine Carey, of Duluth.

## Diet of the Bulgarian Bacillus

A QUESTION often asked by patients at the Sanitarium is thus, Will ordinary sour milk serve the same purpose as Yogurt? The answer is no, for Yogurt buttermilk is prepared by means of a ferment brought from the Levant. In the Levantine countries several kinds of germs are produced in sour milk. Some of these germs are harmful because they produce poisons along with the lactic acid, and some of them alcohol. Yeast will produce sour milk. Kumyss is sour milk prepared by means of yeast, but it contains about as much alcohol as does beer, so it is not to be recommended.

The bacillus from which Yogurt is prepared, the *Bacillus Bulgaricus*, was found by Griegeroff, of Geneva, to be the active principle in "yoghourt," a sour milk product used by the Bulgarians, and it is now known that there is a direct connection between the use of the Bulgarians of this sour milk, or "yoghourt," and the extreme longevity of the race, for it has been found that the Bulgarians are the longest lived people in the world, a population of 3,000,000 containing 3,000 centenarians. One person in every thousand is 100 years old or more, while in Germany only one person in 7,000 is a centenarian, and in this country only one in 25,000.

Now the *Bacillus Bulgaricus*, which is used in making the "yoghourt" of the Bulgarians and the "yogurt" used at the Sanitarium, is able to live in the colon better than the ordinary sour milk germ. The germ found in sour milk dies off in a very short time after being taken into the alimentary tract, with the result that it does not get very far into the intestines. With the *Bacillus Bulgaricus*, however, the situation is different. This germ is able to live for a considerable time in the small intestine, and often reaches the colon. Any means which would enable the *Bacillus Bulgaricus* to live a still longer period in the colon would naturally increase its power of destroying the injurious germs found in the colon. To live in the colon, that is to say, the *Bacillus Bulgaricus* must be supplied in the colon with a food which

will enable it to live; it must have sugar. It cannot live on starch or protein, but it insists on having sugar, and since sugar in ordinary food is already absorbed in the small intestines, the problem is to get the sugar into the colon in order to supply the *Bacillus Bulgaricus* with food which will enable it to thrive. Now, Professor Mechnikoff has discovered a germ that produces sugar in the colon, and he has named this germ the *glycobacter*, so that by using the *Bacillus Bulgaricus* and the *glycobacter* together it is possible to make a very successful attack upon the pernicious germs which infest the colon.

Professor Mechnikoff's discovery has got beyond the stage of theory. Not long since, the Sanitarium received from the Pasteur Institute, of which Professor Mechnikoff is the head, a supply of the *glycobacter* cultures, and we are already using them very successfully in the treatment of intestinal putrefaction, and the disorders which arise from it.

## The Livingstone Centenary Celebrated at the Sanitarium

In keeping with the missionary traditions and ideals of the Sanitarium, the centenary of the birth of the famous African explorer and missionary, David Livingstone, was celebrated by a special program given in the gymnasium on Wednesday evening, March 19th.

After the invocation, by Bishop Collins Denny, a comprehensive and ably-written sketch of the life of Livingstone, prepared for the occasion by Elder G. C. Tenney, was read by Doctor Waggoner, and illustrated by stereopticon views and two excellent tableaux scenes, the first representing the historic meeting of Stanley and Livingstone, and the second the former's departure after vainly endeavoring to persuade Livingstone to return with him to England.

Then followed an address by Bishop Joseph C. Hartzell, who, during his seventeen years' work in Africa, has followed closely in the wake of Livingstone's travels. Bishop Hartzell showed the magnitude of the work he accomplished, and the far-reaching results of it as demonstrated by the impulse given to open up Africa; in the movement which led to the destruction of the slave trade there; in the advance of civilization on the continent; and in the inspiration of medical missionary work given. He closed with an eloquent description, pictured in glowing colors, of the Africa of the future, and which was in such a large measure made possible by the work of David Livingstone.

Doctor Martin briefly urged practical appreciation of the message of the celebration by a support of the missionary work carried on in connection with the Sanitarium.

An important feature of the proceedings was the excellent music. Two selections, the anthem "Send out Thy Light," and "Festival Te Deum," were rendered by the Chapel Quartette, and the celebration closed with the singing of the chorus from Haydn's "Creation," "The Heavens Are Telling," by the Battle Creek Tabernacle choir, assisted by the Quartette and Orchestra.



## The Battle Creek Sanitarium and Hospital Training School for Nurses

The Sanitarium School offers a two-year course of instruction in nursing for men. Diploma entitles the graduate to registration as a trained nurse. Courses of study include, besides ordinary medical and surgical nursing, the many scientific methods of treatment for which the Sanitarium is noted.

An unequalled opportunity for practical experience as well as thorough theoretical instruction; an excellent preparation for a medical course.

Only men of good character and habits admitted.

Prospectus describes fully the course and requirements

For particulars address

The Battle Creek Sanitarium and Hospital Training School for Nurses

Box A-69

Battle Creek, Mich.

## The Battle Creek Idea

PUBLISHED SEMI-MONTHLY AT  
BATTLE CREEK, MICHIGAN

### SUBSCRIPTION RATES

One Year . . . . .	\$1.00
Six Months . . . . .	.50
Three Months . . . . .	.25
Per Copy . . . . .	.05

VOL. VI APRIL 1, 1913. No. 7

### The Cost of Cosmetics

If the use of rouge is an index to the healthiness of the skin, the New York women must be in a bad way, for \$2,000,000 is regarded as an conservative estimate of the amount of money they spend in maintaining the metropolitan complexion. Of liquid preparations more than 2,000,000 bottles are used each year, while the quantities of face powders defies reckoning. Two tons of rouge are used every year, while six factories in and about the city devote their entire energies to the production of eyebrow pencils. In addition to these applications, there are the beauty parlors, six hundred of which are registered in New York, and probably as many more that are not registered.

But the farce does not end here. Many of the substances used on the face are unhygienic in the extreme and have been at the bottom of more than one tragedy. Quite recently a young Greek girl died from bichlorid of mercury poisoning, and the event brought forth statistics which show that not fewer than a hundred women die each year in a similar attempt to beautify themselves. Indeed, it is said that the ruinous effects of complexion-making dope bring the physicians a large revenue, one physician of high standing in New York, according to the *Chicago Tribune*, deriving a large practice from the recruits of a beauty parlor located a block away.

There seems no limit, indeed, to the extent to which women will go to produce an artificial complexion when her natural skin has been ruined by careless and vicious habits of living. A new fashion note from London says that the women of that city have lit upon yellow and mauve complexions as the latest word in make-up, mauve being for the blonde and yellow for the brunette. The women of the upper set will feel highly edified to learn that the recipes for making the pastes came from a harem in the Levant. The aim is said to be to look peculiar and brilliant in the case of the fair women, and interesting and strange in that of the dark complexioned; the yellow can have the effect either of a dark eastern skin or the dark olive complexion of the Spaniard. It is a safe wager that the desired ends will be achieved.

It is incomprehensible that women will thus mar and make hideous faces adapted by the Creator to only one complexion maker—plenty of exercise; as many hours as possible spent in the open air; simple, non-poisoning food and drink; a normal amount

## SPLENDID VICTORY FOR THE BULGARIAN ARMY OVER THE POWER OF DECAYING TURKEY!

Special Dispatch from our Correspondent at the Scene of the  
Greatest War of All Times

By Michael Williams, Author of "The Avenger," "New America," Etc.

I HAVE been privileged to be a witness of a decisive battle which decided the final campaign of a great war.

It occurred last night and was enacted between the army of Defence and the Attacking forces. The Bulgarians led the defending army, and the most dangerous forces of putrescent Turkey were in the van of the enemy.

But the battle did not occur in the trenches around Adrianople or Salonika. It happened right here in the Sanitarium. The battle-field was a human body. The Bulgarians were the lactic acid bacilli produced in Yogurt. The enemy was an army many millions strong of invading disease germs, produced in a man's blood through the action of a piece of Turkey flesh that had been hung up too long in order to enrich its "gamy" flavor and which was the honored and costly *piece de resistance* at a dinner in the club to which the man belonged. The man ate heartily of the turkey flesh, and of turtle soup, and of under-done roast beef, and of oysters, drenched in vinegar and red pepper and salt and tomato catsup, and of many other things, including a cocktail before eating, and two Scotch "high-balls" during the meal, and black strong coffee, and two brandy liqueurs, and a number of strong cigars after the meal. And he considered that this was having a "good time," and he sat with a lot of other business men at that table for several hours, and stuffed, and guzzled, and poured alcoholic poisons into his system, and drew hot air thick with tobacco fumes into his lungs, and at last went to bed after midnight, torpid, and heavy-headed—and next day he was sick! Strangely, surprisingly, amazingly—he was sick; and he had not done anything, he had thought, to bring sickness on him! He had been careful not to "sit in a draught." He had smoked only four cigars instead of eight or ten as other men did, and had taken fewer drinks, and altogether he considered that he had been exceedingly hygienic in his behaviour!

This man was fifty years old. He had been a business man since the age of twenty-three. He had always been strong. He had worked like a horse—like three or four horses, building up his business, and providing for his family. Of late years he had been

of sleep; and freedom from clothing that makes natural movements of the body impossible, so cramping the vital organs that they cannot perform their functions unhampered. If cosmetics really beautified there might be conjured up some justification for their use, but the fact is that there is no made-up complexion which does not pall in beauty beside a skin radiant with the glow of health. And health is far more easily obtained in nearly every case than a yellow or mauve complexion, which suggest quite as readily as the styles affected by society women and the cigarettes in which they in-

dulge, the place of their origin—the harems of the East.

bothered by various ailments for which he took patent medicines, or drugs prescribed by those physicians who make a speciality of smothering nature's warning voices which cry out through pains and aches that something radically wrong is working evil at the seat of life. He had tried what golf could do for him on Saturday afternoons. And some day—some day in the future—he really meant to reduce his tobacco and alcohol to a very low rate.

And now he was stricken down! Smashed! Laid on the shelf! His physicians got rid of the ptomaine poisoning for him, and galvanically jerked his tired and worn-down system into activity again with powerful drugs,

## THE VERY IDEA

\*\*\* Clipped and Contributed \*\*\*

OLD FRIEND—I understand your practice is getting bigger.

Young Doctor—That's true. My patient has gained nearly two pounds in the last month.

"THAT was an awful mistake Dr. Slicer made. The man he operated on didn't have what he thought he did."

"Didn't have appendicitis at all, eh?"

"Oh, he had appendicitis all right, but he didn't have any money."

BENTON: Have you tried all the remedies that your friends have recommended for your rheumatism?

Tulser: Goodness, no! I haven't had the pesky disease more than three years.

MRS. WISE: "Did Mrs. Smith's son graduate as an allopath or a homeopath?"

Mrs. Cutting: "Homeopath, I think. He's been living at home ever since he took his degree."

A PAPER, speaking of a family who made a fortune out of whisky, said: "They live on Cass Street in a perfect delirium tremens of splendor."

"Oh, doctor," sighed patient, "I am so glad you have come. I feel dreadful, and I don't know what in the world is the matter with me. My husband says it is nothing but nervous indigestion, but his mother is positive I am going to have appendicitis, and my mother declares I have intermittent fever, and my sister says it looks to her like creeping paralysis, and Aunt Henrietta says I've got malaria. What do you think I've got doctor?" "Well," frowned the physician, "from these symptoms I should say offhand that you have too many relatives."



but they could not keep him going for long. He grew despondent over his condition. And that made matters worse. And his fits of dizziness, and of semi-stupor, and of chronic languor increased. He spent heaps of money traveling to various spas and springs in Europe and at home—but he felt he was “out of the game.” Life had no savor. Life might be kept up languidly for a few years, but meanwhile his family must suffer many hardships and deprivations, and his own usefulness to his community as a progressive, honest business man and public worker was all over and done with. Gloom settled down upon him. Sometimes when he thought of that last big dinner which had been the final knock-down, he cursed all rich food—and poisonous habits—but he really did not know why.

Then somebody said: “Try Battle Creek!”

“What’s that?”

“A Sanitarium—”

“Not another word from you! I’ve had all I wanted and a great deal more of sanitariums—”

“But this is a new kind of—”

“Worse and worse! I’ve tried too many new-fangled fads and follies—”

“Hold on, there! This is not new in that sense! The Sanitarium at Battle Creek has been running for nearly half a century. I mean that it is new in the sense that it brings the new light of the really scientific methods of preserving and defending and upbuilding Health.”

“Battle Creek! I don’t like the name! I’ve had all the battle and fighting with bad health that I want.”

“Try once more! Never say die, anyway!”

He did so.

At first he found everything so different—so astonishingly different from everything that he knew or had heard about—that, being a cautious and conservative man who came from Missouri, he was on the point of deciding at once that he couldn’t and wouldn’t stand for it but would beat a prompt retreat.

But all at once, a light began to dawn. As a business man, he was obliged to recognize the pervading influence all about him of a great and efficient system.

He knew, being a reasoning man, that a real system must be based upon a vital idea, if it is to have any life and power. So he began to study and ponder and search for that idea—and he found it—he found the Battle Creek Idea.

He was, as it were, taken to pieces—little pieces—before his own eyes in order that he might see beyond shadow of doubting just exactly what was wrong with him, and—what was more important—what was right with him. He was put through the wheels of the diagnosing system and he emerged “a sadder but a very much wiser man.” He knew now that what was right with him was the Creative, upbuilding power which was planted in him at his birth, and which worked in all his limbs, muscles, nerves, and blood as the power of electricity or steam works through the medium of some intricate mechanism. He learned that this power was one with the power of Nature—as Nature in its turn was a manifestation of the higher Power which is the source of all life. He learned that the

evil forces set loose in his blood—the toxins, the poisonous gases and fluids—through the decay within his body of the putrid turkey flesh was only the final and worst example of what he had been steadily doing for years with flesh foods, and condiments which irritated the delicate fabric of his body as acids eat into linen, and with outright poisons like alcohol, and tobacco, and tea, and coffee, and bad air, and bad thinking, and ignorance.

Having learned this, like the boys in Dickens’ novel who learned how to spell “windows,” and then were set to work by the teacher to clean the said windows, the business man girded his loins for the great fight of life, and made a business of getting well as in other years he had made a business of dealing in real estate. This, too, was a deal in real estate—in the very ground on which his life was built.

And last night—as I have reported—it being part of my business to watch the progress of the greatest war of all times, which is the war between the forces of good and evil for the use of men and women on this earth of ours—last night, I say, the man learned that the agencies of Nature set working on his behalf here in the Sanitarium, within and without his body, had so enriched the white and red cells of his blood, which make war upon invading disease germs, that they had been enabled to win a decisive victory.

Tomorrow, the man returns to his family, to his desk, to his own town, and his former place in the work of the world. Instead of being old and worn-out at fifty, like so many American business men, he is good for twenty years more of active life—now that he knows enough not to poison himself with alcohol, tobacco, tea, coffee, and with meats and other foods which cause auto-intoxication, or self-poisoning of the body through the by-products of putrefaction and mal-digestion. Instead, he now knows that he can keep his

bodily and mental machinery going at a high rate of efficiency with pure foods and rational methods of hygiene.

Not a little credit he gives gladly to the Bulgarian friendly germs which warred so actively against the germs implanted in him by the putrid turkey and other things—but it is the study—and the consistent day by day, minute by minute APPLICATION—of the Battle Creek idea to which he attributes the result.

## Sanitarium Guests Make Parlor-Chair Trip to Arctic Region

A VERITABLE tonic of cheerfulness and laughter was provided at the Social Hour on Thursday, March 6th. Dr. T. N. Rogers, of Sault Ste. Marie, Michigan, a convinced believer in happiness as a most important aid to health, gave a programme of miscellaneous talks, very interesting, and illustrating marked versatility. The Doctor has made two journeys to the Alaskan regions. The first, in 1898, was to Dawson City and through the Klondyke region; the second, in 1901, to Nome, Alaska, from there to Siberia, and through the Straits almost to the Arctic Circle, the whole journey occupying almost two years. His talk consisted of some reminiscences of the former of these two trips, and as he is able keenly to appreciate the humorous side of peril, adventure, and discomfort, many laughter-provoking incidents were related. He followed this with two original compositions, both in a vein inspiring cheerfulness: a burlesque entitled “Happiness and How to Obtain It” and “The Old-Fashioned County Fair.” Miss Dellenbaugh, another Sanitarium guest, contributed to the enjoyment of the hour by rendering “The Slave Song,” by Teresa del Riego, and “A Dream,” by J. C. Barrett.

# Turkish Bath at Home Battle Creek Electric Light Bath



Standard Model

## Sent on Approval

This Home Bath, just as efficient as our Sanitarium model, sent on 30 days FREE TRIAL. Test it as you please. Keep it if it suits.

You can't be healthy unless you sweat—not occasionally—but every day. Sweating rids the tissues of the poisons that produce disease. The Battle Creek Electric Light Bath in the home gives a thorough sweat in 10 to 15 minutes, frees the body of poisons, beautifies the skin, is a tonic to all the tissues, keeps the entire system in prime condition. In the great Sanitariums the Battle Creek Electric Light Bath is employed as the surest means of preventing and overcoming such diseases as

**Nervous Troubles, Rheumatism, Blood and Skin Diseases, Stomach, Kidney and Liver Disorders, Gout, Neuralgia, Grip, Colds, Bright's Disease, Anemia, Hardening of the Arteries.**

Busy men and women find in the cleansing sweat of the Battle Creek Electric Light Bath a vital, daily tonic. It brings the buoyancy, life and vigor of perfect health, increases efficiency, adds to the joy of living. The Battle Creek Electric Light Bath is a practical investment for every home; it is in full operation at the mere turn of a switch—gives life long service—cost only 4c a bath.

### Special Introductory Price Offer

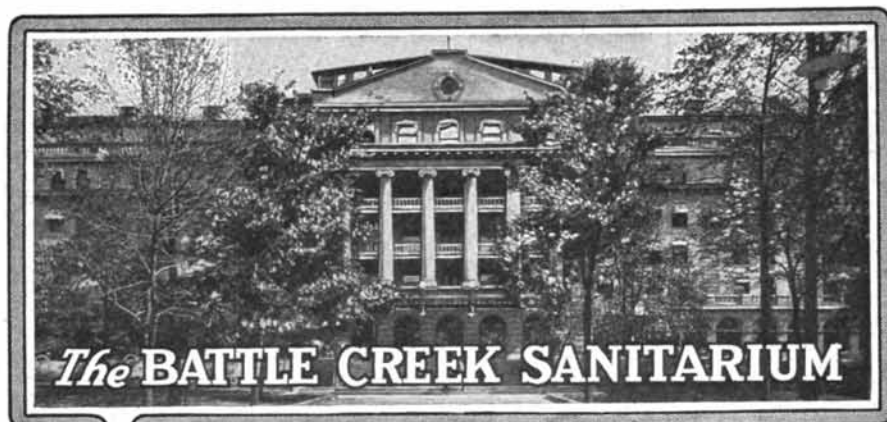
—To introduce the Home Electric Light Bath—for a limited time we are making a special introductory price offer. At moderate cost you can have in your home the same scientific treatments the greatest Sanitariums use. Write for free book of “Home Treatments” and special 30-day introductory offer.

**SANITARIUM EQUIPMENT COMPANY**  
Battle Creek, Mich.

Manufacturers of Vibratory, Light, Mechanical Swedish and other Therapeutic Equipment for Sanitariums, Hospitals and Physicians.

Original from

UNIVERSITY OF MICHIGAN



## COME TO BATTLE CREEK

ONE week of enjoyable health-building at the Battle Creek Sanitarium is worth many weeks of formal amusement at the seashore or fashionable resort. To the jaded business man, to the woman grown weary of social demands, to all who seek refreshing rest and diversion, the Sanitarium affords an ideal resting spot.

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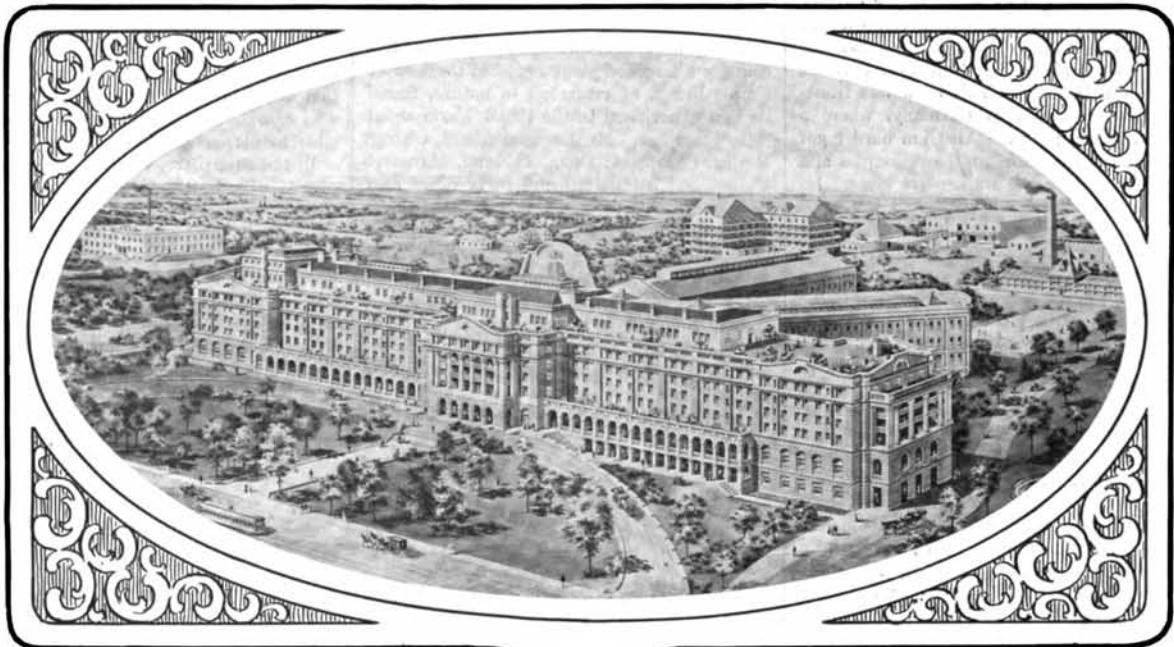
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# THE BATTLE CREEK IDEA: AN EXPOSITION

FROM A LECTURE BY DR. J. H. KELLOGG IN THE SANITARIUM PARLOR

PERHAPS you would like to know where the Battle Creek Idea originated, so I must tell you about it. About fourteen or fifteen years ago, I was asked to go to Madison, Wisconsin, to give an

this institution it is simply the association of ideas. All the ideas we have here are as old as humanity with, perhaps, the exception of a few minor things.



## THE HOME OF THE BATTLE CREEK IDEA

address before the students of the University. When I got there I was introduced to Professor Ely, professor of political science at the university; as I stepped upon the platform I asked him what subject had been announced and he said, "No subject, except that Doctor Kellogg was going to talk. Just talk about anything you like." So he stepped upon the platform and said, "Doctor Kellogg is going to talk about the Battle Creek Idea." That was the first time I had ever heard our principles spoken of in that way, and since that time we have adopted the term. Now I am going to make a confession; we have no ideas here in Battle Creek that belong to us; all our ideas are borrowed, so if there is anything distinctive about

Take, for example, our idea of diet. It is the oldest thing in the world. I have a model of the Heidelberg jaw, the oldest human jaw that is known, which shows emphatically that it is the jaw of a man who ate vegetable food. The Mound Builders' jaws also show the same thing, for the teeth are worn nearly down to the gums from eating meal that was ground with a stone and was, consequently, mixed with more or less grit. That these people were not meat-eaters is very plain to be seen. When Adam began his career upon the earth, the Lord gave him his bill of fare, and it was of fruits and grains. "I have given you every herb bearing seed and every tree, in the which is the fruit of a tree yielding seed; to you it shall





The Sanitarium—as it was in the beginning.

be for meat”—this is the way the record puts it.

Likewise, the idea of water in the cure of disease is very old. In modern times it was originated in England by a Mr. Jacobs, who wrote a book about the wonderful curative effects of cold water. This book was translated and circulated in Germany, where a doctor residing near the Austrian border got hold of a copy, studied up the principles and began to practice the water cure among his patients. In this vicinity a boy by the name of Vincent Priessnitz was born. When he was a lad about twelve years of age a traveling locksmith who was a magician and also a sort of healer came along. Many peasants came to him to be healed, and so successful was he with his treatments that Vincent's father finally persuaded the locksmith to give the boy his cabalistic formula for a sum of money, which he did. And thus little Vincent became the magic healer. As time went by the boy began to gather these water cure ideas together, putting them into actual practice upon himself first, and then upon his neighbors who were sick. Although the wet sheet pack had been given in England a hundred years before his time, Priessnitz commenced to use it in a methodical manner and in a great variety of conditions in which it had not been employed before. He produced emesis by pouring water upon the pit of the stomach, by which powerful contractions were produced in the abdominal muscles and the stomach. This is certainly a very ingenious thing. The douche, the dew bath, the plunge bath, the pour, compresses and the wet girdle were all perfected by this man, although he was an ignorant Austrian peasant who could not even write his name until he was more than forty years old. He insisted that his patients drink from six to twenty glasses of water daily; he was also a great advocate of walking, and when able to do so his patients were required to walk as much as possible. Priessnitz' discoveries were of enormous value, and he made use of them in the most thorough-going and systematic

way, curing such great numbers of patients who had been pronounced incurable by the best medical men on the continent that his ideas impressed the whole world.

There were several water cures in this country a hundred years ago, but the idea of simple living, of returning to nature, found its best experiment in the Brook Farm about sixty years ago. Mr. Bronson Alcott, George Ripley, Charles A. Dana, Thoreau, Margaret Fuller, and a hundred and forty other men and women equally as noted, associated themselves together in an attempt to return to the natural way of living. The experiment failed, however, because it lacked financial management.

Just forty-seven years ago, a dozen men took it into their heads that they would establish a similar movement here at Battle Creek,

and this movement began in a small building on the very spot where the Battle Creek Sanitarium now stands. I remember very well the dedication day. I was then a boy, fourteen years of age, and I thought, "What a great day this is." Just ten years after that time I took charge of the institution and have been connected with it ever since. At that time there were only twelve patients, but the number increased each year so that from time to time it was necessary to add extensions to the original frame cottage. After a while it became necessary to put up an entirely new building; within a couple of years we had to build on to that; then in the course of a few years we had to build a hospital and put up another building in the rear of the main building. The institution grew until at the time of the fire the eighteenth day of February, 1902, which destroyed the main building and the hospital, we could accommodate over six hundred patients. The principles which are the foundation of this work did not go up in smoke, however. The real institution consisted of the organization, the principles and the men and women who had devoted their lives to the promulgation of these principles. As soon as plans could be drawn the work of constructing this building began. Since then our work has been going on, developing more extensively and more rapidly than we even had dared hope for. Each year the number of patients has been increasing, until for three or four years past it has been a serious question to make accommodations for all those who came. Last year, however, it was possible to obtain a large building, the Annex.

In the first place, the first cardinal principle of the Battle Creek Idea is that the natural way is the right way. That is, the natural way of living, of eating, the natural way of conducting ourselves in relation to our environment and our habits of life—in these things the natural way is the right way. And I may say, the next principle is, It pays to be good. And it is just as natural to be good as it is to breathe. I do not believe in



The Sanitarium—ten years later (1876) when the present management took charge.

# Dinner Menu for Sunday, April 5, 1913

## MENU

### Soups

Cream of Browned Onion Soup  
Navy Bean Soup

### Entrées

Braised Protose Baked Nuttolene  
Egg Macaroni

### Vegetables

Baked Potatoes Brown Cream Gravy  
Mashed Potatoes Sliced Beets  
Buttered Vegetable Oysters

### Relishes

Lettuce—Lemon French Salad  
Turnip Puree

### Breads and Beverages

### Desserts

Malt Honey Malt Sugar  
Malt Honey with Butter  
Red Raspberry Sauce Stewed Figs  
Cream Cake Strawberries  
Brazil Nuts

## RECIPES

### Cream of Browned Onion Soup

4 medium sized onions 3 tablespoons slightly  
1 cup water browned flour  
3 tablespoons butter 2 cups milk  
1/4 teaspoon salt

Slice the onions and put in a buttered pan. Add a little water, cover, and put into the oven. When the onions are tender, remove the cover and brown. Rub the browned onions through a colander, add the water, and the white sauce, made by adding the hot milk to the butter and slightly browned flour rubbed together until smooth. The white sauce should cook 10 minutes in a double boiler before it is added to the onion. Reheat the soup, salt, and serve. This makes 1 quart.

### Navy Bean Soup

1 cup navy beans 1/4 onion  
2 teaspoons nut butter 1 small potato  
1/2 teaspoon salt

Soak beans and add other ingredients. Cook until all are soft. Rub through a colander, and add water to make a quart.

### Braised Protose

1 pint brown sauce 1 cup vegetable broth  
2 lbs. protose

### Vegetable Broth

1 pint water 1 small carrot  
1 large onion 1 small turnip  
1/2 tsp. celery salt 1 small potato  
Cook until vegetables are tender. Strain and use liquid for vegetable broth. Place sliced protose in baking dish. Pour over it the vegetable broth and brown sauce. Bake one hour, basting frequently.

### Brown Sauce

1/4 cup flour 1/2 cup cereal coffee  
1/2 cup butter (liquid)  
1/2 cup strained tomato 1 1/2 cups water  
1/2 teaspoon salt

Rub the flour and butter together. Heat the liquids to boiling point and add salt. Pour hot liquids over the flour and butter, stirring meanwhile. Let boil 5 minutes.

### Baked Nuttolene

1 lb. nuttolene 1/2 cup water  
1/2 cup tomato puree 1 teaspoon salt  
1/2 tablespoon butter

Cut can nuttolene in one-half and lay flat side down and pour over it other ingredients. Bake 1 hour, basting frequently.

### French Salad

3/4 cup cooked potatoes 2 tablespoons chopped  
1 tablespoon cucumber celery  
1 tablespoon chopped 1/2 tablespoon onion juice  
radishes 2 tablespoons mayonnaise

### Egg Macaroni

1 1/4 cups raw macaroni 1 cup cream  
1 cup milk 2 eggs

Cook macaroni in 3 cups boiling water (salted) till tender. Drain. Place in baking dish and pour over it the milk and cream to which has been added the slightly beaten eggs. Bake till brown. This makes 12 servings.

## Vegetable Milk and Vegetable Meat

We take the following very interesting article from the April *Review of Reviews*. The study is suggestive as showing the essentially practical nature of the interest which in Europe is being taken in the non-meat movement. There was a time, not many years back, when the vegetarian was regarded as a theorist and an impracticable sort of chap—a visionary and over-developed esthetically. But this attitude is rapidly changing, and the vegetarian diet has fully arrived. But to the article:

In most families the two heaviest items in the cost of food are the expenditures for milk and milk-products and for meat.

Moreover, milk and meat are the most difficult foods to procure, to preserve, and to transport in a pure and wholesome condition. And it is this difficulty, coupled with modern standards of hygiene and sanitation, that has helped to make their cost mount steadily higher year by year. All of us, therefore must be warmly interested in the successful efforts of certain foreign chemists to produce synthetically both milk and meat from vegetable sources, since it is claimed that the "near-milk" and the "near-meat" are not only as nutritious as their prototypes, but far freer from dirt and disease-germs, as well as very much cheaper.

We have noted accounts of these new edibles in various foreign scientific journals, but prefer to quote the less technical descriptions given in *La Revue* (Paris, Feb. 1) under the title of "The New Artificial Aliments."

The new artificial milk is made from the seed of the leguminous plant, commonly known as the soy bean or the Chinese pea, whose scientific appellation is *soya hispida*. It is a native of the warm regions of Asia.

Milk is a secretion of the mammary glands, containing water, albuminoids, fatty bodies, lactose, and mineral salts.

The oil of the soya bean is rich in nitrogen and in fatty matter. From the flour of the soya bean a bread is prepared for the use of diabetics.

From these beans, by a process still secret, a synthetic milk is prepared; or more exactly, a chemical product having the same nutritive value as natural milk.

The invention has been introduced almost simultaneously in France and Germany. The parts of the plant are crushed mechanically, then triturated chemically and reduced to a lactescent substance which costs much less than cow's milk and takes its place perfectly.

There follows an estimate of the cost of production. A cow demands forty acres of pasture besides a certain amount of fodder. She converts 53 per cent of her food into effective nourishment and 5 per cent of it into milk. The soya grown on eight acres gives an equal quantity of artificial milk. The expense is much less; not only is there a smaller amount of land to be cultivated, but the labor involved in the manufacture of the latter is not comparable to that required in raising cattle, milking them, and caring for the milk and the meat.

(Continued on page eleven)

total depravity. I may be regarded a heretic in that particular, but I am inclined to think that heretics in that respect are getting to be very common in these days.

The natural laws in relation to our being are not easy to find when we study man in his civilized and artificial conditions, because, as the Bible says, man has "sought out many inventions." And these inventions are not by any means all good ones. When we find men living in natural, normal conditions, we find their habits are extremely simple—simple foods, and simple ways—everything is simple. Life is not complicated as it is in our civilized communities. The life of a squirrel, for example, how simple it is so far as its physical wants are concerned, how easily they are satisfied. The life of any other wild animal—how simple it is. They live in the open, fresh air. They find their food presented to them at the hand of nature; they take it as presented, they are satisfied, and they are well. Wild animals are, for the most part, healthy, and free from disease.

Domestic animals and domesticated men are full of disease, and the more thoroughly domesticated they are, the more thoroughly civilized, the more diseased they become. Diseases have multiplied right along with civilization. There is something unnatural about our modes of life, and we must make a change if we hope for better things. If we find ourselves ill, because of our perversions, then we must change our habits and reorganize our mode of life, if we desire to get any better and to remain any better.

This is quite important, because so many people think a visit to the Battle Creek Sanitarium will make them all right again, and then they can go back to their old ways. A man said to me some time ago, "I am prepared to do anything you will tell me to do; I will eat anything you want me to eat; I will even eat sawdust; but at the end of six weeks I am going home; and when my time is up I want to be able to go home and eat anything that I want to eat, and do anything

(Continued on page eleven)

## Post-Graduate Studies Obtainable at the Sanitarium

DR. F. I. SHROYER, of Troy, Ohio, a young physician of marked ability, is a guest at the Sanitarium. He has been carefully inspecting the various departments of the Sanitarium, and expresses his satisfaction with what he has seen and learned. "A stay here is an excellent post-graduate course," he said. "It would be a good thing if doctors could be educated in such a place. I have certainly learned much. The institution is not only a place of healing, but of education in right living. There are facilities for securing a most thorough and complete examination, and it is better than a hospital for treatments of all kinds.

"All departments are well equipped. The X-ray equipment is one of the finest in the country. The laboratories are the most complete of the numerous ones that I have visited. In the vacuum light treatment you have something which, I believe, is new in modern medicine, and something of very great value."

Concerning the dietetic system of the Sanitarium, Doctor Shroyer said: "It is not a

diet that people are placed on here, but the Sanitarium principles cause them to eat as they ought to eat." He indicated the importance of this by the further statement that errors in diet are responsible for a large proportion of the physical ills from which the public is suffering.

In conjunction with a partner, the Doctor will open a hospital in his home city this spring, in which he intends to install some of the appliances used here. So greatly has he enjoyed his visit to the Sanitarium, and been benefited by it, that he has decided on an extension of several days.

## Prominent Indiana Specialist in Nose, Ear, Eye and Throat Difficulties Makes His Third Trip to the Sanitarium

DR. S. A. SHOEMAKER, a nose, ear, eye and throat specialist, of Bluffton, Indiana, has a high esteem for the Sanitarium, the result of his personal experience of it, and also of results accomplished for patients whom he has sent here.

"This is the third time that I have been here, and I regard it as a privilege, both to come myself, and to send patients, which I have been doing for the past nine years," said Doctor Shoemaker a few days before the close of his latest visit to the institution. "The institution as a whole I regard as a public benefactor. It is conducted upon a strictly scientific medical basis; its X-ray department is one of the most complete in

the whole country; the laboratories, microscopical, chemical, and bacteriological, are first class, and have a reputation over the country for the thoroughness and accuracy of the work done in them."

Asked his opinion of the dietetic principles of the Sanitarium, he said, "I think them splendid. The food is delightful; there is variety, and it is of good quality." He made special reference to the classifying of the food upon a caloric basis, which has the important effect of enabling guests to guide themselves in determining the amount and constituents required.

The Doctor paid tribute to the courtesy and efficiency of the helpers, and also to the moral atmosphere of the place. The occasion of his present stay was the need of building up, and he stated that he had received very great benefit.



The Medical Office

## TAKING THE SANITARIUM PATIENT'S INVENTORY

A THOROUGHGOING inquiry is an indispensable preliminary in every case accepted for treatment at the Sanitarium. The examinations amount to a complete inventory of the patient's vital assets. The physical condition, the degree of activity and efficiency of the bodily functions, the vital capacity and resistance, are all determined with the highest degree of accuracy obtainable. The body is calipered and tested as an engine or a dynamo might be. In addition to the complete series of tests at the very start, some of the tests, as the case may demand, are repeated at frequent intervals throughout the course of treatment. The results of all these examinations are given to the patient in full detail, and are reduced to mathematical terms on a percentage scale, making it easy to understand and compare the results at a glance.

### The Value of a Thorough Diagnosis

The complete laboratory facilities render possible a very thorough and searching investigation of cases, which is of course serviceable in laying the foundation of efficient curative efforts.

Every attention has been paid for many years to the problem of developing as complete and as accurate a system of diagnosis as modern science and invention could attain. The advantages of this thoroughgoing examination are very great. Not infrequently the examination alone is quite sufficient to relieve the patient of imaginary diseases which he has associated with or mistaken for his real ailment; and very commonly it disabuses his mind of incorrect notions long entertained concerning his physical self.

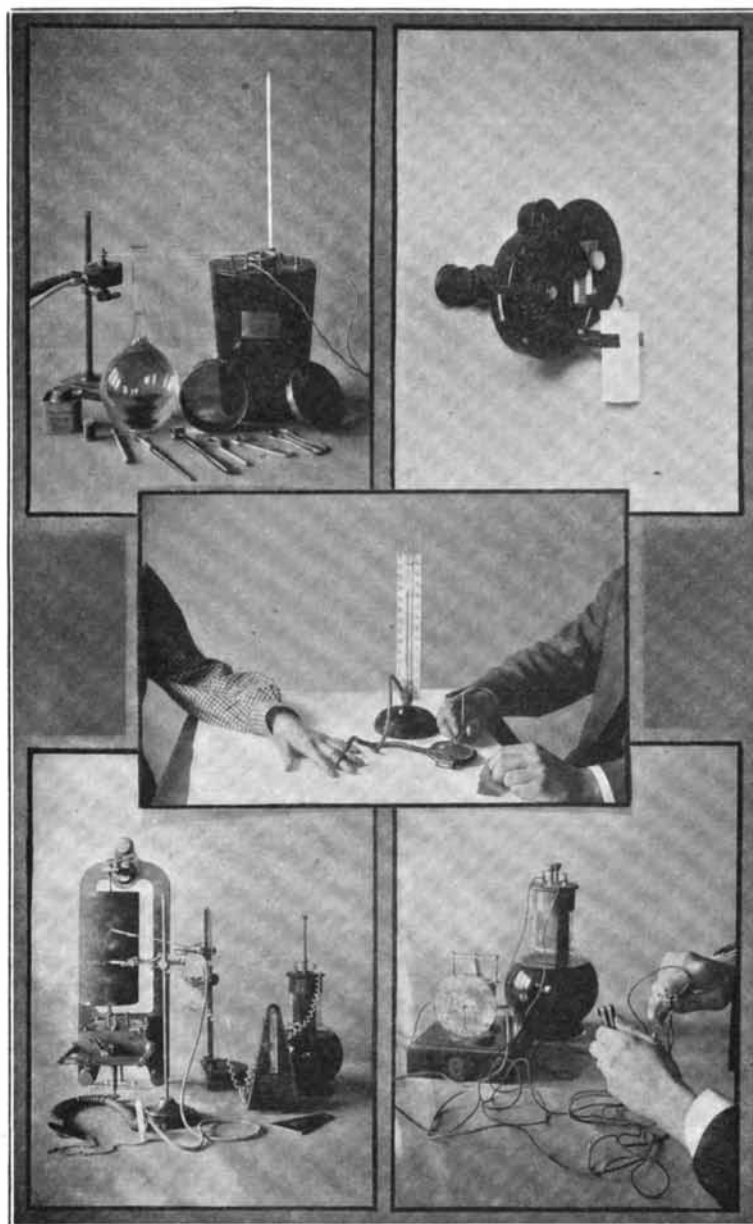
After this thorough and exact diagnosis has been made, the curative measures are carefully adjusted to the particular needs of the individual, thus accomplishing the greatest amount of good in the shortest time, and avoiding those errors and mishaps which otherwise might occur. The patient himself, conscious of the thoroughness and scientific accuracy of the examination, is thus inspired with a confidence which makes him optimistic and of good cheer, and insures his hearty cooperation.

### Initiation of the Patient

A new arrival at the Sanitarium, after being settled in his room, pays a visit as soon as possible to the medical office. Here the receiving physician gathers and records a few facts of general information—name and address, age, etc., and the general nature of his case. The pulse and the temperature are taken. The newcomer is then assigned to an attending physician. Of the thirty physicians who form the medical staff of the institution, he is referred to the one best qualified by training and experience to deal with his particular case. With the physician thus designated, the patient remains in close touch throughout his stay at the institution, receiving counsel and prescriptions from him and reporting regularly the stages of progress. (Consultations with the physician-in-chief may be had from time to time, as considered desirable either by the attending physician or the patient.)

In the office of the attending physician, the real examination is begun. The patient is first asked to tell his own story: the family history of his present illness, and a description of his symptoms. The patient often brings a letter of introduction from his home physician, and this may prove of





Instruments employed in diagnosis

material assistance. The attending physician then makes a minute physical examination of the patient. The height and weight, the pulse and temperature, the physical development, the condition of each organ and function of the body, are included in this physical inventory. The entire body is carefully surveyed by means of inspection, palpation, percussion, etc., with the object of ascertaining whether the heart, stomach, liver, kidneys and other organs are normal in position and size. Throughout the examination the aim is not simply to discover symptoms, but to learn the exact state of the fundamental vital processes. The functional efficiency of each organ or set of organs is carefully determined, and all known means are brought to bear to discover any possible organic changes in the brain or nerves, heart, arteries, or other vital parts. Special emphasis is laid

upon certain points which are of particular value in guiding the application of physiologic treatment.

This first examination over, the patient has now matriculated, so to speak, in this University of Health. A provisional program of baths, exercise, etc., is outlined for him and recorded in the "Prescription" notebook handed to the patient for daily guidance. In this booklet the physician also writes down a number of appointments for special examinations to be taken within the next few days. Upon the results of these examinations will depend the further prescriptions which the physician will make and record in this notebook. The diet, both as to quantity and character, special baths, electrical treatments, massage, mechanical and manual movements, general and particular exercises, hours for rest, and other sugges-

tions, will soon be indicated precisely and with complete detail in this booklet. For the present, the matriculated patient is now free to enjoy the various attractions of the institution.

#### The Strength Test

During his first or second day at the Sanitarium, the newcomer visits a room in the upper story of the bath building, where the strength test is administered and the purely physical examinations thus completed. The strength test is introduced by anthropometric scrutiny of the figure. The height, both sitting and standing, the girth at the neck, chest, hips, calf, etc., the depth and the breadth of chest, abdomen, etc., are carefully measured and recorded. The weight is also determined. When required, an outline of the body is taken by means of a special device, which reveals graphically any deviation from the ideal or normal type.

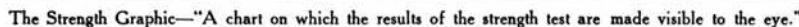
The patient is then called upon to show his muscular strength upon a machine especially constructed for this test. The Universal Dynamometer, as it is called, was developed and perfected by the superintendent of the Battle Creek Sanitarium a number of years ago for this special purpose; it has since been adopted in many institutions throughout the country, including the gymnasiums of leading universities, and other gymnasiums, and the military training schools of the United States Government. By means of this single apparatus, with only a few simple shifts in the operation, the strength of all the important muscles of the body is easily tested. The procedure is a fascinating one, and the machine itself, with its mode of operation, often proves more absorbing to the newcomer than his own performance. Each of the large groups of muscles—the hand grip, the arm pull, the trunk pull, etc., about twenty-five in all—is tested in turn. The strength of each muscular group is exerted without the help of other muscles. Finally, the patient exhales his fullest breath into the spirometer, and the lung capacity is thus obtained.

#### The Strength Graphic

A day or two after this strength test, the patient is presented with a "Physical Chart," a large sheet recording and actually delineating the results of the test. On one side is a list of the bodily measurements, followed by a comparison of these figures with those of the ideal man of the same height. The relative symmetry of development is thus shown. A second column records the strength of each of the muscle groups, in pounds, which are summed up to give the total strength of the body. This total—about 4,500 for the average man—indicates the number of pounds that the patient can lift with the total pulling-force of all his large muscles.

On the reverse side of the sheet is the "Strength Graphic," a chart on which the results of the strength test are made visible to the eye, as shown in the accompanying reproduction.

The rows of figures at the top represent the average strength of each group of muscles in persons of a certain height—all the heights from 64 to 72 inches being repre-



In order that the percentage of variation from the normal may be seen at a glance, the results obtained are plotted across the chart. A straight horizontal line at the 100 per cent mark would mean perfect coincidence with the normal. The zigzags in this line show the exact degree of deviation from the normal for each group of muscles. Points which descend below the 100 level indicate relative inferiority in strength; points which rise above the 100 mark indicate relative superiority. Included in this graphic representation are the total strength of the principal divisions of the body—arms, legs, trunk, and chest—and of the entire body; also a series of highly significant coefficients, explained elsewhere.

### The Exercise Prescription

When this "Strength Graphic" comes to him, the physician has before him an exact and detailed picture of the muscular capacity of his patient. Aided by the knowledge of constitutional and functional conditions which the physical examination has revealed, he is able to give a prescription for exercise adapted precisely to the needs of the patient and calculated to remedy his weak points in short order. While carefully avoiding the dangers of inappropriate exercise and of excessive muscular effort—as, for instance, in a case of weak heart—the aim of the prescription is to secure the greatest measure of benefit in the shortest time. Exercise is one of the natural resources which, when listlessly or spasmodically employed, do not yield a noticeable improvement unless long persisted in. Under the Sanitarium system, however, of thorough, regular, and carefully prescribed physical training, concentrated upon those points which are especially in need of strengthening, the gain made in a few weeks is astonishing. Many of the patients find at the end of their period of treatment that they have doubled their strength; and others do still better. The strength test taken at the start is repeated during the course of treatment; the results are tabulated and pictured again on the original "Strength Graphic;" and the degree of improvement, both in details and in totals, is evident at a glance. A gain of five hundred pounds in total strength after a week's physical training is a common achievement. In some instances, over a thousand pounds

in total strength has been gained in the same short period. The effectiveness of a carefully prescribed and adjusted course of exercise is shown most remarkably by the fact that the weak points in the original "Strength Graphie" often reappear as the strongest in the second test.

(Concluded in the next Idea)

## Sanitarium W. C. T. U. Meets

A MEETING of the Sanitarium W. C. T. U. was held in the parlor, on the afternoon of March 25, when an address was given by Rev. A. J. Clarke, of the Battle Creek Tabernacle. Mr. Clarke emphasized the opportunity that was presented for the overthrow of the liquor traffic by the powerful and growing attitude of hostility to it in social thought and custom; its repudiation by science, and the fact that it is far less esteemed as useful by the medical profession. He urged that there should be a concentration of effort for prohibition on the part of every organization and society favoring it, and declared his confidence in the success of such an effort. An interesting musical program, including a piano solo by Miss Virginia Merriam, and songs by the Girls' Quartette of the Tabernacle, was rendered.

"If thou art blest,  
 Then let the sunshine of thy goodness rest  
 On the dark edges of each cloud which lies  
 Black in thy brother's skies.  
 If thou art sad,  
 Then be thou in thy brother's gladness glad."

## Well-Known Physician and Surgeon Studies Sanitarium

Dr. E. W. MEISENHOLDER, Sr., of York, Pennsylvania, has come to the Sanitarium for treatment, and will be a guest for several weeks. Dr. E. W. Meisenholder Jr., who accompanied his father, inspected the institution during his stay. He expressed himself as interested in what he saw. He has travelled over Europe, but has seen nothing to equal the Sanitarium equipment, especially some of the later electrical appliances, and the vacuum light apparatus. He was particularly pleased with the X-ray department.

## The Ban Upon Rhubarb

PATIENTS at the Battle Creek Sanitarium often inquire as to the reasons for the ban that is placed upon the use of rhubarb at the Sanitarium. The reason is this, that rhubarb contains oxalic acid, and oxalic acid is a poison; whether found in the laboratory or in the rhubarb plant, oxalic acid is poisonous, it is practically without food value, and its use is attended by dangers just as surely as the taking of quantities of uric acid or other unwholesome substances.

## An Easy-Chair Tour of South America

INSTEAD of the regular answering of questions by Doctor Kellogg, on Monday evening, March 24, a lecture, an account of a recent journey to South America, was given by Professor R. D. Salisbury, Professor of Geographical Geology in the University of Chicago, and a renowned geologist.

Starting from Balboa, the port of Panama, the journey was down the west coast to Valparaiso. There were brief stops at various ports, the chief being at Callao. During the south-west voyage, something was seen of the coast cities, and the harborless ports where freight is taken on and put off by means of lighters. With one exception, none of the eight ports at which calls were made, have facilities for docking. In parts the coast is bleak, and no green thing is seen, except in isolated spots.

From Santiago the journey took the lecturer over the Andes to Argentine. The Transandine railway was not in operation all the way on account of the heavy snows; but trains ran up to within a few miles of the crest. Mules carried the passengers and their baggage to the top, where the train from the east coast met them. The account of the ascent through the snow on mule back, with the attendant amusing experiences, was one of the features of the lecture.

A description of the wine-producing country in Argentine was given, as well as something of the country life in the rich and prosperous State of Buenos Aires. The City of Buenos Aires came in for a brief characterization, somewhat different from that which has been given by most of the popular accounts of the city.

From Buenos Aires, the lecturer went south and west, to the Andes mountains of Patagonia in latitude 40° south, seven days beyond the end of the last railway. The mountains here have many beautiful lakes—lakes which rival the Italian and Swiss lakes in beauty. They are, as yet, little known, but a railway now building will reach one of the finest in a year or two, making it accessible. A national park will probably be established, enclosing this lake.

Some account of the life and habits of the Patagonians was given, and the contrast between life in South America and in the United States was brought out, and reasons stated why the latter country has not a larger influence in the commerce of the former.

The lecture was amply illustrated by stereopticon views from pictures taken during the journey.

## A Clever Musicale

A MUSICAL entertainment of exceptional merit was given in the gymnasium on Saturday evening, March 29th, by two talented Albion ladies, Mrs. Darleen Wellington-Miller, and Miss Neema Phipps. The program was remarkable for the high musical standard, and for the extent of the artists' ability, as shown by the variety of the selections, both vocal and instrumental. Mrs. Miller has a soprano voice of considerable range and power, as also of marked dramatic effect. This was clearly exhibited in her rendition of numbers varying from difficult arias and the dramatic "Erking" of Schubert, to the soft and delicate "Like the Rosebud," by Frank La Forge. Miss Phipps is a delightful pianist, with a touch that is remarkably clean and clear. She revealed her versatility in a skilful rendering of Bach and Litz, and Seboeck and Henselt. Her work as accompanist, too, was marked by excellent judgment, and a fine perception of musical values. The audience expressed their esteem of the technique and artistic finish of the performance by a demand for encores.

## Sanitarium Patients Given an Unusual Musical Treat

ON Tuesday evening, April 1st, an unusually interesting musical program was given in the gymnasium, by Mr. Vernon Archibald, of New York. Mr. Archibald's rich and well-trained voice was heard to advantage in favorite songs from Handel, Schumann, Schubert, Purcell, and others, and he fully sustained his reputation as a cultured and sympathetic artist. His renderings of Schubert's "Die Post," and Handel's "Where'er You Walk" were characteristic, and much appreciated. In "A Banjo Song," by Sidney Homer, and the "Fairest Flower," by Helen Brown, the fine quality of Mr. Archibald's voice was probably at its best. But the greatest impression made on the audience was his brilliant rendering of a group of songs by Mr. Hallet Gilberté, who appeared in person to accompany the singer. Two numbers in lighter vein, "Trottin' to the Fair" and "Off to Philadelphia" brought a most successful program to a close.

# Become A Dietitian



**The Sanitarium School of Health and Household Economics trains Dietitians for Hospitals and Sanitariums.**

There is an ever-increasing demand for

## TRAINED DIETITIANS

among Hospitals, Sanitarium and State and private institutions throughout the country.

Nowhere is such practical training and experience to be had. The equipment, including the extensive laboratories of the institution are unsurpassed.

Suitable employment in the Sanitarium provided for those who wish to partly defray expenses in this manner.

Fall term opens Sept. 17.

Catalogue fully describing the course and requirements for admission will be mailed postpaid on request.

Address

LENNA F. COOPER, Director

**The Sanitarium,**

Dept. 70,

Battle Creek, - - Michigan



# LOBBY NOTES

*Interesting bits of Sanitarium News*

DR. H. B. KNAPP, of Ionia, Michigan, is spending a few days with us for rest and change.

MR. F. W. MOORE, General Manager of the Diamond Crystal Salt Company, of St. Clair, Michigan, is a Sanitarium guest.

DR. R. W. KING, of San Antonio, Texas, visited the Sanitarium recently, inspecting the methods in use in the various departments of the institution.

ARCHBISHOP C. H. GOUTHIER, of the Roman Catholic Church, of Ottawa, Canada, is a guest at the Sanitarium.

REV. A. J. LIEBENBERG, a missionary of the Dutch Reformed Church, gave a stereopticon lecture, on Sunday evening, April 6, on "Nyassaland."

DR. F. S. BISSELL, of Minneapolis, Professor of Roentgenology in the University of Minnesota, was a week-end guest of Doctor Case.

DR. S. H. BRAYTON, one of the prominent physicians of Evanston, Illinois, after inspecting the Sanitarium, declared herself much pleased with the various work of the institution.

DR. E. B. PIERCE, Superintendent of the State Tuberculosis Hospital at Howell, Michigan, has recently been a patient at the Sanitarium.

MR. JOHN GATELY, of Chicago, the proprietor of the well-known and numerous clothing stores of that name, is a guest at the Sanitarium. Mrs. Gately accompanies her husband.

DR. W. L. ALLEN, of Davenport, Iowa, paid his first visit to the Sanitarium recently, though he has sent many patients here. Doctor Allen made a study of the methods which constitute the Battle Creek Idea, and declared himself very favorably impressed with its work.

REV. E. W. BISHOP, pastor of the large Park Congregational Church, Grand Rapids, Michigan, returned home on the fourth, after a short stay at the Sanitarium. Mr. Bishop spends a few days here usually twice a year, and he declared that he leaves feeling very fit after his visits.

DR. F. P. KEY, of Nashville, Georgia, who has been staying in Chicago, made a special trip to Battle Creek for the purpose of inspecting the Sanitarium. He is an enthusiast

in regard to its principles and methods, and purposes opening an institution of similar character, and in which he expects to install some appliances such as are in use here.

THE delegates to the Baptist Young People's Union conference numbering nearly eighty, recently held in Battle Creek, paid a visit to the Sanitarium during the conference. They were both pleased and surprised as a result of their inspection of the institu-

tion. On Friday, April 4th, the officers and pastors attending the conference, enjoyed a luncheon at the institution, provided by the management.

"OUR NATIONAL PARKS" was the subject of a remarkably interesting lecture given at the Sanitarium on Saturday evening, April 5, by Mr. Nat. M. Brigham, of Wheaton, Illinois. Mr. Brigham presented statistics showing that America has a greater area of natural parks than all other countries put together. He confined himself chiefly to dealing with three—Yellowstone, Yosemite, and Ranier—describing, with some bits of vivid word-picturing, the wonders and glories of nature as exhibited therein. Mention was made of the important archeological discoveries that have been made in the region of the parks. Part of the lecture was a plea to Americans to see the marvellous natural



## NORMAL SCHOOL OF PHYSICAL EDUCATION

### A Splendid Opportunity for Men and Women

The Normal School of Physical Education offers a practical two years' course to Physical Directors and those who wish to fit themselves for the profession. Each school year comprises thirty-five weeks and an eight-weeks' summer course.

This school enjoys many extraordinary advantages because of its affiliation with The Battle Creek Sanitarium. The equipment, including laboratories, indoor and outdoor gymnasiums and swimming pools, playgrounds and athletic field, is unsurpassed.

In addition to the regular studies, students of the school have special advantages in the study and practice of Physiology, Anatomy, Hygiene, Chemical Analysis, and the various methods of treatment which have made this institution famous.

Tuition for full year \$100, including Summer School; for rest of the year, \$75. For Summer Term alone, \$40; without electives, \$25. Board \$3.00 to \$3.50 per week in addition. Unusual opportunities are given by special arrangement for earning money toward expenses. Two \$100 competitive Scholarships open to High School graduates.

Summer Term, June 30th to August 27th. Fall Term, September 25th to December 20th.

For full particulars and catalogue, address

Wm. W. HASTINGS, Dean,  
THE SANITARIUM, Box B-70, Battle Creek, Mich.

N—S—P—E

beauties and wonders of their own country before going abroad. Delivered by a lecturer thoroughly competent to deal with his subject, and illustrated by exceptionally fine views, the address was not only enjoyable, but rich in educational value.

### Patients Hear Lecture on the Crow Indians

REV. W. A. PETZOLDT, for the past ten years a missionary among them, gave a lecture upon the Crow Indians of Montana, on the afternoon of March 30th. Mr. Petzoldt, with his wife, was a pioneer worker among these people, the very last tribe of Indians to come into the ways of the white man, and risked his life several times before he finally succeeded in winning their friendship. Though much has been accomplished by the mission, the Indians are still primarily a barbarous people, as is shown by their retaining such a custom as that of bartering their children for beads and trinkets. The "medicine man" still reigns supreme over his tribe, while a large number of the natives still hold to sun-worship. Notwithstanding this, the Crows have made rapid progress in certain branches of civilized life, and Mr. Petzoldt feels much encouraged as he compares them with other Indians. A very fine series of stereopticon views illustrated the lecture.

### Popular Novelist Reads "The Milliner"

At the Social Hour, on Thursday, March 27th, the audience had the unusual privilege of listening to a story the reader of which was the authoress as well. The occasion was the reading, by Mrs. Grace Sartwell Mason, of "The Milliner," a short story which appeared a short time ago in one of the popular magazines. It was a sympathetic character-sketch, with a profound and appealing human note, illustrating as it did the great and noble qualities constantly being shown as possessed by many persons regarded as commonplace individuals.

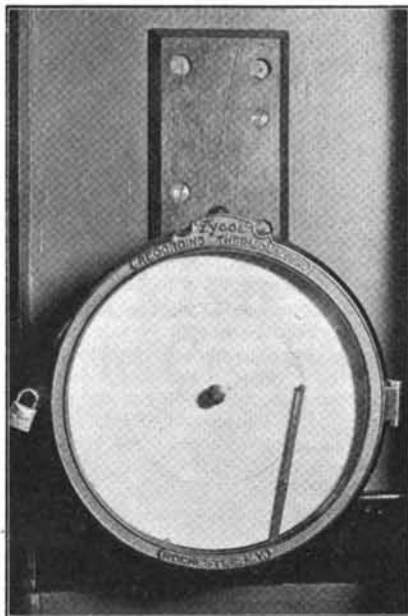
A distinct feature of the Hour was the excellent rendering of the musical selections. "Whims," by Schumann, and an Etude each by Wollenhaupt, and Juon, by Miss Margaret Craig, of Duluth.

### Indian Lore and Song at the Social Hour

THE Social Hour, on April 1st, proved another occasion of high-class and educational entertainment. An address was given by Mr. W. E. Ware, an attorney of Battle Creek, on the Indians of a reservation situated near Athens, Michigan. Mr. Ware's eminent qualifications for dealing with his subject have resulted from the fact that his early years were spent among these people, since being their friend and counsellor. He briefly sketched the origin of the reservation,

and described the characteristics of the Indians belonging to it, making special mention of some of the "chiefs." The younger men, he thinks, are not equal in character to the older ones. He believes however, that the coming generation, as a result of education, will be better. At present action is proceeding in the United States courts on a claim of the Indians—the first time that the Indian has ever been made a party to an action for his benefit—to a strip of exceedingly valuable land along the lake front in Chicago. Mr. Ware is of the opinion that the claim will be sustained. The address included an earnest demand for justice to the rights of the Indians, and closed with a protest against their being supplied with liquor.

Added interest was given to the subject by the singing of Cadman's group of "Indian Love Lyrics" by Miss Elsa Loomis, of Fort Dodge, Iowa. Miss Loomis has a voice of considerable range and volume, and her singing was in excellent form. She was accompanied by Miss Maude Russell, of Battle Creek, who proved herself fully adequate to the demands made by the difficult character of the music. In addition to the foregoing, the audience was privileged to listen to a number of musical selections by Mr. A. A. Andersch, of Grand Rapids, Michigan. Mr. Andersch is an exceptionally gifted musician, with a very fine technique. He plays with much feeling; produces a splendid tone, and his shading in expression is very good. His brilliant playing was much appreciated, and he was obliged to respond to encores.



A "Tycos" recording thermometer has been placed in the lobby of the main building of the Sanitarium. This apparatus is operated on the capillary principle and is unusually accurate. A revolving disc shows the time of day, and a needle marking a line in red ink records the temperature at each hour. The needle is governed by a coiled spring of metal which is very sensitive to heat and cold. The consequent expansion or contraction determines the direction of the needle mark, and so indicates the temperature. The new instrument will be an aid to the medical department in the regulation of temperature in the lobby.



## The Battle Creek Sanitarium and Hospital Training School for Nurses

The Sanitarium School offers a two-year course of instruction in nursing for men. Diploma entitles the graduate to registration as a trained nurse. Courses of study include, besides ordinary medical and surgical nursing, the many scientific methods of treatment for which the Sanitarium is noted.

An unequalled opportunity for practical experience as well as thorough theoretical instruction; an excellent preparation for a medical course.

*Only men of good character and habits admitted.*

Prospectus describes fully the course and requirements

For particulars address

**The Battle Creek Sanitarium and Hospital Training School for Nurses**

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Battle Creek, Mich.

## The Battle Creek Idea

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Six Months . . . . .	.50
Three Months . . . . .	.25
Per Copy . . . . .	.05

VOL. VI APRIL 15, 1913 No. 8

### Chicago Physician Advocates the Establishment of a Federal Department of Health

ONE of the most fatuous oppositions to progressive movements in our twentieth century life is that waged by the National League for Medical Freedom and its kind against the proposition in favor of creating a federal department, with its administrative head in the President's cabinet, for the conserving of human vitality. President Wilson is in favor of it; the party in power is in favor of it; many Republican Congressmen, both progressive and conservative, are in favor of it, enough certainly to insure favorable legislation; while the great body of people—where their passions have not been played upon by mercenary interests and a stupid sectarianism, religious and near-medical—not only will sanction, but are demanding action. The opposition, represented by patent-medicine interests, by Christian Scientists, and by such schools of medicine as the osteopaths and chiropractors, have deluded themselves into thinking that they can stem the tide by methods that, so far from changing men's minds, bring their efforts into contempt. For there is no denying the miracles accomplished by sanitation and preventive hygiene under federal and other control, results which Dr. Edwin B. Tuteur, thus summarized the other day in Chicago:

"Through sanitation and hygiene," he said, "preventive medicine has accomplished the practical elimination of smallpox through vaccination. It has effected the annihilation of yellow fever through the discovery that the disease is spread by the mosquito, and the prevention of malarial fever through the same discovery. It has made possible the prevention of tetanus and hydrophobia by serum injection.

"There is the great saving of life by the prevention of many typhoid fever epidemics—this through the purification of water supply and careful inspection of milk supply, and the marvelous averting of disease through the anti-typhoid vaccine. As an example one has only to look over the conditions at the recent mobilization of 12,000 United States troops in Texas when the Mexican trouble was becoming serious. During the Spanish war there were 50,000 soldiers at Camp Alger and there were 9,000 cases of typhoid. In the Texas mobilization at this rate there should have been in the neighborhood of 2,100 cases of the disease. Instead there was not one.

"One can cite the prevention of diphtheria and many other remarkable results gained through scientific methods. There is the great number of so-called 'occupational diseases' rapidly decreasing when rational measures are used. There is the great problem of infant mortality. In the States where there is birth registration we find that each year around 140,000 infants die of preventable causes. When you realize there is birth registration in only 55 per cent of the country you can see that close to 270,000 children under two years die each year of causes which might be prevented.

"As a remedy I propose this union of health bodies and the direction of energy from a central agency such as a cabinet office. I also urge a broad educational campaign in behalf of public and private health—anything that would attract general attention and bring about a vital general interest in the welfare work."

### The April "Good Health"

THE April number of *Good Health Magazine* comes to our desk with a splendid array of interesting and valuable articles. The leading feature is the second and concluding installment of a practical study of hardening of the arteries, or arteriosclerosis. The candy habit, fatigue causes, Yogurt, salt in eczema, the school of the future, and the cost of tuberculosis in dollars and cents, are some of the subjects discussed. The Question Box also contains valuable pointers on food combinations, the use of fruit when hyperacidity is present, the dietetic value of dried fruits, perspiration, headache, numbness, bananas and their digestibility, itching, mucos colitis and eczema. Of the latter, by the way, the Editor points out that "within the last ten years many articles have appeared in the leading medical journals of France relating to the treatment of disease by means of a diet from which salt was excluded, and more recently German physicians have given the question consideration. A leading medical journal of Berlin has published an account of a number of infants treated for eczema by putting them upon a diet in which the amount of salt eaten was only the quantity ordinarily found in buttermilk. As a result of this simple treatment, which consisted simply in the curtailing of four-fifths of the amount of salt ordinarily used, the infants all recovered, the eczema disappearing completely within four to six weeks. From these observations it seems very probable that eczema in nursing children may often be due to the excessive use of salt on the part of the mothers. This is, then, another important dietetic fact to which nursing mothers should give attention. It is more than likely that many adults suffer from eczema as the result of a too free use of salt in the food. The addition of salt to food is not essential either to digestion or any other bodily function. It has no value except to give a pleasant taste to some food substances which would otherwise be disagreeable. It is more than probable, however, that even this demand for salt is due to an artificially cultivated habit rather than to actual necessity."

"It may be remarked in passing that there

are other causes of eczema besides the excessive use of salt. Combe and others have found that eczema is a symptom of intestinal autointoxication. A child suffering from constipation is exposed to the baneful effects of poisons absorbed from irritant food residues, and the poisonous condition may manifest itself in eczema as well as in many other symptoms."

### The Advantages of a Low Protein Diet in Pernicious Anemia

THE popular idea that meat is necessary for blood-building has been abundantly disproven in the experience of the Battle Creek Sanitarium. Many hundreds of persons suffering from pernicious anemia have found in the Sanitarium diet a cure for their impoverished blood. One of the most striking cases which has come under the care of the Institution was that of Mr. C. H. Owens, of Pine Bluff, Ark., who was suffering from pernicious anemia. The disease was so far advanced that his case was universally regarded as hopeless. When he came to the Institution, he was in such a low condition that no encouragement for recovery could be offered. The hemoglobin was 20, and the red blood count 15. After a few months' treat-

## THE VERY IDEA

★ ★ Clipped and Contributed ★ ★

"THE doctor says if 'e lasts till morning 'e'll 'ave some 'ope, but if 'e don't, the doctor says 'e'll give 'im up."

"WHAT you need," said the doctor, "is an operation."

"Very well," replied the patient. "Which operation are you cleverest at."

"CHEER up! I'll have you on your feet Within a month," said Dr. Jill. He did—my car was sold to meet His monumental bill.

GRIGGS: "A doctor claims that some ailments can be communicated by a handshake." Briggs: "Probably he means the grip."

WOMAN (on the phone)—"Oh, doctor, rush over here as soon as you can. My husband's suffering from something I think is pantomime poisoning!"

"BOTTLES and rags! Bottles and rags!" called the ragman.

"Why do you always put these words together?" asked a passer-by.

"Because, madam," said the ragman, courteously touching his hat, "wherever you find bottles you find rags."

"I ALWAYS was unlucky," he said, with a weary sigh.

"What's the matter now, old man?" his friend asked.

"I've spent over \$5,000 on having my boy taught to play the fiddle, and now his hair's all comin' out."



ment, the patient was so greatly improved he was able to return home, and has now remained in good condition for three years, during which he has strictly adhered to a low protein diet. We are glad to be able to quote the following paragraph from a recent letter received from Mr. Owens:

"Some time ago I remember reading in the Battle Creek Idea a statement from one of your patients who had been troubled for the same disease I had—pernicious anemia—and saying that she had fully recovered but could not take on any flesh, and thought that the vegetable or low protein diet had something to do with it. Now you can say to any of those who make this complaint that I left your Sanitarium three years ago weighing 115 lbs. after being treated and cured of this disease, and I now weigh 180 lbs. and have all along stuck to the low protein diet. I am the biggest moving, walking advertisement you ever put out in this country. I wish you could see me now. Everyone tells me that I look younger and better than I did twenty years ago."

## Vegetable Milk and Meat

(Continued from page three)

Obviously, too, the initial expense of the plant is smaller and there is no loss to be feared like that from illness or death of cattle.

To the finely ground soya flour a definite proportion of water is added. The mixture is violently shaken and also subjected to a revolving motion, in such manner as to cause a new arrangement of the constituent parts.

The treatment at a high temperature removes the peculiar taste and odor of the bean, leaving only the flavor and color of the milk produced by the different combinations of the process. In the end, these combinations take place exactly like the assimilation of the food in the organism of the animal.

The soya plant has long been cultivated in China and Japan. The Japanese mix the beans with rice to form a sort of gruel, which is very nourishing, but has an oily taste, said to make it both offensive and indigestible to Europeans.

Converted into milk the soya has none of those inconveniences. It is easily digested, palatable and without after-taste. A complete food like natural milk, it is suitable for infants as well as for invalids, and is recommended for those who are following a special regimen.

This new product deserves, and will doubtless receive, wide attention in America. From other sources we learn the interesting fact, not mentioned in *La Revue*, that an excellent cheese can be made from this milk, which widens its usefulness materially.

Quite as interesting, and perhaps of even greater significance in occidental countries is the proposition made by the Belgian chemist, M. Effront, to utilize the refuse from breweries to make a palatable and nutritious substitute for meat.

This refuse has been found by chemical analysis to be peculiarly rich in the nitro-

genous matter, or proteins, from which meat derives its value as a source of energy for brain and muscle.

The inventor first washes and then compresses the refuse malt from the breweries. It is then placed in a bath of sulphuric acid to which a prescribed quantity of chalk has been added. The mixture is filtered and again compressed after the evaporation of the water. Certain subsequent processes, which remain the secret of the inventor yield a substance which is said to resemble butcher's meat in taste and to be much cheaper.

The malt contains albuminoids, constituent elements of animal flesh. . . . Many Belgian physicians who have experimented with the new product, which M. Effront calls *viandine*, declare it is in some respects superior to the beef generally used for the *pot au feu*.

A workman, usually ill-fed, who found 200 grams of butcher's meat an insufficient daily ration, put on weight, with more appetite and better health on the same amount of *viandine*.

Experiments made on rats proved that the new food gave results three times as good as lean beef. Six rats fed on ten grams of meat and a small handful of grain daily, died of starvation at the end of a week. Six others which received the same amount of grain and less than five grams of *viandine* daily remained lively and active with no sign of illness.

M. Effront is not alone in making such researches. Prof. Emil Fischer of the University of Berlin, already famous for brilliant laboratory work, has extracted from coal-tar a poly-peptone which much resembles animal albuminoids. He has found in the tar and other by-products of the coal-industries a large quantity of the animal acids which are the bases of animal tissues, and of all which compose meat. By com-

## The Battle Creek Idea

(Continued from page three)

I want to do." I replied, "I am not interested in your case at all. You want me to coach you up to your old sins; you want to go back to your old habits again, and you want me to help you to violate the laws of health, which I consider to be God's laws. You might just as well ask me to coach you up to burglary or something else. I do not propose to do it. If I undertake your case, you must promise to turn over a new leaf, to reform, to make a thoroughgoing reform; then we will do all we can to build you up and help you to get well.

What we are desirous of doing is to convert you while you are here to a new way and a better way; and we call it the "Battle Creek Idea" just to have a convenient term to talk about, something unique to beguile people into the idea that it is something new, while as a matter of fact it is as old as the hills. That is the best thing about it; and the reason why I recommend it to you is because it is so old fashioned.

How careless we are in this matter of life and living! How we squander the splendid health we inherit, throw it away and care nothing about it until it is gone; And then, when it is gone, we would give anything we have, and all our friends have got, in order to get back the thing we have absolutely thrown away. The man who has health at the outset can keep it if he will. It is simply a matter of self-control, of intelligent obedience to the laws of our being that are just as immutable as the law of gravitation; and we must give attention to them; for if we do not they will execute judgment upon us for our transgression.

binning these acids he has been able to obtain, by a series of preparations, divers substances having all the chemical characteristics of beef.

# Turkish Bath at Home Battle Creek Electric Light Bath



Standard Model

You can't be healthy unless you sweat—not occasionally—but every day. Sweating rids the tissues of the poisons that produce disease. The Battle Creek Electric Light Bath in the home gives a thorough sweat in 10 to 15 minutes, frees the body of poisons, beautifies the skin, is a tonic to all the tissues, keeps the entire system in prime condition. In the great Sanitariums the Battle Creek Electric Light Bath is employed as the surest means of preventing and overcoming such diseases as

**Nervous Troubles, Rheumatism, Blood and Skin Diseases, Stomach, Kidney and Liver Disorders, Gout, Neuralgia, Grip, Colds, Bright's Disease, Anemia, Hardening of the Arteries.**

Busy men and women find in the cleansing sweat of the Battle Creek Electric Light Bath a vital, daily tonic. It brings the buoyancy, life and vigor of perfect health, increases efficiency, adds to the joy of living. The Battle Creek Electric Light Bath is a practical investment for every home; is in full operation at the mere turn of a switch—gives life long service—cost only 4c a bath.

### Special Introductory Price Offer

—To introduce the Home Electric Light Bath—for a limited time we are making a special introductory price offer. At moderate cost you can have in your home the same scientific treatments the greatest Sanitariums use. Write for free book of "Home Treatments" and special 30-day introductory offer.

## Sent on Approval

This Home Bath, just as efficient as our Sanitarium models, sent on 30 days FREE TRIAL. Test it as you please. Keep it if it suits.

## SANITARIUM EQUIPMENT COMPANY Battle Creek, Mich.

Manufacturers of Vibratory, Light, Mechanical Swedish and other Therapeutic Equipment for Sanitariums, Hospitals and Physicians.



Men's division of the Mechanotherapy Room—One of the several departments kept in condition by the mechanical department.

## THE SANITARIUM MECHANICAL DEPARTMENT

ONE of the biggest things about the Sanitarium is the amount of machinery which is used. The Swedish mechanical department depends entirely upon machinery for its operation; the laundry could not get along without it, while the bath rooms would be equally helpless. Even the kitchen demands its share, what with bread cutters, potato parers, dish washers and vegetable crushers.

The amount of repair work which all this apparatus requires is tremendous and an entire department has been set aside to care for it. The mechanics' department is situated in the lower part of the laundry building, and consists of a large room completely equipped with all the latest machinery necessary to carry on the great amount of work that is called for. In this shop may be found two lathes, one planer, two emery grinders, a polisher and buffing wheels, three drill presses, besides an electric drill, one power saw, one grind stone, and a forty horse-power engine that runs not only all these machines but the laundry mangles, the tin shop apparatus and in fact all the machines in this building. The electric drill is a tool which is seldom found except in first class machine shops.

Four men are constantly on duty—all their energy being bent on keeping up to the repair work contributed by the different departments of the Sanitarium—little or no outside work is done except as an accommodation to patients or helpers. The Sanitarium automobiles are brought here for repairs, and as they have very strenuous work to do they break and wear out rapidly.

"There is more machinery and repair apparatus here than people think," remarked one of the machinists, "and more than many

people think that we need, but we use it all and are continually having to get more." The supplies are of every sort and kind. Much of the Sanitarium machinery is unique, being made here for our own special work. The casting for the various parts is done outside, of course, but the planing is all done

here and the patterns very carefully kept.

In the store rooms are found drills, belting, machine bolts, screws of all kinds, shafting from one-eighth to three inches, brass work of all kinds for showers, etc., pulleys of all sorts, laundry castings, and other odds and ends that come in useful from time to time.

ARE YOU HANDICAPPED IN YOUR DAILY WORK BY

## CONSTIPATION?



Might as well enter a marathon with the shoes weighted or a swimming tournament with the hands tied. The chances are against you. You can't do your best.

## PARA-LAX

offers the best means known of relieving the system of the burden imposed by this disorder. Battle Creek Sanitarium physicians find it more than takes the place of drug laxatives, for it produces quick results and is absolutely harmless.

It's a mild, innocent, agreeable preparation, and the relief it brings can be demonstrated in your own case at our risk.

Write for further information and special offer.

THE KELLOGG FOOD COMPANY

Dept. X 24

Battle Creek, Mich.





# The Battle Creek

MAY 1913

# Idea.

VOL. SIX. NO. NINE



SPECIAL NUMBER





The North Drive-way.

## BATTLE CREEK—THE CITY IN SUMMER

**N**O OTHER city in the United States is so ideally located for Sanitarium purposes as Battle Creek. Situated in the southern portion of Michigan, a State justly famous for its mild and salubrious climate, the city enjoys not only moderate winters, but also temperate summers. By March first spring has usually put in its appearance, and from then until November first the days of the Sanitarium patients are outdoor days. And this outdoor life is not of the hammock-lounging, lemonade-sipping variety; the call of the fresh air is a call to physical activity—to country walks, to horse-back riding, to motoring, to tennis, to golf, to swimming, and to rowing. In Michigan, moreover, as in no other State in the Union the call is an appeal to the Nature lover, the Wolverine State being particularly rich in every branch of natural phenomena. On this head we take pleasure in quoting from an article contributed to *Good Health* by the late Charles E. Barnes, for many years president of the Battle Creek Nature Club, and an able journalist:

"The marvelous revelations of nature in Michigan, so boundless and opulent, make her the most favored State in the Union for nature study. Her richness in flowers, vines, shrubs, trees, birds and those things which contribute to the esthetic side of man's life, is unsurpassed by any other commonwealth. It gives the State an asset other than that of wealth in factories, farms and shipping—the asset of beauty, for beauty is an asset. It can be truly said that Michigan is 'the heart of Nature,' so prolific and varied are her manifestations.

"Florida is called the 'Land of Flowers,' yet there are more species of wild flowers in Michigan than in Florida, and more species of trees in Michigan than in all Europe. Unlimited is the field for botanical study. All told there are 2,243 species and varieties of plant life in the Wolverine State. There are 90 species of trees, in all Europe 85. There are 209 species and varieties of shrubs; 120 of native grasses; 180 of sedges, and 25 of rushes, and over 1,000 species of plants whose flowers furnish nectar to the bees for the making of honey.

"The Great Lakes exercise a marked influence in equalizing the temperature of the State, and this has its effect upon the flora. For this reason there are found growing up as far as central Michigan and on the west coast trees whose habitat is much farther south, such as the honey locust, dogwood, pepperidge, red bud, tulip tree, red mulberry and pawpaw.

"With this wealth of flowers, shrubs and trees, the woods and fields of Michigan present a vision of beauty and grandeur that is enchanting. From the blossoming of the first spring flowers, amid scenes of rural tranquility, through the radiant beauty of the rarest days in June, to the glorious days of autumn, when the woodland foliage blends gold and red, there is a constant outburst of splendor that, attuned to the melody of the birds, expresses poetic praise to the glory of nature. The woods of Michigan are a perpetual and irresistible lure to people of poetic temperament.

"Equal to the flora as a source of delight to the nature lover is the fauna—the beautiful birds that furnish



the melody of nature. In this State 330 species of birds have been identified. The Great Lakes add to our bird life, by giving them protection and by calling to their waters the aquatic birds. Michigan has many birds whose habitat is in the far north around Hudson bay, and others that live in the States south of Michigan, even along and beyond the Gulf of Mexico. The first are illustrated by the Bohemian waxwing, spruce partridge, Canadian jay and others, while the summer red bird, the mocking bird, and the cardinal red bird illustrate the second group. The Great Lakes attract many birds that are usually maritime, like the gulls and the terns. In southern Michigan, with its prairies and woodlands, is the prairie fauna, such as the pinnated grouse, as well as those birds which are most at home in the forests of the wooded areas, the thrushes and the warblers. This accounts for the large number of woodland warblers in Michigan—the bird lover's paradise.

"The geological formation of Michigan, in the southern peninsula, is unlike that of any other State in the Union. The outcrop of rock formations can be illustrated by a number of saucers, piled up, and set one into another, each being a little larger, so that the rims are exposed. This is an exact representation of the outcropping strata of the geological groups in this State. The glaciers which swept over these outcrops have left moraines, and drift deposits that are rich in fossils of every species. In the drift of Michigan the geologist has a veritable mine, and the study is a most fascinating one.

"Michigan is the State of all States that has the most enticing and most limitless field for the study of nature."

### An Interesting Region

Battle Creek is situated in the midst of this naturalist's paradise. For the geologist there are the "Dutch Mountains," a range of wild hills that form part of a morainial

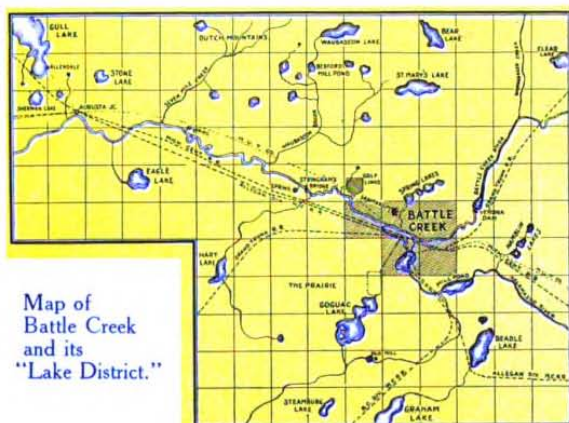


Lovers' Lane, at Gull Lake.

drift which extends for a considerable distance across the State in a general direction of east and west, and that are rich in fossil remains. Interspersed among these hills are marshes and bogs which feed innumerable lakes and give rise to brooks that would have inspired Izaak Walton to rhapsody. In these marshes and along the streams are to be found rare specimens of plant life, especially of the orchids and sedges.

Covering a large area of fertile land just to the south of the city may be seen, too, what is famous as the eastern-most prairie in the United States, the south-western portion of the State having been covered with these large open spaces, which, while not so extensive as the great prairies of the West, were at the same time more beautiful, for their surface is more rolling, and were covered with growths of oak and other trees, which acquired the name of "oak openings."

The student of history will also find much to interest him. The Kalamazoo River, upon which Battle Creek is situated, was on the direct line of overland communication between Detroit and what a hundred years ago was known as Fort Dearborn, now Chicago. The region was inhabited, so far as it was inhabited at all, by scattered bands of Chippewas, Ottawas and Potawatamis, a reservation of the latter tribe being situated at the village of Athens, a short distance from Battle Creek. Rich col-







A delightful walk near Battle Creek.

lections of arrowheads and other Indian relics collected in and near the city attest to the extent to which the red men regarded the river valley a general highway. The scene of one of James Fenimore Cooper's romances, "Oak Openings," is laid along the banks of the Kalamazoo, and describes some thrilling adventures associated with the war of 1812. The country is vividly described by the great writer, studied at first hand some thirty years after the events really occurred. Many sanguinary struggles took place back in those early times, one of them, semi-legendary, giving to a tributary stream which joins the Kalamazoo within the city limits the name "Waupakisko," or "river of blood," this name, in turn, passing to the first settlement at this point, but being changed later on to "Battle Creek." People who are interested in the early highways of America will also find much to interest them in the remains of the old trails that exist around Battle Creek.

In the way of recreation Battle Creek offers exceptional facilities. The golf enthusiast by virtue of a temporary membership has free entrée to the beautiful links of the Battle Creek Country Club. The Club is situated less than a mile from the city limits.

Tennis players are well provided for, the Sanitarium grounds containing five

excellent courts—four of them gravel and one cement. Tennis is immensely popular among the guests, some splendid playing being seen on the courts. Occasional tournaments for guests are staged, and trophies awarded.

Nor is the baseball "fan" cut off from the sport he loves. Battle Creek holds a franchise in the Southern Michigan League, from which have gone directly into major league baseball some of the most remarkable men in the game, among them Merkle, of the New York Giants, King Cole, formerly Chicago's sensational pitcher, and Compton, the heavy hitting outfielder of the St. Louis Americans. The circuit is one of the fastest of its class in organized sport, and fans may be assured of seeing "regular" baseball.

Many guests bring with them their motor cars, which provide a delightful form of recreation. There are several good gravel roads about the countryside, Battle Creek being on the main automobile thoroughfare between Chicago and Detroit.

Driving and horseback-riding are also popular during the summer months. Horses are obtainable any time of day at a very nominal rate. This form of recreation, especially horseback-riding, combines in an admirable way excellent exercise and mental and spiritual uplift.

The exercise par excellence, however, and certainly by far the most popular recreation at the Sanitarium, is walking. All of the beauty spots described above are within reach of the good walker, while the less strenuous will find enchanting spots even within a few minutes' stroll of the Sanitarium. A plan followed by many is to ride into the country a few miles on the interurban electric line, or one of the four steam railways that run out of Battle Creek, and explore country that could not be reached without fatigue except by a tireless pedestrian.

And the subject of lakes brings us to swimming and boating. Goguac, Gull, St. Mary's, Beadle and Hart Lakes particularly are delightful bodies of water that afford every facility for boating. At Lake Goguac, reached by a fifteen-minute trolley ride, the Sanitarium maintains a villa, with boats, for the convenience of guests who wish to spend considerable time at the Lake. Gull Lake, reached in a half-hour's ride by interurban trolley, is a large sheet of water seven miles in length, and navigated by commodious steamers and launches. The



One of the beautiful reaches of the Kalamazoo.



lake is popular among yachting enthusiasts, numerous regattas being held during the course of the summer.

But the joys of boating are not confined to the Lakes. One of the most delightful trips to be made out of Battle Creek is a day spent on the Kalamazoo. Every day sees several boat-loads of people, with lunches, set sail on the picturesque river, and, leaving the boats at a point ten miles away return by interurban car to the city. The banks of the river are heavily wooded and afford a constant succession of charming vistas and panoramas. The word "Kalamazoo" denotes "river of springs," and the many springs of cool, refreshing water to be found along the way bear out the appropriateness of the name.

The foregoing paragraphs present some of the features of Battle Creek and its environs which entitle the city to serious consideration as a place for spending the summer months. Climate, natural attractions, health education at the Sanitarium—we submit that with these there is nothing wanting in the way of inducements, not only for the man with a fortnight, but also for the man with three months to spend.

## Sanitarium Life in Summer

**T**HE DAILY routine and activity at the Battle Creek Sanitarium differs considerably from the ordinary conception of sanitarium life. Instead of the monotony and homesickness which the average health-seeker looks forward to as awaiting him, he finds himself in such a strenuous routine of interesting things from the moment he arrives that the thought of home seldom comes to him. He is too pre-occupied with his new life to do anything else than drink in his succession of experiences with avidity.

Life at the Sanitarium is a steady stream of fascinating treatments, epicurean meals, out-of-door excursions and recreation, lectures and entertainments in astonish-

ing variety, meetings with distinguished guests, and merry chattings with other patients on subjects anything but gloomy. Every patient is kept so strenuously busy in the race for health-winning, and the diversions on the way are so fascinating, that the days pass all too quickly.

The whole program is honest, earnest work for health, and all possible hindrances are removed. New-comers feel at home at once. The fact that everybody is getting well fast dispels the atmosphere of disease and decrepitude which render so depressing the atmosphere of the ordinary hospital.

The program of treatment is, of course, varied from day to day and from week to week, not altogether, however, to meet the indications of changing symptoms, but in the carrying out of a methodical plan for the accomplishment of the object sought; namely, the removal of the causes of the patient's malady by a systematically graduated training of disordered functions to healthful activity. No two patients have exactly the same program, each case having its own peculiarities and indications for treatment. For the average patient, however, the usual day's program is practically as follows:

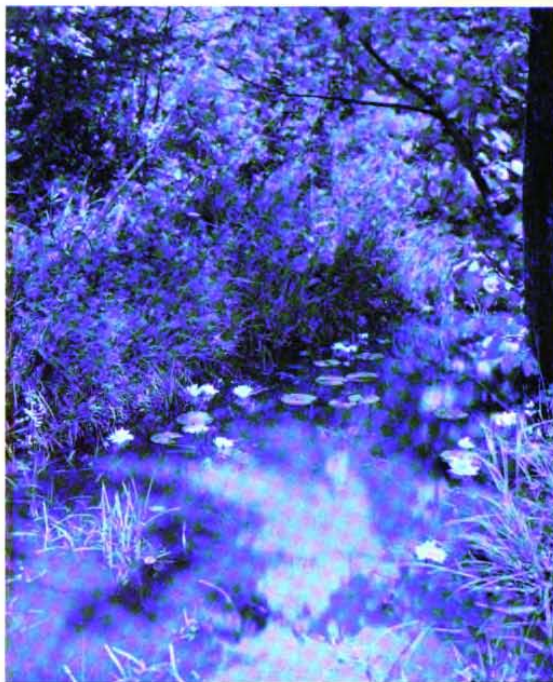
6:00 A. M.—Morning bath, cold spray or plunge.

6:30—Open-air exercise, country walk, etc.

7:00—Chest gymnastics in open air.

7:20—Morning prayers in parlor.

7:40-8:40—Breakfast.



The "Flowing Wells," within walking distance of the Sanitarium.



Last call for dinner—a pleasure party down the Kalamazoo.





The "Annex" and a corner of its quiet, restful lawn.

- 8:30—Rest or recreation in the open air.
- 9:00—Swedish gymnastics.
- 9:30—Mechanical Swedish movements, mechanical massage, etc.
- 10:00—Office consultation or treatment.
- 10:30—Bath treatment.
- 11:30—Exercise with apparatus in gymnasium.
- 12:00—Outdoor gymnasium, swimming, sun-bath, etc., in summer; sleighride, skating, skeeing, etc., in winter.
- 1:00-2:00—Dinner.
- 2:00—Rest or recreation in the open air.
- 2:30—Walking Club outing, riding, boating, etc.
- 3:00—Chest gymnastics.
- 3:30—School of Health, lecture or demonstration.
- 4:30—Bath treatment.
- 5:30—Phototherapy or electrical treatment.
- 6:00-6:30—Luncheon.
- 6:45—Gymnasium drill.
- 7:45—Lecture or entertainment.

Such a program is too rich, obviously, to be taken in invariably on every single day; but the guest is able to take advantage of nearly all these opportunities as the days go by, by alternating between one kind of treatment and another, between the afternoon outing and the School of Health lecture, etc. In addition to these regular features, there are any number of unexpected additions to the day's program, in the way both of entertainment and serious interests, which effectually banish the feeling of routine and fill up the cup of Sanitarium happiness.

There is hardly a day or evening when there is not an entertainment of some kind—a musicale or recital, stereopticon or moving pictures, a pleasant travel-talk, a song or prayer service, a Bible reading, a lecture or address by notable men and women of all creeds, denominations and walks of life. Once a week a Question Box is held by one of the chief physicians, who answers in a vivacious and interesting way any questions that may be presented by the guests on topics relating to health and the cure of disease. On one or two other evenings of the week, one of the physicians, often the superintendent, gives stereopticon lectures explaining the Sanitarium system of treatment or some vital topic of hygienic living. Swimming tournaments, exhibitions, etc., occur at frequent intervals.

Hardly a week passes without one or more lectures from some noted author, preacher, traveler, government official, or other celebrated person who has stopped at the Sanitarium as a visitor or patient. The number of such distinguished guests coming to the Sanitarium within a single season, attracted often by its peculiar advantages as a rest resort for mental workers, is always large; and the oppor-



An ornamental flower bed on the Sanitarium grounds.



tunity to hear them and to meet them is a rare and much-appreciated pleasure.

Guests often comment with delight on the democratic spirit which pervades the institution; not only is it easy to meet and converse with distinguished visitors, but congenial friendships are quickly formed among patients and guests. The patients come from every region of the United States, and often from foreign lands, and the exchange of news and experiences proves mutually illuminating and helpful.

The social life at the Sanitarium is quite unconventional. Fashionable display and dissipation are conspicuously absent. Simplicity of dress, in obedience primarily to the dictates of health, is the rule; and every guest is made to feel at home in the common enjoyment of everything that the Sanitarium has to offer.

Musicales, concerts, readings, etc., are given frequently by noted talent. The Sanitarium has its own orchestra, which renders music during the dinner hour, and gives frequent concerts—on the delightful summer evenings on the front terrace.

## The Out-of-Doors



OUTDOOR LIFE is especially a dominant feature in the Battle Creek Sanitarium System. The outdoor gymnasium, a view of which is here-with shown, was the first of the sort in the United States, and is unrivaled in the completeness of its equipment and the thoroughness of the methods employed. The value of the sun as a curative agent has been recognized from the most ancient times, but it is evident that little good effect can be obtained from this source when the body is almost completely covered with clothing. It is necessary that the ordinary clothing be removed, so that nearly the whole surface of the skin may be exposed to the influence of the actinic rays.



Patients' gymnasium work on the Sanitarium lawn.



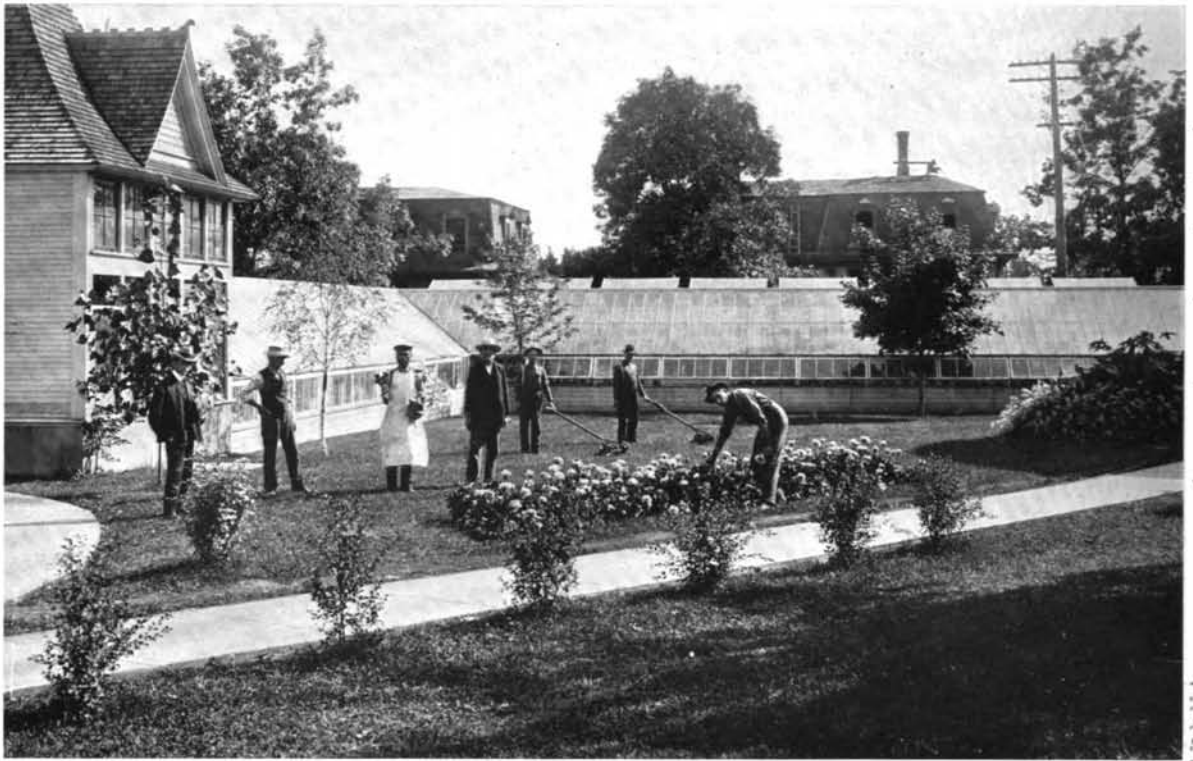
Expert divers and swimmers in the 100-foot pool in the men's gymnasium.

The proof of the effects of the sun's rays upon the skin is to be found in the pigmentation and heightened color which develop rapidly after a few exposures. First exposures are sometimes followed by slight attacks of sunburn, which do no harm, but may in fact enhance the beneficial effects.

The skin is capable of holding two-thirds of all the blood in the body. When it is inactive and empty, the necessary result is congestion of the liver and other organs, and a loss of vigor and general vital resistance. Exposure to cool air stimulates the activity of the skin and every vital function. Exercise with the body relieved of trammels of every sort brings each muscle into normal play.

A return to savagery in a mild and systematic way is perhaps the best of all antidotes for a large share of the ills which are the outgrowth of our very much overdone civilization. The untamed savage is the toughest and most enduring of all animals. The constant play of those most powerful of all vital stimuli, the solar rays and thermic impressions received from the air, gives him not only a healthy, disease-resisting skin, but a disease-resisting body as well. A healthy skin means a healthy body. The influence of light is necessary for dermic health. Contact with cold air or cold water is an essential means of skin gymnastics, and also serves to train the organs of the blood circulation.





Bedding the plants—one of the four large greenhouses that keep the Sanitarium supplied with an abundance of flowers.

At the Sanitarium are two large outdoor gymnasiums—one for each sex, offering practically identical facilities and equipment. Each boasts a fine swimming pool, which is filled with pure water from an artesian well, frequently changed and maintained at a uniform and comfortable temperature. Near by are heaps of clean white sand, where one may roast himself in the sun to his heart's content; horizontal bars, ladders, swimming rings, a maypole, a running track, various appliances for gymnastic games; and close at hand are dressing-rooms and shower baths with other conveniences. The gymnasiums are surrounded by

very high tight fences, affording proper protection, so that the body, protected by a simple bathing suit, may be exposed as freely as possible to the action of the sun and air.

The outdoor gymnasium is undoubtedly the most popular feature of the Sanitarium during the entire summer. The patients resort here in large numbers to take advantage of the sport, fun, recreation, and beneficial exercise—all in one—which the outdoor gymnasium affords. It is not long before the patient's skin becomes hardened, toughened, and often delightfully browned.

The effects of such tanning and hardening of the skin upon the internal organs are in the highest degree beneficial. Appetite and digestion improve, heart vigor increases, and the patient feels daily the growth of new life and vigor under the stimulus of the natural forces by which the body is created and maintained.

Thus all the best advantages of the seashore, camping out, "going fishing," and other forms of recreation are secured, while the patient is protected from excess by the careful guidance of a physician, and also has the advantages of medical care, dietetic regulations, etc.

Outdoor walking parties are much in vogue and are a source of great pleasure as well as profit. These parties are accompanied by a physical director or a naturalist who knows all the birds and



Part of the north Loggia.



On Seven-Mile Creek.

trees, and expounds to the uninitiated the teachings of the great book of Nature.

The first walk at 6:30 in the morning, following the spray, is taken by a considerable number of guests, while a larger number participate in the cross-country jaunts which start from the lobby at 2:30. For those who are not in condition to do the more strenuous walk, there is a second party leaving fifteen minutes later, which does not cover so much ground nor go so fast. These cross-country walks are of invaluable aid to the average person, who invariably walks too little and too unsystematically. The inducements of pleasant company, expert supervision and guidance, and attractive route, tempt many a patient to join who otherwise would yield to his inertia.

Patients, indeed, are urged to spend all their available time in outdoor walking, no matter how limited the distance. For the majority of invalids, walks of any length are as a rule far preferable to veranda dozing; friends who meet can continue their chatting while walking, and to their mutual advantage. For the benefit of those who wish to do systematic walking, the Sanitarium distributes a little booklet, which maps out a series of graded and measured walks in the vicinity, with estimation of the exertion required, etc. Suggestions for walking properly and deriving the maximum benefit from this and other recreations mentioned above are furnished the guests by the management of the institution.

## Plant and Lawn Plans

**T**HE amateur gardener finds it one of the paradoxes of nature that grass will grow readily where it is not wanted, yet is reluctant when you try to coax it into a good lawn. As a matter of fact, a perfect greensward is one of the most difficult achievements of horticulture. One season will not accomplish it, nor two; unremitting care for years is necessary. The Sanitarium recognizes the influence of environment on the patients, and maintains a lovely carpet of green about the grounds. The task is the more difficult because the Sanitarium lawn is not merely to be looked at, but used. Every clear day finds a number of wheel chairs under the trees.

This spring, thanks to a mild winter and considerable rain in April, the grass is particularly rich and heavy. The task of mowing it has already begun and the lawn promises to look its prettiest all summer.

Bright sunshine and warm days in April say that spring is here, but the wise man knows that the danger of frost is not yet over. The setting out of flower beds, therefore, is not safe until May. Meanwhile, however, everything is placed in readiness for the rush days when the lawn is to be interspersed and ornamented with bright splashes of color. The preparations for this began last fall at the first suggestion of winter. At that time thousands of cuttings were taken from the geraniums, and started in sand. Several times they have been shifted into larger pots and now they are already a mass of color.

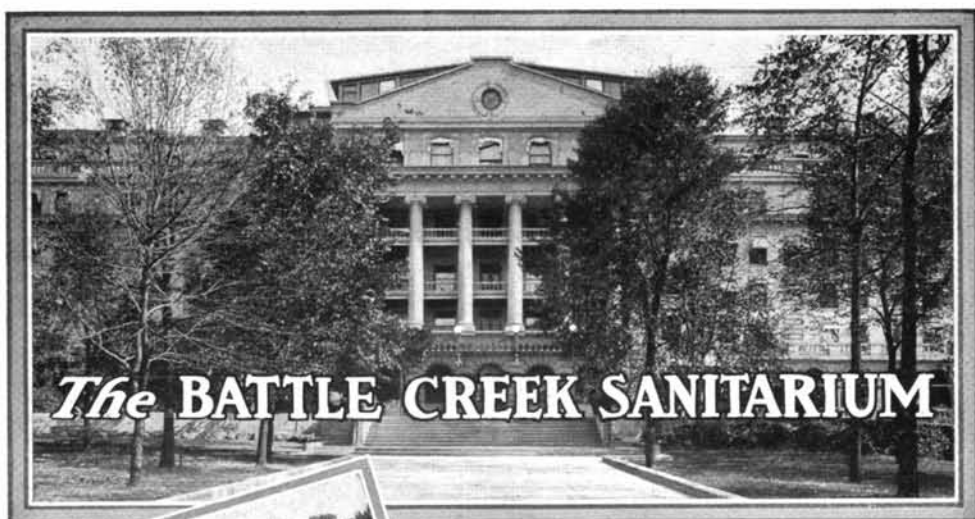
After all, the geranium seems to be the favorite flower for bedding. It blooms cheerfully and profusely all the season and requires less horticultural skill than most plants. The S. A. Nutt is perhaps the most satisfactory of the red varieties. The Jean Vaud, with its big pink blossoms, makes a fine show continually, and it has a strong rival in the Mrs. E. G. Hill.

The begonia is a close competitor of the geranium as a satisfactory bedding plant. It also makes a handsome showing until the fall. Petunias by the thousand are also in the greenhouses, ready for immediate transplanting. The brilliant red of the salvia makes it an admirable mass to set in a green landscape.

As usual, several beds on the Sanitarium lawn this summer will be given over to cannas. King Humbert is  
(Continued on page eleven)



A putting green at the Battle Creek Country Club links.



## A REAL "REST" VACATION

Doctor, some of your patients may be needing a vacation soon—a change of scene, restful diversion and a taste of the outdoor life.

We invite such patients to Battle Creek. Here everything is scientifically planned for rest, recreation and health improvement; the visitor eats, sleeps and lives daily for health in a wholesome, uplifting environment.

The outdoor life, tennis, golf, volley-ball, outdoor swimming, riding, driving, motoring, sailing, tramping—these and many other pleasant recreations are encouraged for suitable cases by the most abundant facilities and favorable conditions. Graduated exercises for feeble patients.

Beautiful expanses of shaded lawn, restful views of charming vistas and the delightful summer climate for which Michigan is noted, all combine to make Battle Creek an ideal resting spot.

### LET US SEND YOU OUR BOOK

We have prepared for special circulation "THE BATTLE CREEK SANITARIUM SYSTEM," a large souvenir volume containing nearly 200 beautiful illustrations showing equipment and methods, which will be mailed free on request. Please sign and mail the coupon.

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# THE BATTLE CREEK IDEA



“The Temple of Health”

Vol. 6

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No. 10

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PRICE 5 CENTS

## A STARCHY DIET BEST FOR THE DIABETIC

FROM A SANITARIUM PARLOR LECTURE BY DR. J. H. KELLOGG

THE diabetic patient should live on a starchy diet. The one thing that is particularly important for him is sugar and starch—carbohydrates are absolutely essential for his condition. And this statement causes no little surprise to you, but what I say is the truth of the matter. The old idea was that a person who had diabetes should eat no starch, that he should eat no sugar, no carbohydrates of any kind—he must eat plenty of protein, the element represented by the whites of eggs and the lean of meat.

Than this there could be no greater mistake. Thousands of people suffering from diabetes have been killed by this error, and it is only within the past ten years or so that we have been able to find out the truth in the matter.

The body most of all requires glycogen, a sort of animal starch. When we eat starch, such as bread, cereals or sugar, these carbohydrates are converted in the body into glycogen, which is, as I say, a sort of animal starch, stored up in the liver, in the muscles and in the lymphatic glands, and in some other tissues of the body, but chiefly in those I have just mentioned. The glycogen is the energy store of the body, the source of the energy with which we think and with which we work—the fuel that keeps us warm is stored up in the body in the form of glycogen. When this is gone we die, failing because the glycogen is the storehouse of power in the body.

Now, in diabetes, the essential factor is loss of power to store glycogen. The symptom of the disease is the appearance of sugar in the urine—this, I say, is the important symptom, but the cause of the whole evil lies in the loss of power to convert sugar into glycogen and to store up this glycogen for future use. So long as an individual possesses the power of storing up glycogen, he need not worry about the presence of sugar, for it is not the loss of sugar in itself that he suffers from, but the loss of power to convert sugar into glycogen and to store it up in the body for the purpose of keeping the body warm and enabling it to perform its normal functions.

Now, glycogen can be made from lean meat, and possibly in very small amount from fat, but the principal source and the natural source and the best of all sources, is the starch obtained from the cereals. Glycogen made from meat leaves a residue that is very poisonous, and on this account protein, and especially protein in the form of meat, is a very dangerous source of glycogen.

To illustrate, a man came to the Sanitarium some time ago suffering from diabetes. Every day he was discharging from his body nearly half a pound of sugar. He had been on a meat diet for three years. We immediately put him on a non-meat diet and in the course of three or four months he went home with no sugar in the urine at all, though he was eating six hundred calories of starch every day.



The Sanitarium Kindergarten at play

This case shows that what the diabetic needs is starch. He must be able to digest starchy foods and to utilize them, and he is not cured by merely being put on a diet that cuts off sugar. The thing that cures him must be some means by which he is enabled to eat starch, to digest starch and to assimilate it sufficiently to offset the large quantity of sugar which passes into the urine.

Our view of the matter is based upon the results of thorough experiments by men like von Noorden and other eminent physiologists. These men have fully demonstrated the folly of the old method of treating the diabetic, and our experience here at the Sanitarium has amply corroborated their findings.

Now as to the practical aspect of the question, there are three foods which the diabetic should especially eat, namely, oatmeal, bananas and potatoes, and in addition to these plenty of green vegetables—such as lettuce, cabbage, cucumbers, spinach and turnips. These green vege-

tables should, indeed, form the foundation of the diabetic's diet. On this diet the diabetic is bound, unless the case is serious, to recover. One or two days a week it is often advisable to confine the patient entirely to the green vegetables. To the green vegetables is added oatmeal porridge with butter—enough to make up a liberal bill of fare, amounting to 2,500 or 3,000 calories, for we must remember that the diabetic patient is losing a great deal of sugar. The patient should also have in his schedule a banana day and a potato day. The bananas should be taken in the form of a puree, being rubbed through a colander to get all the strings and all the lumps out of it, when it can be very freely eaten and well digested. On the potato days he should have as much as two pounds of potatoes. He should begin with first half a pound, then a pound, then a pound and a half and later on two pounds. Following the potato day should come the oatmeal day, followed by the banana day and then the potato day, this order being continued.



"College Hall"—the laboratories where the gastric, blood and other examinations are made.

## TAKING THE SANITARIUM PATIENT'S INVENTORY

IN the BATTLE CREEK IDEA for April 15th appeared an article with the above title. It described the arrival of the patient at the Sanitarium and the consultation with the "receiving physician" for the purpose of gathering the main facts of the case with a view to assigning the patient to a regular attending physician, with whom begins a period of painstaking and careful inquiries for the purpose of determining the nature of the treatment and care needed by the patient. The first of these, the strength test, was described in detail in the BATTLE CREEK IDEA referred to above. The following article describes, also in detail, the other tests employed at the Sanitarium, from which the reader will ascertain that no pains is spared to enable the physician to get at the bottom of the patient's malady.

### The Blood Examination

At noon of the first or second day after his arrival, the newcomer joins the group in the anteroom of the medical office to await his turn for the blood examination.

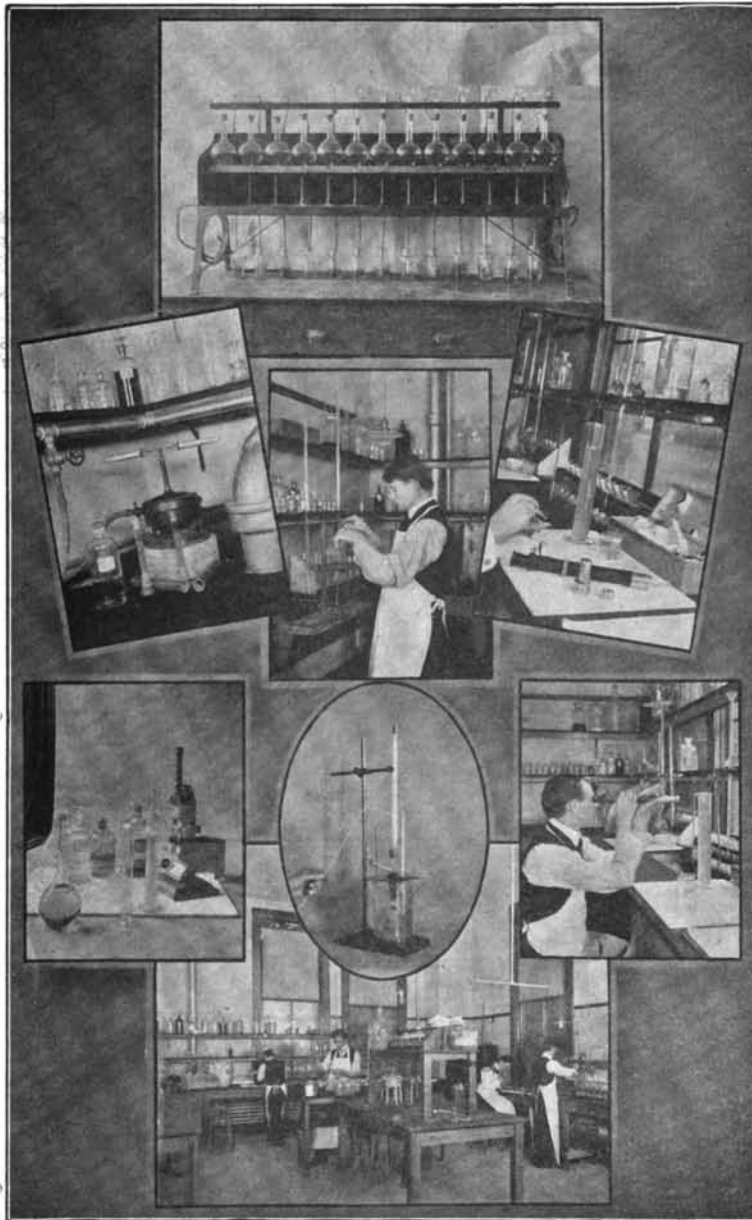
The proceeding lasts but a moment; while a nurse takes one arm in hand and records the blood-pressure, a specialist secures a drop of blood from the finger in some unapparent way. A day or two later the report of the blood examination comes in, and the physician explains to the patient the significance of the various findings.

### The Meaning of the Blood-Pressure

The determination of the blood-pressure is one of the most important and significant revelations of the preliminary tests. This determination is made in the case of every patient, because in the light of modern medical discovery the blood-pressure is an indication of the state of the blood-vessels, and hence of the body in general. The heart is a living force-pump which drives the blood through all the blood-vessels and thus sustains the life of the tissues.

The blood-pressure normally found in healthy persons is about 98 to 110. The danger line for low pressure is 90, and that for high pressure 145. Too high and too low pressure are merely symptoms, indicating the effort of the heart to respond to abnormal conditions. An unusually high pressure means that the heart is overworking, and will soon wear out if not relieved. In cases of low pressure, the heart itself is generally weak or crippled; and in acute cases both the heart and the blood-vessels may be involved. This condition is found in the majority of acute infectious disorders, and is a result of the absorption of poisons from an infected colon. In cases of high pressure, the trouble is with the arteries, which are hardening and degenerating, thus obstructing the flow of blood, so that the pressure rises. High blood-pressure may mean arteriosclerosis—either premature old age or grave disease of the kidneys.





Laboratory for Urinary Examination.

### Hemoglobin and Blood-Count

The determination of the blood-pressure, however, is only a single item in the examination of the blood and the circulation. The drop of blood taken from the patient's finger goes through an elaborate series of examinations in the laboratory, and a number of important and interesting data are obtained. The percentage of hemoglobin—the normal being 100—indicates the richness of the blood in coloring matter, upon which depends the power to carry oxygen. A person whose hemoglobin is 50 is short of breath because, although he takes into his lungs a sufficient amount of oxygen, his blood is not able to absorb and hold it; so the effect is the same as if he were breathing rarefied air or had a considerably reduced lung capacity.

The number of red and white cells, respectively, is indicated by another series of figures. This blood-count

is of large significance, for the functions of these red and white cells are extremely important and depend upon their unimpaired numbers. The red cells are the oxygen-carriers of the body, carrying oxygen from the lungs down to all the tissues, and carrying back the wastes and poisons for elimination.

The white cells are the defenders of the body. They form a standing army always on the alert to resist invasion from poisonous germs, and ready to take offensive measures against them. If the white cells are mustered in sufficiently large numbers, they are practically always able to destroy whatever noxious germs may enter the body. The white cells assist in the healing of wounds and repairing of tissues; pus is simply a mass of dead white cells which have sacrificed their lives in defending the body against germs. If from any cause the white cells are so weakened or so deficient in numbers that they are powerless to overcome poisonous invaders, the body is in great danger from the germs of malaria, tuberculosis, and other infectious diseases. It is then of the utmost importance that the white cells should be present in the body in full force. Ordinarily in a cubic millimeter of the blood there are 7,500 of these white cells. The number of red cells in the same drop of blood is much larger—about five million. The red cells live only six weeks; they die at the rate of eight million every second, and eight million more are instantly created to take their places. Thus the divine creative and healing power of the body is most graphically represented in the blood.

The blood examinations are invariably made at noon, in order that the findings may be properly compared. This is important on account of the fact that the blood-pressure and even the blood-count may vary more or less with the hour of the day, the barometric changes, the taking of meals, and other conditions.

The blood analysis is carried to even minutest detail in cases which call for it. If anemia, suspected malarial infection, or other special indications are present, a differential count of the blood is made. The alkalinity, specific gravity, and coagulability of the blood are also determined.

### The Opsonic Index

Most interesting of all these special tests is the determination of the opsonic index, which indicates the blood's fighting power against disease. This new method, introduced recently by Wright of England, has already proved itself of great importance as a means of estimating vital resistance against infectious diseases. If, for instance, a patient fears that he is likely to have consumption because his father had it, a drop of his blood may be taken and exposed in the laboratory to a number of tuberculosis germs. They are incubated from fifteen to thirty minutes and then examined microscopically and compared with the normal. If the blood-cells can destroy as many germs as can a normal drop of blood, the patient's opsonic

index is 100. If one drop of blood can sufficiently combat the tubercular germs, every other drop can; and accordingly tubercular germs will not be able to obtain a foothold in the body and the patient is safe against infection. If the specimen of blood can destroy only half as many germs as it should, the opsonic index is only 50, and the patient must raise his index if he desires to better his chances against the disease.

By exposure to open air and sunlight, swimming and other exercises, cold baths, and the Sanitarium diet, the opsonic index can be raised and the vital resistance against infection powerfully strengthened.

### The Research

During his first day at the Sanitarium, the patient is allowed to enjoy the Sanitarium diet as an epicurean novelty, without being bothered with an explanation of

salt in three equal portions, to be taken with the food. At noon of the last day, he swallows this in order that the activity of the stomach and the pancreas may be tested.

During the three days of this examination period the entire quantity of urine and feces discharged from the body is separately collected each day and subjected to a most rigid and thoroughgoing analysis in the laboratories.

### Testing the Efficiency of the Kidneys

The salt, or chlorid of sodium, given on the second day is for the purpose of testing the efficiency of the kidneys. If the kidneys are healthy, nearly all the ten grams of salt will be eliminated within twenty-four hours. If the kidneys have been seriously damaged by disease, only a small part of the ten grams will reappear in the chlorid of sodium residue in the urine. In the summer, some allowance must be made for the elimination of some



One of the Gastric laboratories.

the mysteriously scientific bill of fare. Beginning the next morning, however, and continuing for three days, his diet is carefully supervised for the purposes of the "three-day research," as it is called. This research is an important part of the diagnosis, and is intended to reveal a number of significant facts. For these three days the patient eats at certain reserved tables in company with others undergoing the same research, and a physician or dietitian is in constant attendance. Except in a few minor particulars, the patient's own selection of food, according to taste and appetite, is not restricted. Fibrous vegetables, salt and sugar, and some other unimportant articles are forbidden, in order that they may not interfere with the digestive analyses to be made in the laboratory. Otherwise the diet is prescribed only as to quantities, the patient being required to eat a balanced diet such as the normal man of his height should consume daily. The exact amounts to be eaten of each article are carefully weighed out for him under the supervision of the dietitian.

To aid in the determination of the laboratory experts, the patient takes a charcoal tablet the first morning, in order that the motility of the intestinal canal may be noted. During the second day, he is given ten grams of

of the salt through perspiration; but as a rule this gives extremely significant information.

Other important facts are revealed by this searching examination of the urine, which is carried on by the most exact methods known to physiologic chemistry. The microscope determines the various kinds of crystals, and the organic elements, such as casts. By the chemical tests is shown the condition of the metabolism or tissue-change in the body; for the urine is an extract of the tissues, and contains the tissue residues which have been taken from the blood and filtered out by the kidneys. The findings of the chemical examination are compared with a table showing normal quantity, which is based upon the examination of a large number of healthy persons subjected to the same régime.

All the various modifications of tissue activity show whether the patient is gaining flesh or losing flesh, whether the liver is inefficient in its work. All of these and many other questions of highest importance both to the physician and to the patient are answered by the careful scrutiny to which the urinary secretion is subjected in the Sanitarium clinical laboratories. The report which is

(Continued on page eleven)



Jacob Riis.

### Jacob Riis a Guest at the Sanitarium and Addresses Patients

"If we were asked the ground of our belief in the essential divinity of mankind, and were called upon to give a reason for our faith in the meaning and purpose of the universe, we should point to a life like that of Alfred Russell Wallace," says a writer in an English journal, in reviewing the latest work of the distinguished co-discoverer with Darwin of the principle of natural selection. The words might with equal appropriateness be applied to Jacob A. Riis, and for the same reason put forward by the reviewer quoted above: "We rest our faith in man and God upon the fact that men are capable of such self-dedication to lofty and impersonal purposes."

An acquaintance with the life and work of Jacob Riis shows him as possessed of the magnificent and significant qualities indicated above. They were transparently manifested, too, in a lecture upon "The Battle With the Slums," given by him at the Sanitarium on April 16th, during a short stay he made at the institution. He was introduced to the audience by Doctor Kellogg as one "so well known to his fellows throughout the world, for his good deeds, that he does not need to be introduced."

The slums, Mr. Riis declared, are the result of the neglect of brotherhood. In proportion as this mighty factor is forgotten by us, slums spring up. With statistics,

statement, and picture, he proceeded to an indictment of the slum. Views were shown of the dark, sordid, filthy, overcrowded, and deadly tenement houses, such as he has done so much to destroy. In one case, a block of these was occupied by 2,756 persons, and this was but one-half the number found occupying some of these blocks. He made clear the utter impossibility of stamping out tuberculosis with the slum existent. The slum is the home of very many of the most powerful forces making for unrighteousness. Environment, it was insisted, is a supreme factor in the development of wrong-doing and criminality. The boy is not naturally bad, nor does he want to be bad. In illustration and proof—both of which were convincing—of his case against the saloon, he cited the effects of the transformation of conditions. In instances the notorious and dreaded "gang" had been broken up in a single season by the provision of playgrounds. The changing of dark, sunless dwellings to those to which the light had free access has resulted in cleanliness in habits. "They do not clean up until the light comes in." The splendid results achieved by such organizations as the "Baptist Boys Brigade" and the Boy Scouts were indicated, and the statement added, "One boys' club is worth one hundred policemen."

Beauty was another exceedingly potent factor. Enormous sums have been spent in building beautiful schools in New York, and the expenditure was more than justified. "We have found that civic beauty is a civic asset. Beauty gives rise to the birth of ideals, and when you have caused ideals to be born, you have the slum on the hip." With a note of triumph in his voice, Mr. Riis stated some of the work done in New York. One of the most important results has been the reduction in the death-rate of children, in some cases amounting to one-half. In twelve years three hundred out of the four hundred slum apartments had been wiped out. "In five years more none will be left," he declared.

Places like "Thieves' Alley"—eloquently described in its name—and "Mulberry Bend," where seventeen murders had been committed to his knowledge, had been made into playgrounds and beauty spots.

Municipal lodging houses instead of the police station, which Mr. Riis described as "the unholy parody of charity," and which were only wiped out after fifteen years of constant effort, and kindergartens—of which he said, "In the last analysis the kindergarten will drive out the slum"—were among other notable achievements producing splendid results.

In a subsequent conversation Mr. Riis expressed to an IDEA representative his warm appreciation of the Sanitarium. Concerning the institution and the nature of its work, he said: "There is only one thing that I regret, and that is that I became so interested here that I have failed to accomplish some literary work I had intended doing during my visit." Commenting upon the general spirit of cheerfulness prevailing, he declared, "Nowhere could there be less of the invalid spirit." He remarked, also, upon the unusual opportunity of meeting people who were worthy to be known. My stay has enabled me to realize the importance of the Sanitarium principles. I have almost been made a convert to the non-flesh diet. Formerly, the suggestion of vegetarianism would give rise to a desire for meat, but that time is past."

Mr. Riis praised the spirit of open-minded inquiry, and the readiness to adopt new methods when these are based on scientific knowledge, which characterized the institution. He added, "I believe that the time is not far distant when the Sanitarium will become a Mecca for health seekers."





The Magnolia, on the west lawn.

### The Sanitarium Magnolia and Other Flowers

ON the south lawn of the Sanitarium, just west of the chapel, is a small tree that has caused no end of questions this spring, for it has been covered with a mass of large white flowers. The tree seemed the more strange in that it had no leaves, for leaves did not appear until after the blooming period. We say the patients had no end of questions—in this statement, however, we except our guests from the Southern States, who recognized it at once as the magnolia. As far as we know, this is the only specimen of the magnolia in this part of the country. Equally as striking for its color effects is the Japanese quince, just east of the chapel. Its brilliant red flowers have given the plant the name of "burning bush." The yellow leaves of the forsythia have also been conspicuous objects on the lawn. The earlier varieties of the spirea have also made their appearance and the lawn will soon be lovely with the later variety commonly known as the "bridal wreath."

### A Place of Body Building, Says Col. Windrum

"I KNOW of no better place for rest and the rebuilding of the body than here," said Col. J. J. Windrum, formerly of the National Guard of Iowa, and later, of Minnesota, just before leaving the Sanitarium after a stay of nearly four weeks. "The Sanitarium caters to physical needs; there is a very good moral atmosphere, and the spiritual side of man is not neglected."

"My doctor," continued Col. Windrum, "has been exceedingly kind to me, and the attendants I found willing even to inconvenience themselves on my account. I had no idea of my condition until I came here, but I believe that now I have got to the bottom of it. I have been greatly benefited; but if I had derived no benefit whatever, my stay here would have paid me ten times over, in that it has taught me how to live. The next time I visit the Sanitarium I shall feel that I am coming home."

### The Most Wonderful Health Factory in the World

MRS. GRACE SARTWELL MASON, of Carmel, California, author of "The Bear's Claws" and other popular novels, has been for the past six weeks an honored guest at the Sanitarium, coming here at the suggestion of Michael Williams, the well-known magazine writer.

"The Sanitarium?" said Mrs. Mason, on leaving. "Why, I think it the most wonderful health factory in the world. To me it seems the embodiment of genuine genius. And not only because all the materials aids to health are there, but because the very spirit of health, which so often flees from the doors of a hospital or sanatorium, has been captured and persuaded to remain in the Battle Creek Sanitarium. I have felt it often in the atmosphere of the building and in the attitude of the nurses—a sort of sane, common-sense optimism, which does more than medicine or treatments to put one on the road to health. And another thing I admired and felt grateful for is the frankness between doctors and patients—the appeal to one's brain and sense of logic. There is no putting one off, no bewildering one with a flow of obscure terms—but a very practical man-to-man sort of treatment of patients which I have appreciated."

"And then one comes away with a sense of taking something with one that lets in light on the dark places—one has no longer the comfortable old excuse of ignorance—or, at least, one is less ignorant than before; and has, besides, an awakened thirst for health knowledge."

Mrs. Mason's latest book, "The Bear's Claws," was issued from the McClurg press while she was at the Sanitarium, and its reception by both the public and the press is indeed gratifying to the many friends she made while here.



The May-Day Floral Processional.

### A Charming May-Day Festival

THE second annual May-Day festival of the Normal School of Physical Education was held by invitation of Doctor Hastings, Dean of the School, and Mrs. Hastings, at their home in Ridgemoor, Friday afternoon, May 2d. Fifty or more students cooperated with Mrs. Hastings in her attempt to revive the simple, spontaneous play spirit of the old English May-day.

The costumes of the young ladies were most varied and tasty—from that of the English and Scotch peasantry



The Hungarian Cschebogar.

to the Spanish gypsy. The men in uniform of white shirts, blue trousers and imitation buskins added to the picturesque effect of the scene.

The music for the folk dancing was provided by school talent—Miss Florence Thomas, pianist; Miss Leila Broughton, violinist; Mr. Gerald L. Ash, violinist. The beginnings of a school orchestra were also apparent in some special music planned for guitar, mandolin and piano by Miss Pearl Foster, guitar, Miss Lucile Hill, mandolin, and Miss Florence Thomas, pianist. This is the beginning of a movement which is expected to result in a school orchestra this summer.

The following folk games and dances were very creditably rendered under the leadership of Miss Helen Hyde: "The May Pole Dance," "Chimes of Dunkirk," "Hungarian Cschebogar," "Swedish Clop Dance," "Hop Mother Anika," and "High School Schotische." A very pretty and impressive little ceremony of the floral procession of all the couples formed the opening of the festival. Headed by the flower girls—little Margaret and Alice and Elizabeth Hastings—the boys and girls of the school in couples made their obeisance to the Queen chosen by the school, and presented her with a floral offering, a bough of pear or peach blossoms. Little Margaret Hastings bore the Queen's crown, which was presented to Miss Irene Shea with the happy acclamations of all.

A charming feature of the afternoon were sketches from "As You Like It," presented after the manner of the Coburn Players by Miss Paxton as Rosalind, Miss Moyer as Celia, and Mr. Inman as the Duke and Orlando. The festival closed with delightful refreshments, on the lawn, served by Mrs. Hastings.

### Guest Tells of Experience in Dayton Flood

MISS E. T. COLBY, while on a visit to her father, Dr. H. F. Colby, a Baptist clergyman, who has for some time been a guest of the Sanitarium, related for the IDEA readers some of her experiences during the Dayton flood.

Doctor Colby's home in Dayton is situated about half-way between Main Street and the river, and hence right in the line of the flood. From Tuesday morning until Saturday night Miss Colby, her mother, sister, brother and two servants were imprisoned on the upper floor of the house. Their living room was the bathroom, which fortunately contained a heater, in which they burned articles of furniture and other things that had been stored in the attic. Their food consisted of potatoes and canned goods, which had hurriedly been gathered up while the waters were rising, and they drank rain water that was caught as it fell from the roof.

The period of the flood was a most thrilling and exacting experience, said Miss Colby. The weather was intensely cold, and it was impossible adequately to heat

the room occupied. The city was in complete darkness at night, except when this was broken by the brilliant flashes of lightning which marked the severe electrical storm on Tuesday night, or by the lurid glare of burning buildings following the disastrous outbreak of fire which occurred later in the week. Parts of houses, furniture, etc., drowning and dead horses, were carried along by the swift current of swirling, murky water, and considerable debris became piled in the front yard of the house. Boats hurried to and fro on missions of rescue, and with supplies of food and water. The most distressing experiences, however, was that of hearing the cries for aid of the imprisoned. When finally the waters receded, five inches of mud covered the lower floor of the house; the piano was turned over and the cover off, and a large number of valuable books and pictures were absolutely ruined.

### Famous Baltimore Educator Pays a Visit to the Sanitarium

THE Sanitarium has felt itself highly honored by a visit from Dr. J. S. Gaucher, of Baltimore, founder and President Emeritus of Gaucher College. While here Doctor Gaucher made a remarkable address at a meeting held in the Gymnasium for the purpose of offering prayers for the success and prosperity of the new Chinese Republic. The occasion was the more remarkable in that it was called in response to a request from the new Government—whose future has been recently painted in glowing terms by Wu Ting Fang, former Chinese Minister to the United States, a firm believer in the simple life, and a friend—and at one time a guest—of the Battle Creek Sanitarium.

"I have enjoyed being here very much," said Doctor Gaucher on leaving. "The atmosphere of the institution



A brook scene near Battle Creek

is not institutional and the staff is exceedingly courteous. I was much struck with the efforts of the physicians to educate their patients and to secure their cooperation. In fact, I don't know whether I was most impressed with the delicacy and completeness of the apparatus for diagnosing and curing disease, or with the sympathetic attitude of the staff in seeking to give the patients an intelligent idea of their condition and in adjusting the remedies to fit the individual temperament and malady. I have been much improved in my brief visit, having found the pabulum for mind and body that was just suited to my condition."

Doctor Gaucher is a member of the Continuation Committee of Thirty-five appointed by the World Conference on Religion held at Edinburgh, in 1910. He is chairman of the American section of the sub-committee on Christian Education in Mission Fields, which has charge of the Near and the Far East and is deeply interested in the educational problems of China, having visited that country several times.

### Eminent English Physician Tendered Luncheon by Staff

DR. ERIC PIERCE-GOULD, M. A., M. B., F. R. C. S., was the guest of honor the other day at a luncheon tendered by the Sanitarium physicians. Doctor Pierce-Gould is on the medical staff of the famous Middlesex Hospital, London, of which his father, Sir Alfred Pierce-Gould, one of the best known surgeons in Great Britain, is head. Doctor Gould has been in America several months studying methods in the leading hospitals. He is a deep student of social and political problems, and while in Battle Creek addressed the Men's Club of the Presbyterian church on "Some Problems Facing America and England." The Rev. George E. Barnes, Pastor of the Battle Creek Presbyterian Church, and the Doctor were classmates at Oxford University, England.

### A Fine Repair Shop, Says Guest

"THIS is certainly a fine repair shop," said Mr. A. A. Campbell, of Dayton, Ohio, employed in a responsible capacity by the National Cash Register Company. "My experience in the ward," said Mr. Campbell as he was leaving for home, accompanied by Mrs. Campbell and their daughter, "has been especially gratifying. I have had some experience in other hospitals, and am able to appreciate the thorough and careful methods employed at the Battle Creek Sanitarium."

Mr. Campbell has nothing but praise for the Sanitarium diet. "You know we have a noon lunch every day for the National Cash Register Company clerical departments," he said. "The men have their choice of the Sanitarium diet and the usual food, and a large proportion prefer the diet as employed here at Battle Creek."

### "One Is Always Glad to Get Home, but—"

MISS ELSA LOOMIS, of Port Dodge, Iowa, who with her delightful singing has done so much to contribute to the success of the Sanitarium social life the past few weeks has returned to her home. "I am really sorry to leave the

Sanitarium," said Miss Loomis, in making her farewells. "Of course, one is always glad to get home, but I have enjoyed so much the Sanitarium and the people I have met here. I shall always think of Battle Creek with the most pleasant recollections."

### Appreciation of the Battle Creek Idea

MR. LINCOLN KILBURN, of Columbus, Ohio, has just returned to his home from the Sanitarium. The firm of which he is a member, the Kilburn and Jacobs Manufacturing Company, is the largest of its kind in the world, producing contractors' implements, and winning for itself a conspicuous place, both here and abroad, in its particular line. One-third of its business is export, and there is hardly a country in the world to which it does not send its goods.

Mr. Kilburn was much interested in the Sanitarium and spoke of the esteem in which the institution is held in Columbus. "Several of my friends and acquaintances have been patients here," he said, "and they were so enthusiastic about the treatments that I decided to try them for myself. I had just about given up all hopes before I came, but I leave feeling that I am making a new start in life, and that along right lines. I am taking with me a supply of Sanitarium foods and intend to keep up the diet. You may be sure I shall always have a good word to speak for the Sanitarium when I find any one run down in health."

Mrs. Kilburn was with her husband during the last fortnight of his stay, and remarked upon the uniform courtesy of the attendants and their desire to do every thing possible for the comfort of the guests. "It is an excellent idea," she said, "to have a social matron to look after the entertainment and comfort of the guests."

### New York Editor Calls Attention to the Educator's Side of Sanitarium Work

AN honored guest at the Sanitarium has been Miss Bessie Stuart Campbell, of New York City, Editor of *The By-Ways Magazine*. During the course of her visit, Miss Campbell delivered a lecture at the Elks' Temple in Battle Creek on "Education in the Twentieth Century," in the course of which she referred in the highest terms to the Sanitarium and the educational aspect of its work. "The Sanitarium is the result of high educational ideals," she remarked, "and it has as a result made Battle Creek famous throughout the entire world. I have been fascinated with the institution and the manner in which it is run."

### The Measure of One Physician's Confidence

DR. W. H. VAN SLYKE, of Hancock, Michigan, returned home the other day after a two week's stay at the Sanitarium. Doctor Van Slyke, before leaving, stated to an IDEA representative that he had carefully inspected the institution, and had noted with pleasure that the equipment was of the first order. He endorsed the Sanitarium methods as excellent, and was of the opinion that the results attained in the treatment of disease are not excelled in the United States. His confidence in the methods employed, indeed, he expressed by the statement that, "I have been sending patients here for years."



# The Battle Creek Idea

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## Annual Meeting of the Michigan Sanitarium and Benevolent Association

THE sixteenth annual meeting of the Michigan Sanitarium and Benevolent Association for the year 1913 will be held in the Chapel of the Battle Creek Sanitarium, on North Washington Avenue, Battle Creek, Michigan, Thursday, June 26th, 1913, at 3:00 P. M., standard time, for the election of Trustees and the transaction of such other business as may properly come before the meeting.

By order of the Board of Trustees.

E. L. EGGLESTON,  
*Acting Secretary.*

## The Energy Required for the Digestion of Food

ABOUT ten per cent of all the energy supplied to the body by food is expended in its digestion and assimilation. Of course there is a great difference between foodstuffs in the amount of energy required for digestion. The researches of Zuntz and others have shown that proteins require a far greater amount of energy for their digestion than do other food elements—nearly forty per cent. Fats come next in order; and the carbohydrates, that is, starch, dextrin, etc., require least of all. When it is recalled that eight-tenths of all the energy of the body is required to maintain animal heat, leaving only two-tenths to be expended in work, the importance of this question of the amount of energy expended in digestion, becomes apparent. Of the two-tenths of the energy represented in the food which is used by the body in actual work, one-half is spent in digestion and assimilation of the food under normal conditions. If, then, the amount of energy required for the digestion of the food is to any considerable degree increased, the amount of energy remaining for work is proportionately diminished.

For example, suppose the amount of energy required for digestion is increased one-half, the result would be that only one-half of the ordinary amount of energy would be available for muscular and mental activity. This brings at once into plain view the damage to one's working ability which results from overeating, or gormandizing, either occasional or habitual, and from the eating of foods unnecessarily difficult of digestion. Tables compiled by Beaumont as the result of his experiments on Alexis St. Martin show at a glance how greatly the amount of work required in the process of digestion may be influenced by the selection of the bill of fare. When, for example, one makes a meal of rice and milk, the whole process of digestion is completed in a couple of hours, whereas a meal

of roast goose or pork requires twice this amount of time for digestion, and doubtless twice the amount of digestive work, or even more. It is evident, then, that large eaters are living under a serious handicap. A large quantity of energy is wasted in unnecessary digestive work.

But there is still another phase of this question which is even more important than the waste of energy. The surplus food eaten is not utilized, but becomes a burden. If deposited as fat, it is simply a bad load, the carrying about of which requires a further waste of energy. In the case of proteins the situation is still worse, for every particle of protein which is not utilized in repair is converted into poisonous substances and is excreted, either in the form of urea, uric acid or worse poisons. A considerable part of the waste protein undergoes putrefaction in the intestine, producing poisons of the most deadly character, such as skatol, indol, pyrrhol, and numerous other equally toxic substances. These poisons not only tax the energies of the vital organs in their elimination, but by their circulation throughout the body irritate and otherwise injure the delicate cells and fibers of the living structure and in time do irreparable damage through the hardening of the arteries and the setting up of degenerative processes of various sorts in the nerve centers, the heart, liver, kidneys and other organs.

A skilful automobile driver takes care to keep the consumption of gasoline down to the lowest point possible, not only as a matter of economy but as the essential means of getting the best performance from his machine. When an excess of gasoline is used it soon leaves a cloud of smoke behind it, and soot accumulates in its inner parts, so that the machinery becomes clogged and crippled. The combustion of gases fills it with soot from the imperfect combustion of the fuel. The very same thing happens to the body when an excess of food is taken. Smoke is not visible, but it is really there. The products of incomplete exudation may be seen in the urine in the form of reddish or pinkish products and may be smelled in the breath and in the emanations from the body. The cause of the elimination of aromatic poisons is the incomplete combustion or burning of the food fuel.

## LOBBY NOTES

AFTER a sojourn of two months in Florida, Mrs. James D. Standish, of Detroit, has returned to the Sanitarium for rest and treatment.

Mrs. S. K. Richmann, of Indianapolis, at one time the very popular Secretary of the Young Women's Christian Association of that city, is a guest at the Sanitarium.

MRS. T. J. BOTTOMS, of Logan, Alabama, is registered at the Sanitarium, coming for the purpose of visiting her son, Mr. D. M. Bottoms, of the Nurses' Department.

MRS. M. P. AVERY, wife of former Mayor Avery of Holyoke, Massachusetts, is a recent arrival at the Sanitarium. Mrs. Avery is accompanied by her daughter, Miss Adelaide Avery.

DR. H. M. MEEKS of Nashville, Tenn., recently accompanied his son Mr. E. A. Meeks to the Sanitarium and decided on his arrival himself to take treatments. He has since returned to his home, his son remaining on for further treatments.

PROFESSOR Edward M. Brigham, one of Michigan's best known naturalists, gave a lecture in the Sanitarium gymnasium the evening of May 3d on "Exploration Among the Andes." Professor Brigham favored the audience with a remarkable collection of lantern slides.

DR. W. F. MARTIN, of the Sanitarium staff of physicians, has returned from a visit to the east. In Boston Doctor Martin attended a meeting of the American Urological Association, after which with several of his fellow members he went to New York to attend clinics in several of the large metropolitan hospitals. Doctor Martin put in his time in a rather strenuous manner, but returned to his work refreshed and invigorated.

At the first of a series of gatherings being held by the women physicians of the Sanitarium staff, serious and semi-serious in character, Dr. Maud Vollmer read a paper on "Panama Tolls." Dr. Leslie Fraser hit off in humorous verse what she called the "foibles" of her fellow women physicians, while Dr. Mary V. Dryden spoke on "Home Making." A feature of the occasion was a letter read by Dr. Elizabeth Kerr Harris from Dr. W. H. Riley, describing some of the experiences which he is meeting within his studies abroad. Games were played and refreshments served.

### Face Bleaches

A VERY interesting question found its way to the Question Box the other night. Some one inquired as to the effect of face bleaches, to which Doctor Kellogg replied, "They are bad. They do a great deal of damage because the lead which most of them contain is absorbed into the body, and besides injures the skin. At the best, the use of powders is hypocritical, for they are used in most cases to cover a bad condition within. The best thing is to get clean inside, after which the face will care for itself. Just the other day a patient asked me to examine her tongue, which I found foul, indicating a foul condition within the body. I said, 'I am sorry you are neglecting your face.' 'Why,' she said, in surprise, 'is my face not clean.' 'The back side of it,' I said, 'is very dirty,' and when I explained, she saw the point. And so it is, the inside of the face is much more important than the outside, and the necessity of a face powder on the outside is a fair indication of an unclean state inside. And it is far better to remove pimples and blotches and liver spots and other unsightly things by giving the body a general cleaning out, than to hide them up by means of face bleaches and powders.

### Prominent Michigan Business Man Advises Friends

ONE of the most recently arrived and most honored guests is Mr. F. W. Moore, General Superintendent of the Diamond Crystal Salt Company's works, a position which gives him the charge of the manufacturing part of the large plant at St. Clair, Michigan. Mr. Moore has been receiving treatment here for some two weeks, and states that he is already feeling much better. "I think the cause of my trouble has been discovered," he says. He is greatly pleased with the equipment and the methods of the institution, and expresses his faith in the beneficial character of the dietary system. He also pays a high tribute to the great courtesy and kindness of the Sanitarium helpers, "which," he says "helps one very much." Mr. Moore added that "I have written my friends telling them that, if they become sick, I know of no better place for them to receive treatment than at the Battle Creek Sanitarium."

### TAKING THE INVENTORY

(Continued from page five)

furnished to the patient gives both the normal figures and the figures found in his individual case, so that he can see at once his physical standing as indicated by the urinary examination.

#### The Fecal Analysis

The alimentary residues of the first and the last days of the three-day research are analyzed and tested with the most painstaking care, and a number of important determinations are made. By this means only can precise information be obtained concerning the changes which the food has undergone while passing through the entire length of the alimentary canal. The presence in the feces of undigested foodstuffs, of parasitic bacteria swarming in numbers vastly greater than the normal, are significant facts, which have not been fully studied or appreciated until recently. More extensive examinations of this sort have been made in the clinical laboratory of the Sanitarium than in any other, and many important observations and improvements in technique have been developed. This examination includes, of course, careful search for tapeworm and other parasites.

#### Telltale Data of Digestion

The findings in the fecal examination determine principally the following points:

1. The length of time required for the food to pass through the entire alimentary canal. The normal time is eighteen to twenty-four hours.
2. The solution and absorption of food. The presence of food in masses visible to the naked eye is evidence of insufficient mastication as well as imperfect digestion.
3. The action of the appropriate digestive juices upon each of the three food principles—protein, fat, and carbohydrates.
4. Digestion by the stomach.
5. Digestion by the pancreas.
6. The number of bacteria, both dangerous and "friendly," per gram of dried feces.
7. The number of putrefactive bacteria per gram.
8. The amount of indol and other products of putrefaction.





View on one of the large Sanitarium farms.

9. Catarrhal and inflammatory condition in the large or small intestine.

10. Parasites of various kinds.

The estimation of the indol of the feces, and at the same time of the indican in the urine (indican is indol transformed by action of the liver), affords the only accurate and reliable method of measuring the presence and extent of putrefactive processes in the intestine. This method was first organized and set in operation in the Sanitarium laboratory.

#### Testing the Stomach

If the patient is suffering from some stomach disorder, a test meal is administered, usually a test breakfast. The fluids obtained from the stomach by this test meal are subjected to as thorough a series of analyses as that used in the assaying of ores, and the results are equally useful and reliable.

In addition to the test breakfast of Ewald, several other test meals are employed, especially the test dinner and the test supper, which are especially indicated to test the motility of the stomach, that is, its ability to empty itself of food. Other special meals are employed in special cases, as the Boas Meal in cases in which cancer of the stomach is suspected.

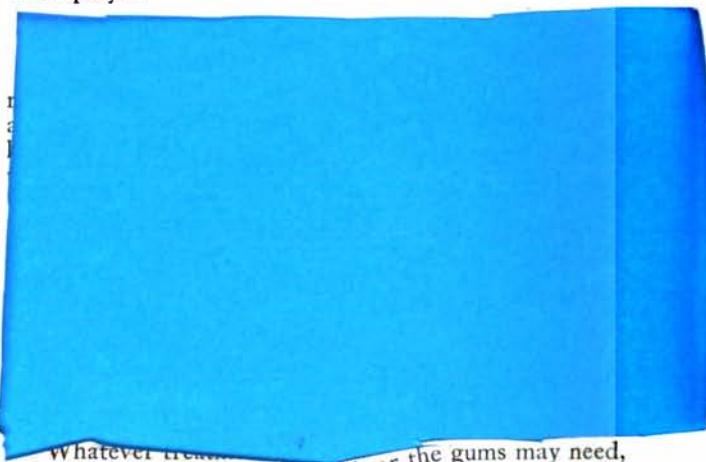
Among the many important facts determined by this examination of the stomach fluids are the following: the physical character of the stomach contents; the presence of mucus, blood, or other morbid elements; the presence of bacteria, yeast and molds, and in what numbers; the proportion of anaerobes, or poisonous germs, and aerobes, or "friendly" germs; the character of these germs—whether acid-forming, gas-forming, milk-coagulating, etc.; ability to digest proteins, as shown by the total acidity, total chlorin, free hydrochloric acid, presence of pepsins and other ferments, etc.; ability to digest starch, as shown by the amount of maltose, dextrin and soluble starch, organic fatty acids, etc., and by the quality of the saliva.

These data, with many more, are recorded on the Gastric Report, which gives a full explanation of the

findings, together with a series of highly important coefficients which show the exact percentage of variation from the normal digestive powers, and a chart on which this variation is graphically represented. The motility and capacity of the stomach are also ascertained. This precise determination of diseased conditions present renders great assistance in the application of the treatment that will bring about the surest and speediest improvement.

#### Testing the Nervous System

Modern researches have developed a number of exceedingly interesting methods by which the structural and functional states of the central nervous system may be tested. With the help of the chronometer, kymograph, and other delicate measuring and calipering devices of the psychological laboratory, it is possible to determine with accuracy the actual condition of the brain and spinal centers. The tests include the variations of the rate of nerve transmission, the recognition of impressions of various kinds, the time required for judgment or decision, the reaction time with various forms of stimuli, etc. Certain tests are also applied to the vasomotor system, by means of which it is possible to measure the ability of the patient to react to the measures of treatment which are to be employed.



Whatever treatment the gums may need, may be obtained promptly at the Sanitarium dental office, which is completely fitted out with the latest resources of modern dentistry, and is in charge of an expert dentist of many years' experience.



The Sanitarium "Pump Room."



# THE BATTLE CREEK IDEA



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## THE HYGIENE OF THE ARTERIES

### THE CAUSES OF ARTERIOSCLEROSIS AND SOME SIMPLE MEANS BY WHICH IT MAY BE RELIEVED

IN no other disease are the vicious effects of our modern habits of life better seen than in arteriosclerosis, or hardening of the arteries. Every practising physician finds that a growing proportion of the patients who come to him are suffering from this disorder; and every physician early discovers that there is no hope of cure without a complete change in the manner of living. The diet must be put on an antitoxic basis; the eliminative functions of the liver and other organs must be brought up to the highest efficiency; exercise and other means must be adopted in order to increase the tone and general resistance of the body, and there must be cultivated a spirit of optimism and hope.

Hardening of the arteries is due to changes in the walls of the blood-vessels which result from the irritating effects of poisons circulating in the blood. An irritant applied to the skin causes, first irritation, then thickening, and finally hardening and contraction. This is just what happens to the blood-vessels when poisons circulate in the blood.

#### Common Poisons That Encourage High Blood-Pressure

The most common poisons that are active in producing higher blood-pressure are syphilis, alcohol, the nicotine of tobacco, the caffeine of tea and coffee, the pungent oils found in pepper, mustard and other condiments, the uric acid of meat and meat extracts, and most common and most active of all, poisons absorbed from the colon. Poisons in the colon result from the putrefaction of undigested food, especially meat, and hence meat eaters are especially liable to arteriosclerosis, and heavy eaters and meat-eating animals are usually short lived.

Constipation is always accompanied by putrefaction in the colon and autointoxication, and so encourages degeneration of the blood-vessels, as well as of the kidneys and other parts.

That chronic lead poisoning through lead pipes is another cause of hardening of the arteries has been clearly proved.

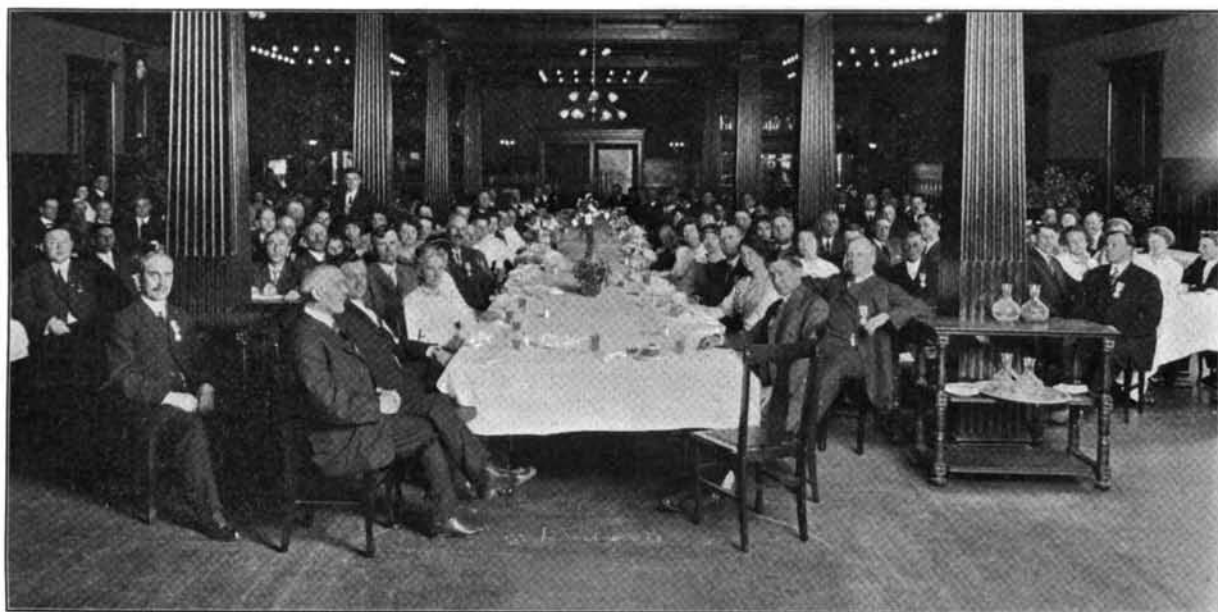
The body is protected against the poisons mentioned and others by certain organs which have for their function to destroy poisons and to remove them from the body. The most important of these poison-combating organs are the intestinal mucous membrane, the liver, the kidneys, and the thyroid gland; of all these the liver is the most important.

#### The Liver, The Hardest Worked Organ

Now more people complain about the liver than about any other organ of the body, when, as a matter of fact, of all the organs of the body the liver is almost the least worthy of blame. It is the most untiring in its efforts to preserve our lives; it is the most industrious; and, aside from the brain, it is the most wonderful and the most mysterious organ of the body. It carries on a large number of activities. It secretes, it excretes, it creates, it destroys, it tears down and builds up. It seems to be a sort of jack-of-all-trades in the body, and an expert in every one of them, and yet the most powerful of microscopes fails to reveal in the simple structure of the liver any hint whatever of this marvelous diversity of function.

One of these many functions of the liver is the making of bile, of which it produces from sixteen to twenty-four ounces every twenty-four hours. Bile is one of the most poisonous of body wastes and needs to be eliminated from the system as speedily as possible. It is composed not only of alkaline wastes, but also of bacteria that have been removed from the blood, and of various poisonous substances which may have been taken into the stomach with food or drink. It serves a number of useful purposes, being an antiseptic, a laxative, an aid to absorption, and prevents the acid gastric juice from digesting the small intestine by the simple expedient of neutralizing its acid acid.

Glycogen, one of the essentials of life, a substance needed by every living cell, is another product of the liver. Glycogen is a product of sugar brought to the liver from



### BANQUET TO THE MICHIGAN LAUNDERERS

TUESDAY evening, May 20th, the Sanitarium entertained the Michigan Laundrymen's Association at a banquet in the Annex dining room, covers being laid for one hundred and fifty guests. The tables presented a charming appearance, the decorations as well as the entire service being the work of the students of the Sanitarium School of Health and Home Economics. The menu followed. After the last course had been served, a short toast program followed. Doctor Kellogg made the first address of the evening, welcoming the guests in behalf of the Sanitarium. "Some one," said Doctor Kellogg, "has said that a community may be judged by the amount of soap it uses: the community that uses much soap is civilized, and vice versa. Another wise man has said that cleanliness is next to godliness. Someone once asked Henry Ward Beecher to which side cleanliness applied, and the great clergyman said, 'Both sides, in and out.' So you see the work of the laundry stands very close to that of the church.

"Now, we are really delighted to welcome you tonight, the more especially as we regard our work as being allied to yours. The Sanitarium is really a laundry. You cleanse the clothes; we cleanse the people. We try to iron

out wrinkles, to bleach out dirty skins—yes, we try to do even a little more: we try to show people how to keep clean, so that we shall not have to launder them again. In this respect, you see, we go a little farther than you do.

"To illustrate, earlier in the evening I was giving a Question Box lecture for ladies, and the very first question I came across was this, 'How can I remove liver spots?' Now, liver spots are a sign of a dirty skin that needs careful laundering. My reply to the question was, 'Do not eat liver spots,' and that is why we have put no liver spots on your menu tonight. You will observe that you have not had any fricaseed liver, or any other form of meat, for if one will constantly omit from his diet liver and other flesh foods, he will not need to ask for information about how to remove liver spots."

Miss Lenna F. Cooper, head of the Sanitarium School of Health and Home Economics, followed with a short address, in the course of which she made the observation that the Sanitarium is one of the only two schools of home economics in the country which has in its curriculum a course in institutional laundering, a statement which, one may be sure, met with the approval of the guests present.

the intestine by the portal vein. This sugar, however, is not the ordinary cane sugar with which we are familiar, but a fruit sugar formed by the digestion of starch. In diabetes this function is disturbed; the body gradually loses its power to store glycogen, and death occurs.

Waste substances produced by the work of the body or by changes in the intestines, or that have been taken into the body with food, such as uric acid, are converted into harmless urea by means of special ferments which are formed by the cells of the liver. The discovery of this important function of the liver explains the zoological fact that carnivorous animals, and especially scavenger

animals, have extraordinarily large livers. A dog has a liver four times as large as that of a man in proportion to its size, because it has so many of these poisons to take care of. If man had a liver as large in proportion as that of a turkey buzzard, there would be no room left for the other organs of the abdominal region. Large meat eaters compel their livers to do three or four times as much work as is required with a low-protein or non-flesh dietary. It was on this ground that the late Professor Dujardin-Beaumetz, of Paris, forbade the use of flesh foods of all sorts in all cases of disease of the liver or kidneys.





The Kalamazoo, near Battle Creek.



One of the Sanitarium greenhouses.

### How Bacteria Enter the System

Under the conditions of our modern civilized life, the ordinary mixed diet introduces into the system an enormous number of germs. The poisons produced by some of these germs are identical with those produced by the putrefaction of a dead animal or a decayed egg. In moderate quantities the liver is able to deal with these poisonous products, but its capacity is limited; hence the "biliousness" which results from constipation, over-eating, and the free use of meats. These bacteria are constantly passing through the intestinal wall into the veins and thus find their way to the liver. The liver cells destroy many of these, but great numbers often find their way into the gall bladder, causing inflammation of the gall bladder and gall stones.

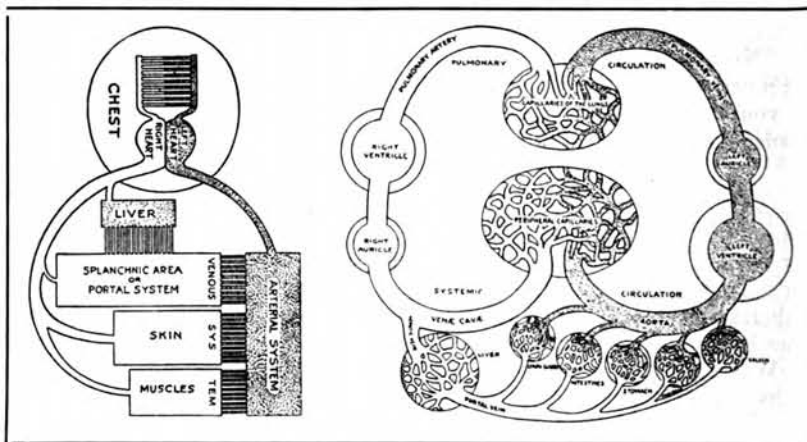
In recent times it has been demonstrated that the vital processes of the body have two quite independent sources of regulation—the nerve centers, on the one hand, which send out exciting and controlling nerves, and, on the other hand, internal secretions which act in relation to such great functions as muscular activity. The action of every muscle, of every gland, probably of every cell, is controlled by these remarkable and most subtle substances, of which many eminent physiologists believe the liver is the source. It is readily

apparent, then, how great must be the disturbance of the vital machinery when through any cause the functions of the liver become deranged, as in the condition commonly known as "biliousness." This term, while not scientific, is nevertheless significant in that it suggests a disturbance of the bile-making organ, which is in a condition of enormous overwork, and unable to meet the extraordinary and unnatural demands made upon it.

Every person is indebted to his liver for rescue from speedy death. This marvelously versatile organ has power to destroy poisons. If a person drinks water containing lead, or eats peas or pickles colored green with copper, the liver seizes upon the poisonous metal, and after discharging as much of it as possible through the bile, gathers the remainder up in its cells, thus preventing the circulation of the poison to the rest of the body. When a person is found suffering from metal poisoning, the fact is evident that the liver has been seriously damaged; otherwise other organs would not have suffered. The smoker, the user of alcohol, or the opium slave would have suffered death from the first indulgence in his poison were it not for this marvelous function of the liver. Tea and coffee, too, are active agents in causing premature breakdown of this important vital machine; and the same must be said of the condiments, mustard, pepper, capsicum, spices, vinegar, hot sauces, and the use of chemical substances in bread making. All of these substances should be carefully avoided, unless one wishes to die prematurely.

A brief study of the physiology of the liver and its relation to the circulation of the blood will explain the manner in which this protective function of the liver is performed, and emphasize the importance of not over-taxing it by the use of poison-forming foods and beverages, and irritating spices and condiments. First let us examine the heart.

The human heart is really not a single organ, but a double heart—a left and right heart, as will be seen from the illustration. Some animals have three or four hearts located in different places, but the human system has but one, divided into two sections—as we have said, the right and left heart. The left auricle and left ven-



At the right is shown in graphic form the three circulations: the "systemic," "portal" and "pulmonary." The illustration at left shows the two hearts, the reservoir-like capacity of the arteries, and the capillary system through which the blood must be pumped before it reaches the right heart and the pulmonary circulation.



**CLEVELAND CHAMBER OF COMMERCE REPRESENTATIVES GIVEN BANQUET AT THE SANITARIUM**

THE evening of May 12th the Sanitarium tendered a banquet to fifty representatives of the Cleveland Chamber of Commerce, who have been visiting the larger cities of Southern Michigan for trade extension purposes. Before the banquet the guests were taken about the Sanitarium by Dr. A. J. Read and shown the working of the various departments. In the sixth-floor dining room, they were welcomed in a short speech by Dr. J. H. Kellogg, in the course of which the Doctor explained the principles upon which the Sanitarium is based, going at some length into the position of the Sanitarium with reference to diet and poison-producing habits, such as the use of tobacco and alcoholic drinks. "Any man," said Doctor Kellogg,

"who stops to study himself, who inquires into the means by which he can conserve his vital energy and increase his efficiency discovers that the first thing to do is to raise the load off his liver and other organs. He discovers, for instance, that the work his lungs and his kidneys are required to do in eliminating nicotine is far more than all the work involved in digesting foods and performing intellectual labor, and if he is a wise man, he will drop at once the use of tobacco. He discovers, also, that meat and alcohol and tea and coffee give rise to poisons that cripple the organs of elimination, and he is bound to discard them at the same time he discards the use of tobacco."

tricle pump the pure blood through the aorta into the peripheral capillaries in all parts of the body, where it is gathered up by the veins and carried into the vena cava, the large central vein that carries the impure blood into the right heart. This is known as the "systemic circulation."

By the right heart the blood is pumped into the pulmonary artery, whence it is carried to the lungs. The blood now circulates through all parts of the lungs, becoming oxygenized and freed from the impurities which it has picked up in its journey from the left heart. From the lungs the blood travels by way of the pulmonary veins back to the left heart, whence it is ready to set out again on its journey of the systemic circulation. This journey, from the right back to the left heart, is called the "pulmonary circulation."

The most interesting part of the story has yet to be told, however. Part of the blood, after it leaves the left ventricle, leaves the systemic circulation and is distributed to the stomach, intestine, pancreas, spleen and other organs. From these various organs the blood is conveyed by a large vessel, known as the "portal vein," to the liver, where it is filtered, as it were, and the grossest of the poisons from the organs just named are removed. In this way all the elements absorbed by the veins of the stomach during digestion are submitted to inspection before being allowed to enter the general circulation. From

the liver the blood is carried to the "ascending vena cava" by means of the hepatic vein, and is then carried to the right heart. This circulation of the blood through the stomach, intestines, pancreas and spleen is known as the "portal circulation."

The integrity of the portal circulation is of the utmost importance. All the many poisons which the blood gathers from the stomach, the spleen, the pancreas, and the intestines are carried by the portal vein to the liver—poisons, that is to say, which have been absorbed from the stomach and other organs, and poisons that have been ingested with the food and drink. A large part of these poisons the liver destroys, the others are carried on by the blood into the hepatic vein, which returns them to the systemic circulation.

The destruction of poisons by the liver is one of the most important processes in the entire body. People have been known to live without a stomach, and still others with but one kidney, while portions of the intestinal canal have been removed without any appreciable effect on the patient; but if a person's liver should be removed he would die in a few hours, fatally poisoned by the toxins which enter the general circulation because not filtered out by the liver.

A visitor to the laboratory of the great Professor Pawlow, in St. Petersburg, is shown a dog with an "Eck's fistula," in which the portal vein, which carries the im-

pure blood to the liver to be purified before it goes into the general circulation, is attached to the vena cava, making it impossible for the blood to go through the liver. The animal that has this operation performed gets well in a few days and appears like any other dog, but it is necessary that it should live on a very strict diet. If he eats meat of any sort he dies within three days. Why? Because the poisons from the meat go into the general circulation without being freed from the blood by the liver. If, on the other hand, the dog is fed upon a vegetarian diet, he can play about like any other dog and be as well as any other animal.

There are many people who suffer from bilious attacks. They have livers like the dog's. Of course the portal vein has not been joined to the vena cava, as is the case with a Pawlow dog, but the liver has been crippled to such a degree that it is almost as much disabled as if the

operation had been performed. The bilious attack means simply poisoned blood—in other words, auto-intoxication. The poisons of auto-intoxication are the most deadly that are introduced into the body. If a butcher cuts his finger with a knife with which he has been cutting meat, he will die of blood-poisoning, but he can take an equal amount of the same poison into his stomach and it will not kill him, because the liver takes care of these poisons.

In order to be effective in its work of removing impurities from the body, the blood must have an uninterrupted flow through all the blood-vessels. The blood after leaving the left ventricle, passing from the aorta, enters a vast network of fine capillaries before it empties again into the vena cava. Again, the blood must traverse a vast capillary system before it passes through the pulmonary circulation back to the left heart.

To propel the blood through the blood-vessels of the body, the heart pumps night and day without any rest, except what it gets between beats. Thus, the total amount of work done by the heart in twenty-four hours in its contractions, in an average man, is about one hundred and twenty-four foot-tons; that is, it is equivalent to lifting one hundred and twenty-four tons one foot high, or lifting a one-hundred pound weight one foot high 2,480 times, or at the rate of about four times a minute for ten hours.

The heart, indeed, is in effect a force-pump, as will be recognized by the diagram on the left. The "arterial system" is a great reservoir into which the heart is constantly pumping blood with a force that knows no diminution. From the arterial system the blood passes through the capillaries (indicated in the illustration by fine horizontal lines) into the venous system (represented in the illustration at the right by the sections labeled "skin and muscles"), and into the portal system.

The venous blood of the skin and muscles is carried directly to the right heart, while that in the portal system, or "splanchnic area," has to pass through the liver for the removal of its poisons. In the same illustration the capillaries of the pulmonary circulation are represented at the top of the picture, also by horizontal lines.

In view of the constant pressure of the blood exerted by the action of the heart, the importance of keeping the blood-vessels elastic and healthy is very apparent. With each beat of the heart the vessels are distended by the flow of blood. If, however, they become hardened so that they do not give, the blood does not readily press its way through, which, especially in the case of the arterial system, creates an abnormal pressure that results in increasing degeneration of the vessels, with ultimate rupture of the vessels, or heart failure.

#### "A Man is as Old as His Arteries"

The popular saying, "A man is as old as his arteries," could be elaborated effectively to this: "A nation is as old as the arteries of the people composing it," for the growing death-rate from diseases of the arteries is assuming the proportions of a national calamity. In the year 1900, 6.17 people out of every 100,000 died from this disease. During the ten years that followed this figure increased 227.9 per cent. That is to say, where ten years ago one person died from arteriosclerosis, three persons are now succumbing to the disease, with the aver-



Dinner given to the Lansing visitors by the senior class of the Sanitarium School of Health and Home Economics.

#### Michigan Agriculture College Students Study Sanitarium Methods

THE senior class of the Michigan Agricultural College, of Lansing, spent the afternoon of Thursday, May 15th, at the Sanitarium, for the purpose of studying the institutional equipment and work of the Sanitarium School of Health and Home Economics. The visitors were accompanied by Miss Yenowine, Director of the Domestic Art Department, and Miss Agnes Hunt, Director of the Domestic Science Department, Miss Hunt being a sister of Miss Ada Hunt, instructor in the Sanitarium School.

The afternoon was spent visiting various places of interest, such as the static room, gymnasium, ladies bath, electrical department, kitchen, basement storeroom, cooking school, and the respiration apparatus room.

At five o'clock a reception was held in one of the cooking school rooms, where the guests became acquainted with the young ladies of the Sanitarium School, afterward being tendered a banquet by the Seniors in the sixth-floor dining room.



age mounting rapidly towards four persons. An increase, not so rapid, has likewise taken place in disorders of the heart, which bear a close relation to arteriosclerosis, and which are produced by practically the same causes that produce arterial degeneration.

This growing prevalence of the disease corresponds very accurately to the development of those conditions to which every scientific observer ascribes it. "The best express engine from the Baldwin works," says Dr. William Osler, "run day by day at maximum speed will not last one-half the time it would do if it were not so pushed, but nowadays with the human engine it is top-speed or nothing, and we cannot wonder that it early shows signs of hard usage. In the fourth or fifth decade, even with the best habits in eating and drinking, the incessant strain and anxiety of public life or business may lead to degeneration of the blood-vessels. Mental exertion is not in itself injurious, and the life of the student need not be one of great tension, but the mental extortion of the modern business man is of a different kind. Competition is so keen and the environment so stimulating that, even without social or political ambitions, high pressure seems a necessity." The result is, says Doctor Osler, that it is exceptional to examine the arteries of a person past sixty without finding evidence of degeneration.

Dr. Lewis M. Warfield, an acknowledged authority on the subject, likewise says that "the stress and strain of our daily life has, as one of its consequences, early arterial degeneration. There can be no doubt that arterial disease in the comparatively young is more frequent than it was twenty-five years ago, and that the mortality from diseases directly dependent on arteriosclerotic changes is increasing. . . . The wear and tear on the human organism in our modern way of living is excessive. Hard work, worry, and high living all predispose to degenerative changes in the arteries, and so bring on premature old age."

Yet the expression, "modern way of living," conveys little meaning; the term is relative. We are all subject to conditions of life which are peculiarly modern, yet all do not suffer from arteriosclerosis. Many people work under tension for long hours, and bear burdens of heavy responsibility, yet have arteries as healthy as those of a child. Not infrequently people with weak constitutions choose a definite mode of life that will give them an ability to do strenuous work and to compete with their fellows who are blessed with more robust bodies, and almost invariably they succeed.

#### Diet Correction of First Importance

The first step in diet correction is to reduce the quantity of food. Most people will find that they can reduce their daily ration by one-third, sometimes one-half, without any inconvenience whatever. The change need not be sudden; the individual can make the reduction gradually until, in the words of Doctor Osler, "he finds the minimum on which he can maintain mental and bodily vigor." After a heavy meal one will often observe the heart pumping with extraordinary vigor. When this takes place three times a day, year in and year out, it is bound to have a degenerative effect on the arteries, for they are not constructed for heavy work of this kind.

Moreover, excess food becomes converted into poisons which, entering the circulation, irritate the walls of the arteries and encourage degenerative processes. One of the first things that the experienced physician prescribes for arteriosclerosis victims is a vastly reduced ration; and it is seldom that the body does not respond to this very efficient form of treatment.

Akin to overfeeding is hasty eating. Foods swallowed without sufficient insalivation are unassimilable by the system and circulate throughout the body as poisons, irritating the walls of the arteries in the same way as excessive food, and setting up degenerative processes that can result only in arteriosclerosis. It is a fallacy that the business man, no matter how hurried he may be, must eat rapidly. Ten minutes of good mastication will supply the system with as much utilizable nourishment as ten minutes of rapid eating. In the one case no food is taken which the body does not utilize; in the other, much food is taken into the stomach, but most of it the system is not able to use at all, because of the insufficient chewing which it receives.

#### Excessive Proportion of Proteins

Another most serious dietetic error is to eat freely of foods containing a large proportion of proteins. Experiments conducted during the past few years have shown conclusively that under the old standard the protein ration was too high. Many of the older physiologists claimed that from one-fourth to one-sixth of the total food intake should be protein, but Chittenden and Fisher and others have shown that protein equivalent to one-tenth of the total food intake is sufficient to maintain even the hardest kind of muscular work.

The danger from excessive protein lies in the tendency of the protein or nitrogenous foodstuffs to undergo rapid decomposition, the products of the decomposition acting upon the system as irritant poisons. The seat of these decay processes is the colon, where, especially in cases of constipation, large masses of foodstuffs collect, the protein parts of which become a veritable still of poisons. A certain amount of poisons are, of course, being constantly produced within the body; the vital processes by their very nature involve the generation of toxins which, allowed to remain in the body and circulate freely in the blood, would surely result in disaster. To take care of these poisons, however, the body is provided with the various eliminative organs mentioned last month—the lungs, the skin, the liver and kidneys. In the case of the muscle worker, these organs, especially the lungs and skin, are active, and eliminate readily the toxins produced under normal conditions, but when, through hasty and high-protein feeding, we encourage the excessive formation of dangerous poisons, the system is totally unable to cope with these substances, with the result that many of them remain in the system, irritating and degenerating the various tissues with which they come in contact, their effect being especially fatal in the case of the artery walls. The mischief is intensified in the case of the sedentary worker, in whom elimination by way of the skin and lungs is reduced to a minimum.

#### How Spices and Condiments Poison

Excess food and an over supply of protein poison the system by means of toxins created *within* the body. An-

other class of substances introduce poisons from *without*. These are the condiments and spices with which we season our foods, as though Nature were a novice in the business of catering. Excessive salt, pepper, pepper sauce, horseradish, tobacco, vinegar—all these and other relishes with which we smother the natural flavor of our foods have in the system the effect of the most vicious poisons, and, defying the already overworked liver and kidneys, circulate at will through the body, and irritate the arterial walls, preparing the way for the worst forms of arteriosclerosis.

The question naturally arises, what diet is least conducive to degeneration of the arteries. The answer is so simple as to be ridiculous if the civilized world had not strayed so far from a natural dietary. It seems a trite reply to say that the individual should eat only natural foods; that is, foods naturally adapted to the human constitution, but we have wandered so far away from natural modes of living, and have so far forgotten the fundamental principles of natural human feeding that the statement is not by any means trite. It may be elementary, but trite it certainly is not. And after all, in the question of diet we must get down to elementary principles, keeping in line with the methods of reform in other directions—for in the political, social, economic and moral reforms which characterize our day, is not the outstanding feature, in every case, the tendency to go back to simple, foundation principles?

By natural foods, then, we mean those foods which are included under the heads of fruits, nuts, grains, legumes and vegetables. Of special value in combating arteriosclerosis are the fruits and vegetables. The nutrient qualities of the fresh fruits are ready for assimilation by the body; that is, no long digestive process in the stomach is necessary, and as a result they begin entering the circulation as soon as they reach the stomach, with the result that there is no opportunity for fermentation in the intestines, or the production of irritant poisons.

Vegetables contain a considerable proportion of cellulose, which, being practically indigestible, adds to the bulk of the intestinal content, and combats constipation, the source of so many poisons.

Avoid meats of all kinds, including flesh, fowl and fish. These foods are rich in protein, and protein, as we have already pointed out, undergoes putrefaction readily in the intestine.

Meats undergo putrefaction in the colon with particular rapidity because in most cases they contain harmful germs that give rise to the most virulent poisons, whereas the proteins contained in vegetables are free from organisms of any kind. There is a common notion abroad that the germs contained in meat are destroyed by cooking, but this is an error, for very few cooking processes get sufficient heat into the interior of the meat to destroy bacterial growth.

#### Eggs and Milk Should be Avoided

Eggs are also rich in protein, and should therefore be used in great moderation. They encourage putrefaction in the intestinal tract, highly favorable to the development of arterial hardening. The yolk of the egg is less harmful in this respect than the white, inasmuch as it contains less protein.

Milk, because it contains considerable protein, but especially because in a very large proportion of people it produces constipation, headache, "biliousness," coated tongue, and other symptoms of autointoxication, should form a very small part of the menu of the individual suffering from disease of the arteries. Buttermilk—particularly buttermilk made from a culture of the Bulgarian bacillus—may, on the other hand, be used to advantage by any one, even though ordinary milk does not agree with him; sour milk, too, as Doctor Osler points out, "has been a favorite drink with many persons who have lived to a vast age, like Thomas Parr.

Cane sugar, since it encourages indigestion and gastric catarrh, which in turn, produces a prejudicial effect upon the entire nutritional system, should be used very sparingly. Cane sugar also produces a condition of the blood which favors hardening of the arteries.

Tea and coffee are arterial poisons. Few of the millions addicted to these drugs are aware that they contain from three to six per cent of a deadly poison, whose effects are very apparent to a careful observer. The sallow complexion, so common among women of the higher classes who have reached middle life, the nervousness which characterizes our present day life, together with the many forms of nervous disorders, and the increasing prevalence of nervous or sick headaches, afford ample evidence of the fact that tea and coffee, and the allied beverages, cocoa and chocolate, are poisons of a grave type. The well-known effect of these drugs in producing wakefulness, banishing as if by magic the sensation of fatigue, affords sufficient evidence of their poisonous character. No one would doubt for a moment the poisonous nature of a drug capable of producing irresistible drowsiness in a person who is not weary. The power of a drug to produce wakefulness in a person who is strongly inclined to sleep as the result of fatigue, is equally evidence of its very poisonous character.

Closely allied to the poisons just named are, so far as their deadly effects are concerned, tobacco and alcohol. Alcohol formerly had a reputation as a foodstuff, a quality which, in the minds of many people condoned, to some extent at least, for its intoxicating characteristics. Modern research, however, has shown this to be wholly erroneous, and so far from acting a benevolent part in the metabolism of the body, exercises a severely damaging influence. Professor Kochlakoff, of St. Petersburg, made experiments on five healthy persons ten minutes before each meal, giving each person three ounces of alcoholic liquor, containing from five to fifty per cent of alcohol, the proportion found in ordinary alcoholic drinks. The Professor found that "under the influence of alcohol, the acidity of the gastric juice and the quantity of hydrochloric acid, as well as the digestive power of the gastric juice, are diminished. The enfeebling of the digestion is especially pronounced in persons unaccustomed to the use of alcohol." Doctor Figg, of Edinborough, experimented upon two dogs to whom he fed equal quantities of mutton, then administering to one dog one and one-fourth ounces of alcohol. After five hours the dogs were killed and examined, and it was found that the one which had been given no alcohol had digested his meal entirely; whereas in the case of the other dog, on the other hand, digestion had hardly begun.

### Alcohol Produces Serious Changes

Alcohol likewise produces serious degeneration of the stomach, irritating its walls, producing a chronic dilation of the blood-vessels, and covering the interior surface with small ulcers. The effect of alcohol upon the liver is not less notable, assuming in time a characteristic condition known as "hobnailed liver," a condition in which the organ is shrunken, hard and almost wholly useless, insensible to ordinary nerve stimulation. Degeneration of the liver sometimes takes the form of what is known as "fatty degeneration." In both cases the liver is absolutely unable to perform the functions for which nature peculiarly adapted it—which are those of a sieve or filter. That is to say, a healthy liver filters out from the circulation the poisons which have entered the blood and withholds them from the general circulation, rendering them incapable of doing harm. But when the liver is wholly incapacitated these poisons flow through without any obstruction whatever, and, circulating throughout the blood-vessels, produce the same degeneration of the arterial walls as is found in the case of the liver. This is not to say, of course, that every victim of arteriosclerosis is a hard drinker, or even a moderate drinker; but it does show that the individual who at one and the same time indulges in alcoholic drinks and suffers from symptoms of arteriosclerosis should at once give up the use of alcohol in every form.

While tobacco does not exert the same influence upon the stomach and the liver as does alcohol, yet the nicotine of tobacco is quite as deadly as alcohol, and adds its quota to the vast flood of poisons which must pass through the liver and which, in time, render it perfectly useless as a filtering organ. Once in the general circulation, it is not too much to say that it produces effects upon the artery walls every bit as injurious as those of alcohol. The same statement applies to that vast group of poisons which, under the name of "dope" is increasing in use at such an alarming rate. Absinthe, opium, cocaine, morphine—in the death of every person addicted to these horrible drugs the degenerated condition of the arteries will be found to have played a very prominent part.

### Golf and Other Corrective Exercises

Among corrective measures exercise should occupy a prominent place. Care should be taken that this is not violent, such as boxing, jumping, rowing, swimming, baseball, and other recreations carried to the point of extreme fatigue—all of these forms of exercises are too strenuous if the symptoms of arterial hardening have made any degree of headway. All exercise is best taken out of doors, and of all outdoor recreations golf is perhaps the best. As Doctor Warfield points out, "it is not too violent for the middle-aged, yet it gives the young athlete quite enough exercise to tire him. It is played in the open; one is compelled to walk up and down in pleasant company, for golf is essentially a companionable game, while he reaps the whole benefit of the invigorating exercise. The blood courses through the muscles and lungs more rapidly; the contraction of the skeletal muscles serves to contract the veins and so to aid the return of blood to the heart. The lungs are rendered hyperemic; deeper and fuller breaths must be taken; oxi-

*(Continued on page eleven)*

### IMPRESSED BY CLOCK-LIKE NATURE OF WORK

DR. O. P. GRAHAM, of Jeffersonville, Indiana, has been visiting the Sanitarium for several weeks, studying Battle Creek methods, with a view to adapting to his practice such of them as he finds suitable to his work. Doctor Graham believes in keeping thoroughly abreast with the progress being made in the medical profession, and he says he has found what he calls his "post-graduate course" here of great advantage.

"It is certainly a wonderful institution," he remarked to an IDEA representative, "and I can now understand why people who have come here are so enthusiastic over the place. Naturally I have been greatly interested in the medical features of the work, and at the same time I have been much impressed by the wonderful business-like system which prevails. Everything moves like clock work. Too often in a large institution like this, one sees various bosses about directing affairs, but here there is no visible superintendence. Every one knows just what he is expected to do and goes ahead and does it absolutely without causing friction." Mr. Graham is accompanied by Mrs. Graham and their child.

### NOTHING LEFT UNDONE, SAYS IOWA BUSINESS MAN

MR. S. R. CORNELIUSEN is a veteran business man of Story City, Iowa, having followed a mercantile career of more than half a century. Mr. Corneliusen is now a guest at the Sanitarium, coming here for rest and recuperation, which he finds very agreeable after the strenuousness of a long life of business. "This is a wonderful place," he remarked the other day to an IDEA representative. "It seems as though nothing has been left undone to aid the sick and suffering. A physician is not depended upon to do the whole work. The surroundings all tend to help the invalid out of his tendency to dwell morbidly upon his troubles. I am especially pleased by the attractive lawns and flower beds, and enjoy sitting out under the trees and basking in the delightful sunshine."

### SANITARIUM CHAPLAIN RECEIVES IMPORTANT CALL

REV. W. CHAPMAN, who since September 25th last, has been chaplain at the Sanitarium, has resigned this position, having been appointed to the pastorate of the Maple Street Methodist Church in Battle Creek. No little regret is felt at Mr. Chapman's departure, for during his connection with the institution he has endeared himself to a large number by his spirit of brotherly sympathy, his breadth of interest in the welfare of those with whom he has come into contact, and his constant, ready, and helpful service. Many good wishes accompany him to his new charge, and the hope that he may there have all that is necessary to the accomplishment of a large and permanent work. Mr. Chapman desires it to be known that he greatly appreciates the kindness shown him here. He regards his connection with the Sanitarium as having afforded him very valuable and happy opportunities in many directions, and he highly esteems the privilege of having been able to serve in the institution. Rev. W. C. Longden, for twenty-five years a missionary in China, succeeds Mr. Chapman.



# The Battle Creek Idea

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VOL. VI

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No. 11

## ANNOUNCEMENT OF ANNUAL MEETING OF THE SANITARIUM BOARD

THE sixteenth annual meeting of the Michigan Sanitarium and Benevolent Association for the year 1913 will be held in the Chapel of the Battle Creek Sanitarium, on North Washington Avenue, Battle Creek, Michigan, Thursday, June 26th, 1913, at 3:00 P. M., standard time, for the election of Trustees and the transaction of such other business as may properly come before the meeting.

By order of the Board of Trustees.

E. L. EGGLESTON,  
Acting Secretary.

## RECENT FACTS REGARDING THE GROWING PRE- VALENCE OF RACE DEGENERACY

DOCTOR TREGOLD, an eminent English authority, writing on eugenics in the July, 1912, *Quarterly Review*, presents a number of new and convincing facts showing an unquestionable trend of the English race toward race degeneracy.

First of all, Professor Tredgold considers the notable decline in the death-rate within the last half century and its relation to the question of race decadence. In 1865 the death-rate per thousand persons in England and Wales was 21.4. In 1911 the death-rate was only two-thirds as great, or 14.6. Statistics show that there has been in England a decline in the death-rate in all ages under 55. Notwithstanding this, says Professor Tredgold, "it would be extremely fallacious to conclude that a diminished death-rate is any indication of an increased power of resistance to disease and an improvement in the inherent vitality of a people."

It is gratifying to be able to quote the above statement from so eminent an authority as Doctor Tredgold. For more than thirty years we have maintained that the death-rate, or, in other words, the average longevity, is not a proper measure of the vigor of a nation, but rather the maximum longevity. The death-rate has declined, as Doctor Tredgold well remarks, "not because the nation is more resistant to disease, but because modern science has lessened its incidence and modern skill in treatment has diminished its fatality." The prevention of plagues by quarantine, the suppression of smallpox by vaccination, the control of typhoid fever by safeguarding water supplies, the better protection of infancy, and the marvelous strides which have been made in medical science, have not improved the vitality of the race but have simply served to

keep alive a large number of feeble infants who otherwise would have perished. The result is that the beneficent activities referred to have actually served to diminish the average strength and vigor of the race.

## Increase in Disease at All Ages

Doctor Tredgold demonstrates by statistics gathered from various friendly societies having an aggregate membership of nearly a million and a half that notwithstanding all the advances made in the prevention and cure of disease there has been a steady increase in the average amount of sickness at all ages shown by the following table (showing the changes in thirty years, 1866-97) taken from the Report of the Actuaries appointed in connection with the National Insurance Act of 1911:

Ages	SICKNESS PER ANNUM PER MEMBER IN WEEKS (male lives)			
	Manchester Unity 1866-70	Ancient Order of Foresters 1871-75	Friendly Societies 1876-80	Manchester Unity 1893-97
16-19	.54	1.04	.88	.92
20-24	.75	.82	.85	.90
25-29	.81	.85	.87	.95
30-34	.93	.97	1.02	1.06
35-39	1.06	1.15	1.24	1.27
40-44	1.26	1.37	1.47	1.58
45-49	1.64	1.71	1.89	1.99
50-54	2.22	2.27	2.39	2.75
55-59	3.05	3.21	3.36	4.02
60-64	4.72	4.59	5.17	6.31
65-59	7.24	7.97	8.73	10.59

A careful study of the returns of the Registrar-General of England show, according to Doctor Tredgold, that out of every 1000 children born today as many infants die from "innate defects of constitution" as fifty years ago; and this notwithstanding that the total death-rate of infants has been diminished nearly one-third. In addition to this, it is well known that a great number of feeble infants are today kept alive by scientific feeding and improved care in other respects who fifty years ago would certainly have perished. It is evident, therefore, that the proportion of feeble infants born into the world is at present very much greater than fifty years ago.

This has been made still more evident by reports of the Chief Medical Officer to the Board of Education, which show that of the six million children registered in the public elementary schools of England and Wales 10 per cent showed serious defects in vision, 3 to 5 per cent defective hearing, while 40 per cent suffered from extensive and injurious decay of the teeth; 1 per cent were found to be suffering from tuberculosis; between 1 and 2 per cent were victims of heart disease; 6 to 8 per cent suffered from disease of the nose and throat so grave as to require surgical attention, and a large number of others showed marked evidence of malnutrition. These facts clearly indicate that far more than half of the children in the public school of England and Wales today show very pronounced evidence of inherent constitutional weakness. This terrible fact perhaps bespeaks more loudly than could any other the presence of an active trend in the English race toward degeneracy and ultimate extinction.

## Significance of Increased Insanity

The increase of insanity is cited by Doctor Tredgold as another evidence of race degeneracy. While the increase of the population of England and Wales in 52 years has been 85.8 per cent, the increase of the certified insane has

(Continued on page eleven)

## LOBBY NOTES

MR. AND MRS. F. D. ORR, of Duluth, Minnesota, have arrived at the Sanitarium and will spend a few weeks with us. Mr. Orr is manager of the Dupont Dynamite Company.

AMONG recent arrivals are Dr. A. G. McGill, of Little Rock, a scientist well known in the middle west, and State chemist of Arkansas.

MR. J. H. DAVIDSON, of Thomasville, Ga., late Superintendent of the Florida Central Railway, and Mr. C. W. Pidcock, of Moultrie, Ga., President of the Georgia North Railway, are among recent Sanitarium arrivals.

ANOTHER prominent railway official, Mr. F. A. Clark, of Wortendyke, New Jersey, auditor of the Erie Railway, arrived this week.

DR. T. B. SHIPP, of Americus, Georgia, is spending a short vacation at the Sanitarium.

DR. L. G. POWELL, of Dunlap, Iowa, a physician widely and favorably known in the West, recently returned home after a week's rest. He was well pleased with the results of his stay.

AMONG recent arrivals we note Dr. T. Dillingham, of Marlboro, New Hampshire, a well known New England physician.

THE President of the Twin City Rapid Transit Company, Mr. C. J. Goodrich, of Minneapolis, is a guest at the Sanitarium. The corporation of which Mr. Goodrich is the head operates lines, not only in Minneapolis and St. Paul, but also in Stillwater, Duluth and other cities.

MISS FLORA SELL, of the Sanitarium staff of dietitians, and a graduate of the Sanitarium School of Health and Household Economics, class of 1911, has recently been called to Akron, Ohio, to become dietitian of the Akron city hospital.

AMONG the most fortunate of the present guests of the Sanitarium is Mrs. Deeds, wife of Mr. E. C. Deeds, Vice-president and Assistant General Manager of the National Cash Register Company, Dayton, Ohio, who, with Mr. Patterson, President of the Company, did so much in rescuing the victims of the recent Ohio floods. Mrs. Deeds was absent from home at the time, and so escaped the harrowing experiences of the disaster.

MR. F. E. WARD, of Chicago, the popular Vice-President of the Missouri, Kansas, and Texas Railway, is a guest at the Sanitarium.

MR. JAMES ROBERTSON, of Houghton, Michigan, Assistant General Freight and Passenger Agent of the Duluth, South Shore, and Atlantic R. R., is a guest of the Sanitarium.

ON the evening of April 15th Mrs. H. B. Wheelock, of Evanston, Illinois, very kindly favored another audience with a talk on bird-life. The occasion was a social given for the Sanitarium nurses and members of the Christian Endeavor Society. To the interest of the present talk was added the treat of a large collection of exceptionally fine streopticon views, the majority of which were from photographs taken under the difficulties incidental thereto. Following Mrs. Wheelock's talk, the Sanitarium orchestra played a number of selections, and refreshments were served.

(Continued from page nine)

dation is necessarily more rapid and effete products which if not complete oxidized would promptly act as vasoconstrictors are oxidized to harmless products and eliminated without irritating the excretory organs." Unless the symptoms have made some progress, tennis, when exercise, not the winning, is kept uppermost, may provide one of the best forms of exercise for these cases. Horseback riding, if not carried to excess, is excellent, as is also walking, the effects of the exercise being to fill the surface blood-vessels and thus relieve the arteries of much of their load.

### The Role of Optimism

Exercise can be accompanied to advantage by outdoor sleeping. Sleeping porches are easily adaptable to most houses; where this is quite impossible, the windows can be thrown wide open and the bed placed close in front of them. No fear need be had of drafts, for no harm can come of any draft produced by an open window.

Supplementing these measures must be a right mental outlook. To be afflicted with arteriosclerosis is no more inspiring than to labor under the handicap of any other disease; it is naturally conducive to an unhappy frame of mind that very easily becomes chronic pessimism. But pessimism must be fought with all the mental power that one possesses. Cheerfulness and optimism must be cultivated just as diligently as one cultivates healthy arteries, a healthy liver and a healthy stomach. It has been amply demonstrated that "fear-thought," worry, melancholy and all evil passions interfere very seriously with the digestive functions of the body; and we have seen how vitally associated are a healthy digestive system and healthy arteries.

### Growing Prevalence of Race Degeneracy

(Continued from page ten)

been 262.2 per cent. At the present time there is one insane person to every 275 of the normal population of England and Wales. This fact, as Doctor Tredgold says, is, to say the least, "very disquieting." But, as the Doctor still further shows, "there is even a more numerous class suffering from a still more serious condition, inasmuch as their incapacity is not possibly temporary, but is permanent and incurable. These are the feeble-minded."

Of this class, there is now known to be in England not fewer than 150,000, making a total of 290,000 mentally affected persons in England and Wales, besides "a vast horde of persons discharged from asylums, whose mental condition is decidedly unsatisfactory; and an additional army of individuals who, although they have not yet been committed to asylum, are nevertheless of feeble mental constitution and may well be described as potential lunatics." Doctor Tredgold makes the remarkable statement that in England and Wales the mentally infirm constitute "well over one per cent" of the entire community.

### Growth of Pauperism

Another evidence of racial decline presented by Doctor Tredgold is the proportion of paupers. The number of vagrants and paupers is shown to be increasing, and this notwithstanding the enormous amount of relief work afforded by the church, Salvation Army, charitable



An event in a swimming tournament in the Sanitarium outdoor pool. The men's outdoor gymnasium is about ready for its 1913 opening, and lovers of the natatory art will find its large pool a center of daily interest. Professor G. H. Corsan, swimming instructor in the University of Toronto, will spend a large part of the summer at the Sanitarium, while there are several local aspirants to records and trophies.

societies and committees, hospitals, homes, refuges and other charitable agencies of a private character. It is evident that in England and Wales there is a steady increase "in the proportion of those persons who are unable or unwilling to subsist by their own efforts," so that it costs Great Britain half as much to support her army of paupers as she expends upon her entire military establishment.

A marked increase in crime is another evidence of race degeneracy. Doctor Tredgold quotes from the annual report of the Home Office figures which show an increase of nearly 13,000 in the number of persons tried in the year 1910 as compared with the year 1900, showing an increase of crime amounting to nearly 25 per cent. These reports showed habitual criminals at large in addition to the number in confinement.

The foregoing and other facts lead Doctor Tredgold to say: "It is impossible to avoid the conclusion that at present England contains an increasing number of people who are failing to adapt themselves to the exigencies of the times, who are not keeping pace with the increasing demands which civilization entails, and who are deficient in the capacity to carry on the progress of the nation and of the race.

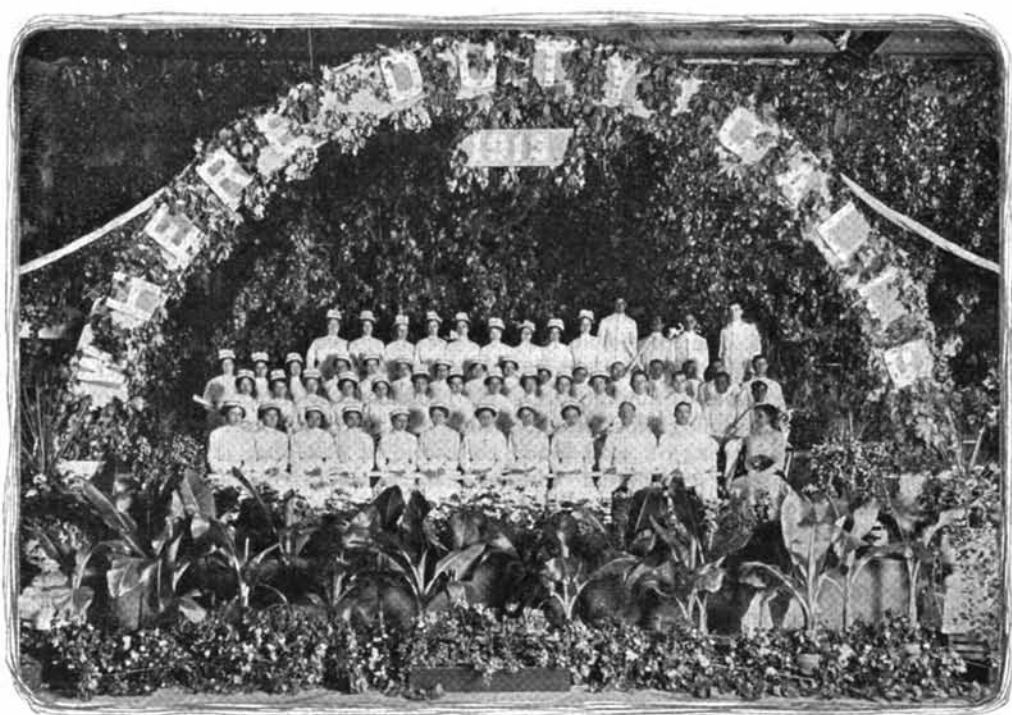
Heredity Doctor Tredgold considers one of the most active causes of progressive race degeneracy. He shows that mental unsoundness, lunacy, idiocy, imbecility and feeble-mindedness may be traced to hereditary influence in 90 per cent of the cases. Mr. David Heron and others

have shown that while there has been a marked decline in the birth-rate in the population in general, the diminution is almost entirely confined to the healthy and thrifty class. In a section of population numbering a million and a quarter persons, thrifty and healthy artisans, the decline in the birth-rate in 24 years, 1880 to 1904, was over 52 per cent, or three times that in England and Wales as a whole. Study of a large number of families of the working class of incompetent and parasitic character found that the average number of children to the family was 7.4, while in thrifty and competent working families the number of children was 3.7. In other words, the incompetent and defective classes are multiplying far more rapidly than are the competent and efficient.

Doctor Tredgold ends his very striking presentation of the evidences of race degeneracy as follows: "Life on this planet is so constituted that it can only progress by the survival and propagation of the biologically fit and the elimination of the unfit. In the course of a man's evolution a stage has been reached at which this process has been reversed, with the result that the race merely marks time, while successive nations ebb to and fro in a ceaseless rise and fall. I believe that this is but a phase, and that the time will certainly come when the antidote of eugenics will be applied, and man will continue his progress; and I have no hesitation in saying that the nation which first grasps and applies this principle will thereby secure such an advantage in increased efficiency that it will rapidly become the predominant power."



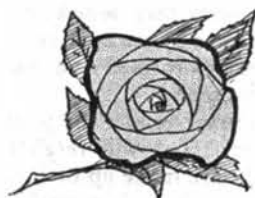
# The Battle Creek Idea



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## HOW ANTITOXIC FOODS PREVENT AUTOINTOXICATION

AN ADDRESS IN THE SANITARIUM PARLOR BY MISS LENNA F. COOPER,  
SANITARIUM CHIEF DIETITIAN

"AUTOINTOXICATION," says Combe, the great Swiss authority on the subject, "means self-poisoning." Poisons may be introduced into the body in several ways. In the first place, we may have poison added to our food, with the result that poisoning occurs. But this is not the fault of the body. It is accidental. We shall not include this kind of poisoning among the causes of autointoxication. Neither shall we include the poisoning which results from the accidental or otherwise infecting of good food with disease producing germs, such as typhoid and diphtheria germs. These germs, of course, enter the body, not through any fault of the body, but from causes outside of its control, and therefore we shall not consider these among the causes of autointoxication, neither the poisons which result from pus and other formations within the body.

### Autointoxication a Toxemia

Combe asserts that autointoxication is a toxemia, or a poisoning caused by poisons produced under the direct influence of the vital processes. The poisons thus formed within the body may be divided into two classes: First, poisons formed by the activity of the body cells or tissues; second, poisons formed as a result of bacterial activity in the digestive tract.

Let us first consider the poisons formed as a result of cell activity. You will recall that the muscular tissues of the body are made up of tiny cells and that these cells are made up of protein material, which is essential to life and is therefore a very important food constituent. But sometimes we overestimate the value of the protein so far as its quantity is concerned. It is important that we do not take protein to an excess. The protein that is left from the cells that are broken down must be cast off as waste material in some way. For the protein which is introduced into the body is first of all built up into the cells and then is broken down again into waste materials known as the waste products of metabolism. When our protein

has been built up into muscular tissue and serves its purpose there, it becomes worn out and must be eliminated. This is accomplished by the process known as oxidation, the worn-out muscular tissue being burned. In this way we get the full value of the heat production resulting from the metabolism of the food. In other words, oxidation of the protein saves an equal quantity of the "fuel" foods. Then when it is oxidized in the body, it leaves a residue consisting of uric acid, xanthin, oxalic acid, etc. These substances are carried by the blood to the excretory organs whose function it is to carry off such substances but which sometimes become over-burdened and unable to perform their functions properly.

### Autointoxication from Breaking Down of Body Tissues

Thus we may have autointoxication resulting from the tissues being broken down in muscular activity, or the ordinary activities of cell life within the body.

But we may also have autointoxication from other sources. For instance, we take food into the alimentary tract where it is digested. We find that the starches are converted into the sugars, and that the fats are emulsified and again absorbed, and we find that the proteins are broken down into peptones, amino acids, etc. Now, in the alimentary tract there are organisms which may bring about the same changes brought about by the digestive juices. We have been accustomed to thinking of digestion as taking place only as the result of the action of the five digestive juices. But we now have found that the same changes may be brought about by the action of bacteria. But, we find that there are bacteria in the intestinal tract which may bring about the conversion of starches into sugar. We find others which will bring about the emulsification of the fat, and still others that bring about changes in the proteins that are produced by the digestive juices. But, we find that the action of the bacteria is not limited to these changes. They may bring about still others, a fact especially noticeable in the



A parlor audience at one of Miss Cooper's lectures.

action of the bacteria upon the proteins. But the bacteria carry the decomposition or the breaking down of the protein molecule further than the digestive juices can do it, or more than is normal. So we find the protein molecule broken down into substances which are poisonous to the body. Among them are some which are produced as the result of a tissue being broken down, already referred to. Among these are the ptomaines. Ptomaines are poisonous substances formed from the amino acids. Amino acids are the last step in the breaking down of the protein molecule under the influence of the digestive juice. Bacteria, however, may carry this process even farther and form ptomaines. Some of them are not poisonous, but others are very toxic. Indeed, some are more toxic than the venom of snakes, so that when we have ptomaines formed, we are laying the foundation for self-poisoning, or autointoxication.

#### The Foods to Avoid in Autointoxication

These facts are of great practical importance, as pointing the way to the particular class of foods that we should eat to prevent this self-poisoning or autointoxication. In the first place, a very important thing is to reduce the proportion of protein in our food, bringing it to the point where we take no more than the amount needed by the body to fulfill the purposes of muscular repair and tissue building. In other words, we should not use more protein than necessary, because it is from the breaking down of the protein molecule that ptomaines or other poisonous substances result through the action of bacteria upon proteins.

And so first of all we must get the protein down to the minimum. In many cases where the amount of proteins produced has been excessive, it is advisable to almost exclude it for a few days, or two or three weeks.

It is equally as important that an abundance of carbohydrate shall be supplied to the dietary, as carbohydrates supply food from which other bacteria in the intestinal tract form lactic and other acids. Acids form an unfavorable medium for the growth of the proteolytic or ptomaine forming bacteria.

It is often advantageous to inoculate the food with acid forming germs, such as the Bulgarian bacillus, which is the active ferment in Yogurt, which is a sour milk preparation formed by the action of the Bulgarian bacillus. This germ, so far as is known, is the strongest lactic acid producing organism known. Many of these organs are easily destroyed by the action of the gastric juices, but it has been demonstrated that the Bulgarian bacillus

*(Continued on page twelve)*

#### THE TWENTY-EIGHTH ANNUAL COMMENCEMENT OF THE SANITARIUM TRAINING SCHOOL FOR NURSES

Graduating week of the Sanitarium Training School for Nurses was opened by the baccalaureate sermon, delivered in the Chapel May 1st by Bishop W. S. Lewis. The text was the words: "That our sons may be as plants grown up in their youth; that our daughters may be as corner stones, polished after the similitude of a palace." Speaking upon the first part of the verse, the Bishop said that the figure implied a plant taken and placed in some exposed place, where it had no support. The ideal son was a man who could be exposed to life's experiences, to its adversities as well as to prosperity, and who yet was strong enough to stand alone; indeed, a man who built his strength by means of misfortune. Such a man had a task, that of service. This task was God's expression of love to and of confidence in him.



The corner stone was a figure eminently fitting as that of the ideal daughter. The significance of the corner stone is that it gives direction to the whole building. The corner stone of this republic is its womanhood. The moral quality of a community never rises above the moral quality of its homes. Womanhood is characterized by skilfulness in touching humanity at its most vulnerable point.

Addressing the class of 1913, Bishop Lewis congratulated them on the profession they had chosen. It was a profession that meant service. In sentences stirring and eloquent he declared the urgent need of the healing ministry they could minister—one of body and soul that could be made to possess eternal significance.

#### Graduating Exercises in the Gymnasium

The commencement exercises were held in the gymnasium the evening of June 3d. The entire service was most imposing, the gymnasium being beautifully decorated for the occasion, and the presence of the entire class of sixty-six graduates and a large body of alumnae and undergraduates adding to the impressiveness of the scene.

The commencement address was delivered by Dr. Lucy Ryder Meyers, of the Deaconess Training School, of Chicago, who took for her subject, "Nurses and Social Service." "Our conception of social service," said the speaker, "is very new; it has evolved, indeed, during the past decade or so. In this new ideal individualism in service has given place to the subordination of the individual to the social body itself. Into this new conception of service, the work of the nurse fits admirably, by it, too, being broadened in scope and ennobled in ideals."

#### Two Essential Qualities for Nurses

Following Doctor Meyers' splendid address, Judge Ben Lindsey, of Denver, delivered a striking address, laying emphasis on sympathy and faith in humanity as essential parts of the nurse's equipment. Judge Lindsey congratulated the members of the graduating class upon having had the opportunity of training in an institution which, in his mind, had no superior in the world, and laid stress upon the necessity and value of such training in order to acquire skill in meeting and overcoming those three foes of humanity, sickness, misery and crime. There are two other qualities that must accompany such technical knowledge in order to make it effective, said the Judge. "The first, and the one which I would place above all others, is sympathy, 'divine sympathy.' The second great quality is faith in humanity." The Judge's remarks were illustrated by a number of touching experiences from his unique work with boys and men.

#### The Class Paper

Following a selection by the orchestra, the class representative, Mr. J. R. Jeffrey, Jr., read a paper upon "The Development of the Nurses' Training," in which he followed in an interesting manner the growth of nurses' education from the most elementary beginnings to the present highly technical and scientific methods. Diplomas were presented by Doctor Kellogg and class pins by Mrs. M. S. Foy, head of the nurses' school.

(Continued on page ten)

## Judge Ben Lindsey, of Denver, Tells Sanitarium Guests "How We Beat the Gang in Denver"

ONE of the busiest men at the Sanitarium these days is Judge Ben Lindsey, of Denver, who has done more than any other one person to revolutionize court procedure in juvenile cases, and who is one of the greatest friends that childhood has ever possessed. Judge Lindsey is resting a few weeks at the Sanitarium, but does not spare himself, nearly every day delivering an address, either at the Sanitarium or in the city, in response to the eager requests of people who desire to learn not only all about Judge Lindsey's great fight with the "Beast" in Denver, but also about the methods used and results achieved in juvenile court work.

Wednesday evening, May 21st, Judge Lindsey spoke in the Sanitarium Gymnasium on the subject of "How We Beat the Gang in Denver." "The 'gang' as I use the term," said the Judge, "is divided into two parts, one the 'kids,' and the other the political gang. One of the moving forces in our struggles with the latter was the realization of the extent to which it has been responsible for the former."

For two hours, the audience listened with rapt interest to the story of the Denver fight. The speaker related the original discovery of the robbery of the city by a grafting printing concern, which led to the investigation that after long and wearying legal processes finally ended in several members of the "gang" being sent to the penitentiary. It was at this point that the fight became bitterest, Judge Lindsey being ostracized socially and politically, with both the old parties combined and the corrupt and evil influences of the city against him. He appealed to the people, gave them the facts, and by the loyal support of the women of Denver and the unique help of the newsboys in the campaign that followed, he was returned with increasing majorities until at the last election he was returned by a majority of 37,000, breaking all Colorado records for a judgeship of the Juvenile Court.

The most remarkable part of the narrative, however, the audience must have felt, was the spirit of idealism with which the Judge emerged from the struggle. "After thirteen years as magistrate and judge," said Judge Lindsey, "trying men and boys, I have come to the conclusion that there are no bad people and no good people, but just people. But there are bad things—bad conditions—which make the gang."

Last Wednesday evening Judge Lindsey gave another remarkable address on "Some Kids I have known." This address was especially remarkable by reason of the enthusiasm which it evoked among the score or more of "kids present," who drank in every word of the speaker, and cheered most heartily as the Judge portrayed some of the most interesting boys and girls whom he has met in his work in Denver (and because the "kids," did not want him to stop at nine o'clock, but to go right on, extending his gallery of portraits, the Judge promised to give another address on "Banking on the Honor of a Kid"). Space forbids our telling about the remarkable youngsters whom the Judge described—of the little towled

(Continued on page eleven)

## Dr. Winfield Scott Hall, Eminent Eugenist, Delivers at Sanitarium Three Notable Addresses on Heredity

UNDER the auspices of the Normal School of Physical Education, Dr. Winfield Scott Hall, Professor of Physiology in Northwestern University, author of note and a recognized authority on eugenics, delivered three remarkable addresses before the Sanitarium last week. In the first, Doctor Hall defined the meaning of the term "eugenics" as being "well-born," adding that good birth calls for both heredity and environment. Heredity operates through a great law that has been called "the immortality of the germ plasm," according to which characteristic traits are unfailingly transmitted from one generation to another. Discussing the degree to which these qualities are passed on in various generations, the Doctor declared that parents contribute one-half, one-quarter each coming from the father and mother, all previous ancestors on the male side contributing one-quarter and on the female side one-quarter. An increasingly small influence is exerted as we trace the generations back, so that by the tenth generation, the influence scarcely merits consideration. "We are not in a position to modify our own heredity," said the speaker. "How, then, can we modify that of the next generation?—By the simple fact that the environment of people living today will have a more decided influence in determining the qualities inherited by our successors. Again there enter into the problem positive and negative factors. The former are the qualities that it is desirable to perpetuate—those of physical and mental efficiency; the latter class is composed of disease tainted degeneracy, and tendencies to criminality. The positive elements are being maintained and passed on by choice—by exercising care in the choice of husbands and wives. In order to prevent the continuation of the worst forms of the negative element, the state should interfere. A medical certificate as to freedom from venereal disease, from tendency to tuberculosis or chronic alcoholism, and from degeneracy and criminal tendencies, should be demanded from all candidates for marriage, and where any such have been married, interference should be made to prevent issue.

"After all, however, the results that can be accomplished by law are largely negative. The most effective work that can be done toward influencing the next generation is by spreading information concerning the influences that are exerted, one generation upon another."

Doctor Hall gave later in the day an address to women only, entitled, "A Physician's Message to His Daughter," and one to men upon "Sexual Hygiene."

All three messages were delivered with force and conviction, and made a powerful and lasting impression upon the audiences, and emphasized again the educational side of the Sanitarium program. Curative work is one phase of the Sanitarium health propaganda, it is true, but the aim of the management is to give the guests a genuine training in health, so that the good work begun here can be continued intelligently at home.



One, two, three—and



Posing for the Picture Man.

### THE MEN'S OUTDOOR GYMNASIUM OPENS WITH GYMNASTIC DRILL AND VOLLEY-BALL

THE above photograph shows the first work done in the men's outdoor gymnasium this season. There was no formal opening, mind you—no brass band or other trimmings. To his three o'clock gymnasium class, Physical Director Miller merely said last Sunday, "How many men would like to have our work in the outdoor gymnasium this afternoon?" Every one wanted to, of course, so adjournment was duly taken to the big sand bed in the outdoor gymnasium. After the exercises were over, the volley ball net was put up, and after sides had been duly chosen a lively game was played. Before this paper reaches its readers, the big pool will have been filled and the outdoor gymnasium season in full swing.

### THE "PSYCHIC POWERS OF MUSIC" AS DISCUSSED BY MR. JAMES MELDRUM, OF SCOTLAND

SOCIAL hour the other Thursday the guests at the Sanitarium were treated to a delightful address on music and its psychic appeal, by Mr. James Meldrum, of Glasgow, Scotland. In the art history of the world, said Mr. Meldrum, music preceded all the other arts. Poetry itself is the child of music. All the older races chanted their inward feelings in song—songs without words, usually, but songs that expressed adequately the psychic experiences of the singers. Psychic music Mr. Meldrum defined as that which comes from the soul of the composer and that appeals to the soul of the listener, to the mystical and the spiritual in the human heart. This quality runs through all music, in modern music being best illustrated by the work of Chopin. Tone, color and all the technical elements of music are essential, but soul music is never attained until the composer or performer allows inward feelings to transcend matters of mere technique. For the performance of this work ideal conditions are important, as in the case of Chopin, who composed much of his music under the stars.

Mr. Meldrum called attention to the close relation between sociology and political economy on the one hand and music on the other. "I have observed," he said, "that music lovers are drawn out more strongly to their fellow men than are people who do not appreciate or understand music, so that when our students become trained in music, political economy will not be the dry subject that it is commonly reputed to be."

Mr. Meldrum's talk was preceded by a delightful musical program. Miss Babcock sang Slaughter's "The Home Land" and Cowen's "The Birthday;" Miss Craig gave a charming interpretation of Rachmananoff's "Prelude;" while Miss Hyslop rendered Chopin's "Fantasie Impromptu" with feeling and true insight into the mood of the great composer. All three performers responded graciously to encores.

### DR. W. H. RILEY RETURNS HOME FROM SIX MONTHS' STUDY ABROAD

DR. W. H. RILEY of the Sanitarium medical staff, has just returned home after spending six months in study in Vienna, Munich, London and other medical centers of Europe. The Doctor brought back with him valuable charts and models dealing with the pathology and anatomy of the brain and nervous system. Best of all, however, he brought back with him a Fellowship in the British Royal Society of Medicine. This is a high honor, on receiving which his many friends are congratulating him. Doctor Riley after visiting the great hospitals of Europe says he has seen no institution so completely equipped as the Battle Creek Sanitarium. The Battle Creek institution is widely and favorably known throughout Europe, not only because of the uniqueness of many of the methods employed here, but of the all-embracing quality of the régime.

### GREAT DAYS ARE THESE FOR THE KIDS

THESE are great days at the Sanitarium for the kids. So popular, for example, are Judge Lindsey's talks on Juvenile Court work and his experiences in Denver that he is kept very busy answering the demands made upon him. Mrs. Ruby M. Zahn, President of the Political and Civic League of Detroit, has also spent several days at the Sanitarium the past fortnight, and delivered a striking address last Thursday afternoon, on the subject of "The Child in Relation to the Woman's Compensation Bill." Mrs. Zahn first became interested in the child of the poor home when she went to Pittsburg. There, with her sister, she took a flat in the heart of the slums and opened it for the boys and girls of the neighborhood.

Like Judge Lindsey, Mrs. Zahn declared that the child of the slums is not inherently bad; he has bound up in him qualities that are found in anybody's boy or girl, and the speaker gave several remarkable instances to prove her contention. A case in point was that of a boy, the terror of the neighborhood—and he had a wooden leg. He was got interested in Mrs. Zahn's work, however. Money was collected for a perfectly good cork leg, new and clean clothes were put on him, and today he is a model young man in every respect. Another instance to

show the stuff that boys are made of was an attempt to rent a large place, the owner of which, however, objected to the proposed tenants on the ground that the boys chewed tobacco and would ruin the place. In a state of mind approaching despair, the workers abandoned the idea. But the boys had gotten wind of the affair and came to the speaker with this proposal: "See here, Mrs. Zahn, you're goin' to have that house, and there ain't goin' to be no smokin'. We boys 've cut it out, fer we want to do our part, too."

The very fact of the existence of large numbers of boys and girls on the streets because their mothers must work to support them led the speaker to a study of the mothers' compensation movement. "There are eleven times as many children brought into the Juvenile Court because their mothers are out at work as for all other reasons combined," said Mrs. Zahn. "Not only that, but epilepsy and imbecility are increasing so fast in the United States that they are about to become a national calamity. Eighty-five per cent of the feeble minded are born of overworked mothers, it has been found. When I removed to Detroit, I brought the matter before our Club. I pointed out the fact that this imbecility and feeble-mindedness and degeneracy must continue until expectant mothers were not obliged to overwork, and until mothers who have no means of support were granted a means of support by the state. I outlined a campaign in behalf of the bill to be brought before the legislature; my club promised to back me up, and we began a systematic campaign that resulted in a bill being brought before the Legislature and passed in the Senate unanimously and in the House with only one dissenting vote. Michigan has thus joined a group of eleven progressive States to pass mothers' pension bills."

### CHICAGO CLOTHIER DISCUSSES "THE BEST INVALID REPAIR SHOP IN EXISTENCE"

It is probable that few merchants in America are better known than Mr. John Gately, of Chicago, head of twenty-six large clothing stores. Mr. Gately is spending a few weeks at the Sanitarium and has nothing but praise for the methods in use here. "It is the finest institution of its kind I know of" he says. "It has the best modern methods and equipments for treating disease, and in my opinion is the best invalid repair shop in existence. As to the diet, the longer one follows it the better he likes it. It is beneficial, no matter what the nature of the illness is. I came here on account of high blood-pressure, on the recommendation of my Chicago physician. During my month's stay, the pressure has been reduced seventy-five points. I have nothing but praise for the Battle Creek Sanitarium."

### PUTTING BATTLE CREEK PRINCIPLES INTO PRACTICE

ONE of the most honored guests of the Battle Creek Sanitarium is Mrs. W. C. Mason, of New York City. Mrs. Mason's father is Dr. Stephen Smith, dean of American surgeons, and a devoted friend of foreign missions, especially medical missions. Mrs. Mason, indeed,





### NORMAL NINE DEFEATS KALAMAZOO COLLEGE

THE Normal School of Physical Education closed its 1913 baseball schedule last Wednesday by defeating the Kalamazoo College team on the Sanitarium grounds by a 10 to 6 score. Errors on the part of the Kalamazoo team and good bunching of hits won the game for the home athletes. (It is claimed by the fans who were present that the splendid rooting turned the trick, but positive proof is lacking on this point, although the cheer-

ing was of a lusty and vociferous quality.) Captain McKay, of the Sanitarium team, has left for Kentucky, where he will play first base for the Lexington team in the Blue Grass League. The score follows:

Kalamazoo .....	1 1 0 0 0 0 2 2—	6 14 8
Normal .....	0 2 0 4 0 4 0 0 x—	10 10 4

Batteries: Bramble, Zeedyke and Young; Race and McKay. Umpire: Darling.

has had long experience in mission work, her husband at the present time being stationed in India, under the American Board. Previous to Doctor Kellogg's Question Box the other night, Mrs. Mason gave a remarkable testimony as to the results accomplished by a conscientious adherence to Sanitarium principles. "I was brought to the Sanitarium a year ago on a stretcher," said Mrs. Mason, "after our home physician had declared that an operation was necessary. I put myself completely in the hands of those who had charge of my case here, and carried out as far as possible their instructions. As a consequence, an operation was found to be unnecessary and I was gradually restored to health." Mrs. Mason emphasized the increased improvement that is bound to come when the patient does not leave all to the physician, but when he attempts to cooperate in a sympathetic way with what the doctor and nurses are trying to do in his case.

### BATTLE CREEK IDEA BECOMING MORE AND MORE POPULAR, SAYS FLORIDA PHYSICIAN

FROM Estero, Florida, the "grape fruit center of the South," comes to the Sanitarium Dr. A. Weimar, one of the best known physicians of his State. "While I have not before visited Battle Creek," says the Doctor, "yet I have been a reader of the Sanitarium literature. Thus I

have become acquainted with the general ideas upon which the Sanitarium work is based, but on seeing the principles in actual application by means of the excellent equipment of the institution, I am able to appreciate it in a new and enlarged sense. From what I have observed," the Doctor went on to say, "I am convinced of the growing popularity of the principles which underly the Battle Creek Idea. I hear them spoken of everywhere, and with favor. In my own case I have been much benefited by my rest and by what treatments I have taken. I have been very much benefited and shall go away with a feeling of gratitude."

### ARKANSAS SCIENTIST DESCRIBES THE BATTLE AGAINST THE HOOK WORM

UNDOUBTEDLY one of the most useful citizens of the State of Arkansas is Dr. A. G. McGill, of Little Rock, who is spending a few weeks at the Sanitarium in gaining a much needed rest. Doctor McGill is State Chemist for Arkansas, and among other responsibilities is in charge of the clinical laboratory work of the State Board of Health, whose laboratories are also a part of the University of Arkansas equipment; he is also an instructor in the University Medical School.

Doctor McGill has taken a prominent part in the campaign against the hookworm which Arkansas along

with other southern States is waging against this disease. The hookworm disease, it will be recalled, is contracted by the contact of the skin with infected dirt, being confined largely to laborers and to children who walk barefooted. The crusade with which Doctor McGill is prominently identified is being carried on by means of stereopticon lectures, bulletins and pamphlets, examination by competent authorities, and treatment of actual cases. An important feature of the campaign is the work of the field men, appointed by the State to visit the schools with a complete equipment for examining and treating children. "The results so far obtained," says Doctor McGill, "have been eminently satisfactory and promising. When treatment is persisted in, the disease is curable—and it is fortunate that most patients are willing to continue, in spite of the necessarily severe character of the treatment, and I look forward to the time when the hookworm will be extremely rare in the South.

"This is my first visit to the Battle Creek Sanitarium," the Doctor went on to say, "and it has proved a great surprise to me. I had heard a great deal about the institution and about the scientific nature of its work, but what I have found far exceeds my expectations. I have been especially impressed by the completeness of the equipment and with the systematic way in which the institution is managed, and particularly with the originality shown in the conduct of the various departments."

Doctor McGill commented favorably upon the climate here, and its availability for the treatment of malarial cases. "The climate and the treatment strike me as being ideal for such cases," he said, "and I believe that patients who are incurable at home could find relief here in the summer. The thoroughness of the examination here also favors such cases being brought here—for usually there are other troubles which must be relieved before the malaria is removed, and the Sanitarium system is admirably adapted to discovering and removing the causes of these conditions."

#### THE DISPENSARY REPORTS AMOUNT OF FREE WORK DONE DURING THE MONTH OF MAY

ONE of the most important features of the Sanitarium work is the Dispensary, which provides ample facilities for giving to many cases absolutely without cost all the treatments which the Sanitarium itself affords. The Dispensary work includes more than the treatments, an important factor being the food which is distributed to the worthy poor in the city. The following figures cover the work for May:

Consultation by physicians .....	549
Office treatments by physicians .....	168
Examination by physicians .....	42
Surgical dressing .....	47
Nurses, outside calls .....	33
Nurses, outside treatments .....	16
Nurses, outside surgical dressing .....	4
Bathroom treatments .....	858
Electrical treatments .....	78
Baskets of food given out .....	550
Articles of clothing given away .....	about 25
Physicians' outside calls .....	100

#### MILK AS AN IMPORTANT AND FREQUENT CAUSE OF CONSTIPATION

A PATIENT asked one of the Sanitarium physicians the other day as to why boiled milk tends to produce inactivity of the bowels. "Boiled milk is completely digested," was the reply. "It leaves no residue behind. It is necessary, of course, that the intestines, in order to be active should have a residue of foodstuffs. There are some animals which do not seem to require intestinal bulk for intestinal activity, but the human alimentary canal must have bulk, just as does the alimentary canal of the horse, the cow, or the sheep.

"You know, if horses or cows are fed entirely upon grain or other food that is almost completely digested and that leaves little residue behind it, they become sick and die. The bowels become inactive and the animal dies of autointoxication, or perhaps of acute inflammation. The trouble is that they need a diet which affords bulk.

"The monkey eats a great deal of bulky food, such as leaves, tender sprouts, etc., which leave a considerable bulk. Now intestinal bulk is quite as essential to the human being as it is to the monkey. One should eat three hundred grains of cellulose every day in order to give the bowels the proper bulk to work upon, and the



The clerodendron, a flower, of which many species are found in the tropics and in China and Japan, has been added to the large list of plants at the Sanitarium. It is a tall, trailing evergreen, the calyx of which is pure white, while the corolla is red. The flower looks and acts not a little like a morning glory, opening in the morning, and closing at night. It blooms about six weeks in the year, three in the spring, and three in the autumn.

ordinary diet does not afford this. It would surprise most people to see how little cellulose passes the entire length of the alimentary canal, because much of the cellulose which enters the small intestine never gets through the colon, cellulose being often attacked by the germs that infest the intestine and converted into gas, a veritable illuminating gas that will burn. This explains the extraordinary development of gas in the intestine of people accustomed to a meat diet, a meat diet encouraging the growth and development of germs. The production of gas is due to the action of these germs on this cellulose. So numerous and so active are these germs, indeed, that often they consume nearly all the cellulose, leaving almost no residue whatever, cases have been observed, indeed, in which only five per cent of all the cellulose eaten remained behind, the germs having eaten up all the rest of it. This shows how important it is, then, to use a diet which contains a large amount of cellulose, if we are to afford a bulk to the intestines that will stimulate them to the proper activity."

#### A CHINESE DELICACY THAT IS TOO LITTLE KNOWN IN AMERICA

WE occidentals are unfortunate, the Chinese would have it, in not having on our bill of fare the "water chestnut," a term applied to several kinds of nuts produced by plants growing in water, and which form a considerable portion of the food supply of many natives. They are so well liked by the Chinese, says a writer in *Harper's Weekly*, that large quantities of the nuts are consumed by Chinese in other parts of the world, who go to no little trouble in importing them. The best known of these nuts, says the writer is that found in the Yangtze Valley. "There it is called 'ling,' and in the Canton country it is known as 'ling kok.' This nut is shaped much like the two horns of a water buffalo or a Texas steer, including a portion of the skull. The shell is so hard as to require cracking and the kernel is comparatively small, consisting of almost pure starch.

"The 'ling' or 'ling kok' is the variety most generally noticed by travelers along the canals of central China. On Grand Canal is Che-kiang province, and in that canal itself, the cultivation reaches its greatest extent. The nuts are planted merely by dropping old nuts at intervals of a few feet in ponds or along the edge of a canal, where the plants can be fenced in by bamboo poles and a network of the same material.

"They are planted annually in the spring, growing best in five or six feet of water. The nuts take root quickly and send a shoot to the surface in an incredibly short time. The nuts are formed among the leaves of the plant on the surface and are gathered in boats. A water-chestnut field of this sort resembles a field of water hyacinth in the rivers of our southern States. The nut plants, in fact, grow under conditions similar to those pertaining to the water hyacinths, and it is thought probable that the nut could be cultivated in our country in sections where the water hyacinth flourishes.

"The Chinese use these nuts in various ways. They are to be had, roasted, of street vendors in central China; they are eaten boiled, tasting somewhat like a Jerusalem artichoke; they are made into various pastries and puddings, some of the latter being very popular among foreigners in China."



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### ANNOUNCEMENT OF ANNUAL MEETING OF THE SANITARIUM BOARD

THE sixteenth annual meeting of the Michigan Sanitarium and Benevolent Association for the year 1913 will be held in the Chapel of the Battle Creek Sanitarium, on North Washington Avenue, Battle Creek, Michigan, Thursday, June 26th, 1913, at 3:00 P. M., standard time, for the election of Trustees and the transaction of such other business as may properly come before the meeting.

By order of the Board of Trustees.

E. L. EGGLESTON,  
*Acting Secretary.*

### THE BATTLE CREEK IDEA EN ROUTE

WE are just in receipt of a delightful letter from a charming gentleman who spent a few weeks at the Sanitarium last summer, Mr. Thomas Allen, of Auckland, New Zealand. (Mr. Allen left Battle Creek September 30, 1911.) The winter of 1911-12, Mr. Allen spent for the greater part in southern Europe and northern Africa, visiting Naples, Rome, Port Said and Cairo. The following summer he lived in England—in London except for a few weeks spent in the western counties. The early part of last winter Mr. Allen again spent in southern Europe and Africa, on January 15th sailing for home from Port Said.

Throughout the entire journey, Mr. Allen has been an enthusiastic gossamer of the Battle Creek Idea. "All the way," he says, "I told my friends that after five weeks' treatment and diet at the Battle Creek Sanitarium I was enjoying the best of health. During the eighteen months I have been at about forty different tables, on steamers and at hotels—that is, I have been under forty different caterings—and have not taken one particle of medicine." By taking advantage of the vegetarian restaurants which may be found in all parts of Europe, Mr. Allen carefully chose his hotels, with the best of results healthwise. "Before going to Battle Creek, I had given up tea and coffee, mustard and pepper, while I had never been a user of tobacco or liquor. During these eighteen months I have not eaten fish, flesh nor fowl, neither have I used tea or coffee, mustard or pepper, liquor or tobacco or drugs." Indeed, says Mr. Allen, "during my meat-eating days I was subject to periods of constipation, and at intervals had severe attacks of diarrhea. For the past eighteen months I have had no recurrence of these troubles, nor any sign of indigestion. On the whole, my bowels have been very

open, for which I feel that there is much to be thankful for. It is difficult for me to tell you how thankful I am for the benefit received and the information gained about diet and care of the body at the Battle Creek Sanitarium."

Mr. Allen expresses the hope that he may visit us again for a few weeks during the present year, a hope in which all of the many friends which he made at the Sanitarium heartily unite.

### A STATEMENT THAT IS QUITE AS TRUE OF AUTOINTOXICATION

A RECENT "Vest Pocket Essay," written by Mr. George Fitch, author of the famous "Old Siwash," though written in humorous form contains some food for thought by those people who think to lessen the gravity of their folly by covering their "drunkenness" with the term *intoxication*. "Intoxication," says Mr. Fitch, who, the reader will discover, has no illusions whatever in the matter, "is the refined name for drunkenness, and it is the only refined thing about it."

"Intoxication comes in many forms. Sometimes it remains in the victim's legs, making them quarrel and go far away from each other when they are needed by their owner for transportation purposes. Sometimes it gets into the victim's fists and makes him regard himself as a white hope when he comes home to his family. When intoxication touches the heart, its owner weeps over the death of Adam and has to be prevented from embracing Indian cigar signs on his way home. Occasionally intoxication stays in the brain and causes it to exceed the speed limit, thus making its owner more brilliant and witty than ever. There is little hope for the man who has to soak his cerebrum in whiskey before it will produce wisdom. Being wise only when he is drunk, he prefers to stay drunk all the time."

"Intoxication is a good thing, because it furnishes so many vacancies in business, thus enabling the sober young man to climb faster."

### TWENTY-EIGHTH ANNUAL COMMENCEMENT

(Continued from page four)

#### Reunion of Alumnæ

Commencement activities came to a close on Wednesday evening, June 4th, with a reunion of alumnæ and a banquet for the class of 1913, held in the Annex, covers being laid for two hundred. Dr. M. A. Mortensen, of the class of 1892, was toastmaster. Of special interest was a roll-call by Mrs. Mary Staines Foy, superintendent of the Training School. As Mrs. Foy announced the year of each class that has been graduated since the school was founded, thirty years ago, the members who were present arose. Fully half the classes were represented. Miss Leone Sweet, President of the alumnæ greeted the class of 1913, response being cleverly made by Miss Gertrude Frazer in the meter of Hiawatha. Mrs. E. L. Eggleston responded to the toast, "Our Alma Mater," and Miss Alene Warren read a bright poem entitled, "To Our Annual Meeting." Dr. Paul Roth and Doctor Kellogg closed the program the latter paying high tribute to those who had been associated with him in building up the Sanitarium and sustaining its ideals.

## LOBBY NOTES

MR. JAMES C. THOMPSON, one of Pittsburg's best known brokers, is with us for a few weeks' rest and treatment, from which he is deriving a great deal of benefit.

Two of Mississippi's most successful physicians, Dr. C. M. Henderson, of Sardis, and Dr. J. W. Hough, of Jackson, are spending a few weeks at the Sanitarium in a well earned rest.

AMONG other guests of that very thriving commonwealth, Arkansas, who are at the Sanitarium, are Mr. and Mrs. L. W. Pfeifer, of Little Rock. Mr. Pfeifer is head of one of the city's most prosperous mercantile establishments.

THE graduating class of the Sanitarium Training School for Nurses was tendered a reception by Mr. C. S. Quail and Mrs. M. S. Foy, the evening of May 27th. The host and hostess provided a musical program which, together with the delightful refreshments, was greatly enjoyed by all.

ON June 1st, Doctor and Mrs. Case gave a luncheon in the Sanitarium dining room to a number of visiting X-ray men. Among the guests were Dr. and Mrs. P. M. Hickey, of Detroit; Dr. and Mrs. Henry Hulst, of Grand Rapids; Dr. E. W. Caldwell of New York City and Dr. and Mrs. H. W. Dachtler, of Toledo. Doctors Kellogg and Read were also guests.

MR. J. M. McANULTY, of Neosho, Missouri, a member of both the Illinois and the Missouri bars, and for years a practicing attorney, is a guest at the Sanitarium for a few weeks. Mr. McAnulty is at present head of a large realty business, and is much interested in the development of the middle southwest.

THE Sanitarium Medical Staff has been reinforced by the addition of Dr. J. E. Cooper, who left a valuable practice at Auburn, Indiana, to take up duties in this institution. Doctor Cooper is a graduate of the American Medical Missionary College.

AN automobile party composed of Mr. and Mrs. Albert B. Bernardi, and Dr. and Mrs. S. M. McCallum of Kansas City, Missouri, arrived at the Sanitarium May 26th. Mr. Bernardi, who is one of the most successful merchants of his city, and Doctor McCallum, a prominent physician, have since returned home, the ladies of the party remaining behind for a few weeks' rest.

A GUEST who is always welcomed by the many friends he has made here is Dr. Ira M. Martin, of Green Bay, Wisconsin, who has returned to the Sanitarium for a much needed rest. Another physician who has returned for recuperation is Dr. C. W. O'Donnell, of Andover, New York.

Mr. Arthur Feilchenfeld, the very popular head of a thriving three store hat business in Chicago, has recently visited the Sanitarium for a much needed rest and recreation. Mr. Feilchenfeld is an enthusiastic golfer and frequently visited the Battle Creek links. He was no less enthusiastic about the Sanitarium diet, for which he had many commendable words.

THE students of the Sanitarium School of Home Economics gave a reception May 23d to Miss Isabel Bevier, head of the Domestic Science Department of the University of Illinois, and former President of the National Home Economics Association. Miss Bevier had only words of praise for the Sanitarium School of Home Economics, and expressed real surprise at the magnitude of the Sanitarium work and the completeness of its every detail.

It is not every day that the Sanitarium can have the honor of entertaining an Indian chief. This pleasure, however, was afforded us the other day when Dr. G. W. Hill of the Six Nations Reservation at Brantford, Ontario, spent a few hours with us. Doctor Hill is one of the sixty chiefs who preside over the reservation, ten from each nation. Fourteen years ago it was that Doctor Hill paid his first visit to the Sanitarium, and the changes and developments that have occurred in the meantime in connection with the Sanitarium were remarked upon by the chief with not a little interest.

## NORMAL STUDENTS PROVIDE INTERESTING ENTERTAINMENT

THE Normal School of Physical Education again demonstrated the efficiency of its work by the splendid "normal practice" which its students gave Tuesday evening, May 27th. The work was in charge of two seniors, Miss Doris Evans and Mr. Bernard Bergin, and consisted of the following program:

1. Selection	Orchestra
2. Marching	Juniors and Seniors
3. Games	Juniors and Seniors
4. Swedish	Juniors and Seniors
5. Dumbbell Drill	Seniors
6. Clubs	
7. Wand Drill	Juniors
8. Pyramids	Juniors and Seniors
9. Apparatus	Juniors and Seniors
10. Games	Juniors and Seniors

The work throughout was of a remarkably fine quality, the Swedish, dumbbells and clubs being especially deserving of mention.

## JUDGE LINDSEY ADDRESSES SANITARIUM GUESTS

(Continued from page four)

urchin whom a barber put out into the street with his hair half cut because of the alleged discovery of "animals" and who came to the Juvenile Court to "git jestic," and who got it; of the boy who brought an entire gang into court when the old methods of procedure had utterly failed, because again the boys knew here they could "git jestic;" and of the dozen and one other lads whose confidence the Judge gained because they knew they had in him a friend who understood them. "Children can not be made to do right because they have to," declared the Judge, "but they will do right when they wish to; and so we have shown them we are not against the children themselves, but against the bad things that they do. No, the juvenile court is not a thing of the statute books; it is a thing of the heart, and the spirit of the movement is the spirit of the man of Galilee, the spirit of sympathy that helps those who need help."



Views of a few of the cottages that are required in addition to the two large main structures and the Annex to house the large number of guests that have arrived for the 1913 summer season.

## ANTITOXIC FOODS PREVENT AUTOINTOXICATION

(Continued from page three)

is not destroyed by the gastric juice, and so it is considered more effective than any other of the lactic acid producing organisms. Again, the lactic acid is itself antiseptic.

Now, we may get an excessive quantity of protein in meat, in eggs, or milk, especially sweet milk, so that we should reduce the amount of protein in our food, add carbohydrates and some kind of lactic acid germ which acts as an enemy to the ptomaine-producing germs of the body.

Another important thing in an antitoxic diet is to introduce plenty of bulk. Bulk is necessary as a stimulant to intestinal activity, and the contraction of the muscular walls of the alimentary tract. Autointoxication may easily result from food remaining in the alimentary tract longer than normal, so it is important that the food contain plenty of bulk. In many cases it is important to increase the amount beyond what is considered normal. We consider about one ounce of cellulose necessary in most cases where the cellulose diet is prescribed. This means that a large amount of fruit, such as oranges, apples, blueberries, etc., and such vegetables as lettuce, celery, young carrots, turnips and cabbage should be introduced into the dietary. Most vegetables contain comparatively large amounts of cellulose. Hence an antitoxic diet will contain a large amount of fruit and vegetables for two reasons: First, because of bulk, and second because of the small amount of proteins which they contain.

Fruits, moreover, are especially valuable on account of the acids which they contain, which act as a natural antiseptic to the intestinal tract. People who get up in the mornings with a bad taste in the mouth would do well

to eat a fruit breakfast and sometimes a glass of fruit juice half an hour before breakfast.

Cereals are also added because of their nourishment. for fruit and vegetables are not especially nourishing, though what nourishment they do contain is easily digested; we should, however, depend upon them for our entire source of nourishment. Cereals, however, are very nutritious; whereas fruits contain only from 5 to 10 per cent of nourishment, cereals on the other hand contain as high as 80 to 90 per cent of nourishment. The food constituents are in a state of almost perfect proportion, except that they are somewhat lacking in fat. For this reason we naturally put butter upon our bread and cream upon our cereals.

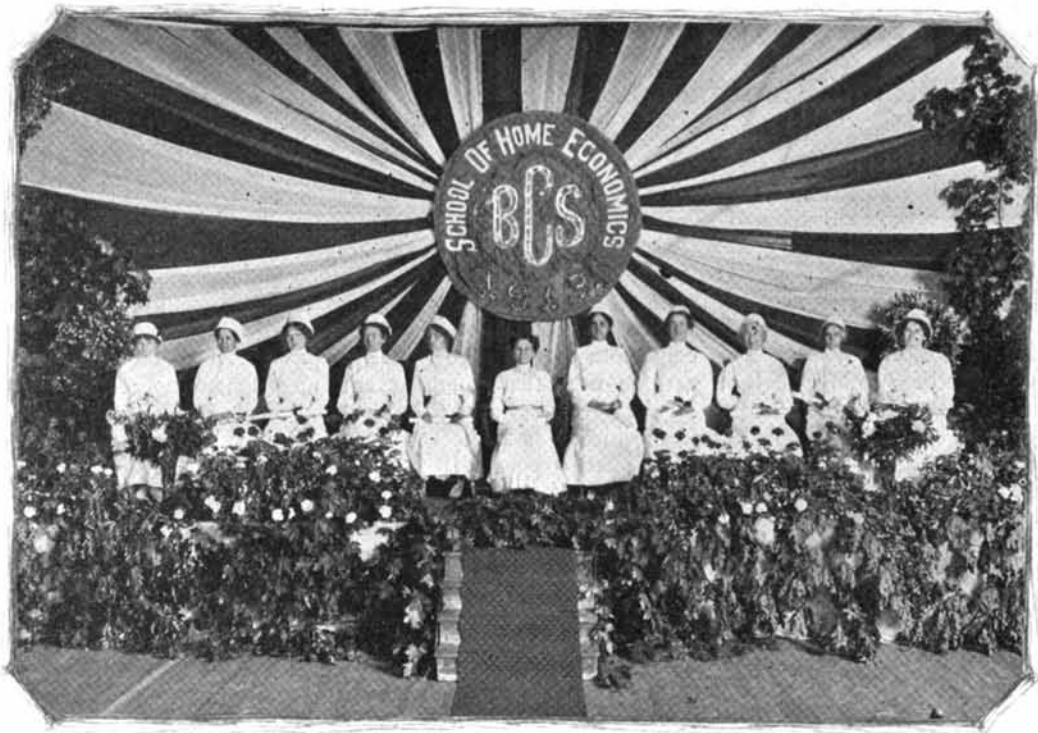
These three, then, fruit, vegetables and cereals, with the addition of fats and sour milk preparations form the basis of the antitoxic diet. But what shall be avoided? Meat, of course, especially the lean meat, eggs, and those nut preparations that are very high in protein.

## THE SOCIAL HOUR PROGRAM

THE reputation for attractive programs which the Social Hour has attained was fully sustained last Thursday. The piano selections, "The Dance of the Demons," "The Golden Butterfly," and "Love Waltzes" were rendered in excellent style by Miss Florence E. Thomas. Mrs. H. A. Little sang the old and favorite songs, "Mrs. Lofty and I," and "Rory O'More," giving as an encore, "Is It Anybody's Business?" with great spirit. Special interest attached to the singing of these songs on account of the fact that Mrs. Little had learned them fifty years ago when she was a girl. A charming informal talk on "Our Wild Birds" was given by Mrs. Irene G. Wheelock, of Evanston, Illinois.



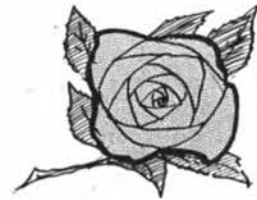
# The Battle Creek Idea



GRADUATING CLASS, '13, OF THE SANITARIUM  
SCHOOL OF HOME ECONOMICS



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## Entertaining Lecture by Ben Lindsey, Judge of the Denver Juvenile Court, a Sanitarium Guest, on "Banking on the Honor of a Kid"

[EDITORIAL NOTE: One of the features of Judge Lindsey's addresses is always the cries of the "kids" at the close to "Go on! Go on!" After graciously responding to several of these encores at a recent address given at the Sanitarium, Judge Lindsey promised the boys and girls to speak again before he left the Sanitarium, on "Banking on the Honor of a Kid." This engagement Judge Lindsey filled the evening of June 24th in the Gymnasium, much to the edification, not only of the boys and girls, but of the grown-ups. The following incident is taken from the address as representative of many of the cases that come into the juvenile court and that justify the confidence reposed in the youthful offenders.]

In the earlier days of my court experience I often went onto the bench and saw before me several boys handcuffed together. I made up my mind in time that this was not necessary, and I made bold one day to venture a suggestion to the deputy sheriff that we could better bank on the honor of the kid than on the chains that held him. He replied, "You have not been in the business as long as we have. There is no criminal like the kid criminal to give you the 'hot foot.' You must take no chances."

But I concluded that this was because they did not understand the kid, because they had never put to any good purpose the quality of honor and loyalty that looms up so large among the good qualities of childhood and youth. The difficulty was that this spirit was against the State, rather than for the State: the boy's one object was to escape from the policeman, to give him the "hot foot," as they call it; to the boy it seemed the one object of the policeman was to catch him: the boy did not understand the policeman, and the policeman did not understand the boy.

Among the first cases I tried my experiment upon was a little fellow whom we shall call Charley Deal. Now Charley was a little fellow about thirteen years old. He had a bad record at police headquarters. He lived in a bad neighborhood and was quite a leader among the bad gangs.

Now there was a watchman at a railroad crossing who, as Charley put it, "had it in for him;" this man, Charley always maintained, was constantly "pinching" him when he had done nothing whatever; and of course when he was arrested the boy would tell a lie in order to get even in some way. (For this is the philosophy of the street boy. He is often arrested unjustly, and he feels that he must even it up with the policeman in some manner, and the most convenient way is usually to lie in order to make up for the times they have been undeservedly pinched.)

One day this watchman started after Charley, who ran as fast as he could. The officer made some gain on the boy and Charley picked up a rock and threw it at him, but missed him. The man made a grab at him, and as he did so fell dead, the boy falling under the prostrate form. The boy was arrested for murder, when as a matter of fact he did not kill the man, an autopsy showing that the watchman had heart disease, and in the excitement of the moment falling dead.

The boy was arrested, and thrown into the old city jail. Now Charley was a chronic little truant. He had no father, and his mother was obliged to work out. He was full of energy, bubbling over with the boy spirit; in any escapade he was the leader, especially delighting in playing some prank on a policeman or other officer. The result was, of course, that one thing led on to another until the time came when something had to be done to him.

Charley was considered such a bad boy when arrested that he was not permitted to be unchained, or to go unattended. (In the case of a boy of this kind I have known two big officers to bring into court between them a little mite of a boy because they regarded him as such a dangerous criminal that they would take no chances. A boy of that type is cely and breaks away easily, and as it was more or less of a nuisance to chase them, they always handcuffed them. It seems brutal, but it was their way of saving time and effort.)



Judge Lindsey and a "bunch of kids." Photograph taken in the Sanitarium Gymnasium.

Well, Charley was brought to me in chains. I ordered the shackles taken from him. He was escorted by two of these big policemen, each one of whom must have weighed two hundred pounds, with Charley wedged in between, a little fellow weighing perhaps seventy-five pounds. To see the roguish stare which that boy bent, first on one and then on the other of the two policemen was one of the most amusing things I have ever seen. It was indescribable. I had told one of the officers that I was going to send Charley to the industrial school alone. That seemed to amuse them very much—they always gloated at my failures as a sort of reflection on my "experiment." Some one tipped off to the newspaper reporter the fact that I was going to send Charley Deal, who had been tried for murder, to the reform school alone, unattended, thinking it would be a great joke on the Judge. Charley, they said, would not go. Said one of the policemen, "I have chased him two weeks at a time, and do you think he is going up there alone, to the very place he has been running away from? Why, the Judge is crazy."

And it really was a difficult case. When they brought him in, I ordered him to sit down. He began to plead, for he was a talkative lad: "Oh, Judge," he said, "cross me heart, I'll never do it again. Don't send me up this time. I'll never do it again, cross me heart I won't, Judge." I never heard such a going-on in all my life. Charley begging and praying that I would not send him up that time. I said, "You have said that before, Charley, and you never did it. The trouble is you are not strong enough to last over night." I paused a moment, then continued, "But I believe this time you will last, Charley. I am going to send you where you can get away from bad habits. When you go away from there you will be strong enough to keep your word. You will be able, not only to last over night, but to last a week, to last all the time."

Well, Charley had a few crying spells and I realized that I had a difficult case on my hands. The big policemen sat by with a great grin on their faces, wondering what would happen next. Presently the newspaper man came in. As a rule I try to keep this sort of case out of the papers, and to conduct the whole affair in as quiet a man-

ner as possible. So I asked the newspaper man to step out a moment while I talked to Charley. I stepped up to the boy, laid my hand on his shoulder, and looked into his eye. "Charley," I said, "you know I have been your friend. I have tried to help you and do not want to hurt you. If I wanted to hurt you, I would leave you on the street. You have no father and your mother washes all day and cannot have you tied up to her apron strings. You cannot keep your word, and I am going to send you where you will get strong enough to keep it—and I am going to send you alone. I am going to trust you this time. Peterson [the policeman] here says you cannot be trusted, but I believe you can. He may be right and I may be wrong. He tipped it off to a newspaper man that I was going to send you up to the industrial school alone. The story was to be a joke on the Judge, because, Peterson said, you would run away. But," I said, "that is not the kind of story that he is going to write." I called

(Continued on page twelve)

## Commencement Exercises of the Sanitarium School of Home Economics

AND still another class of young people graduates from the Sanitarium. This time it is the '13 class of the Battle Creek Sanitarium School of Home Economics, twelve in number.

The exercises connected with the commencement began June 7th, when Rev. George Emmerson Barnes, Pastor of the First Presbyterian Church of Battle Creek, delivered the baccalaureate sermon in the Sanitarium Chapel. The address was a presentation of the ideal of the really vital life, in all its richness; in its fullness and abundance, and suggested the existence of two springs of power from which this vital life must come: "First is the spring of meditation, which is a condition essential to fullness of active service—in quietness there is power, and through this life is saved from becoming monotonous, and is given color and glory. The second spring of power is found in the 'work to be done,' the God-appointed tasks, carried on amidst life's difficulties and perplexities."

Original from

UNIVERSITY OF MICHIGAN





Sanitarium athletic circles are much interested in the organization the other day of a Sanitarium track team. There is frequent practice work and the showing of several of the members is very promising indeed. May 30th, in a meet at Detroit of various Michigan athletic bodies, two of the Battle Creek men, John M. Jannsen and W. H. Bretschneider, each won a bronze medal. The event was a cross country run of five miles and both men finished in good time. Mr. Jannsen was formerly a member of the Danish Athletic Association of Copenhagen, while Mr. Bretschneider has held a membership in the Tübingen, Germany, Athletic Association.

The conditions of imperfection which are met with are just those necessary to train the soul and build character, said the speaker: "Your work, will be to teach men and women how to live, interpreting for them the laws of the universe. Yours will be a work preventive rather than remedial, corresponding to the genius of the institution in which you have been trained, a genius that is becoming the genius of modern life in the matter of dealing with evils in men and conditions."

#### Class Banquet Held in Dining Room

The graduating class and alumnae of the school were tendered a banquet in the main dining room on the evening of June 11th. Red and white, the class colors, prevailed, peonies of these colors being used; candles with red shades were on the table, red nectar in glasses was served, while celery and radishes formed one of the courses. Each place card bore the photograph of the guest and a printed list of toasts, which were as follows:

"To the Class of 1913," by Mrs. Ralph DeVault, responded to by Miss Matilda Von Pein; "To Our Alma Mater," by Mrs. L. Baughey; "In the Field," Miss Cora C. Walter; "Our Home," Mrs. Guy M. Hunt; "My Girls, Past and Present," Miss Lenna F. Cooper. Miss M. Hostetter acted as toastmistress.

The musical part of the program consisted of a violin solo by Miss M. Pringle and a vocal solo by Miss Ethel Stump, both numbers being rendered in excellent form.

#### Graduation Exercises

Thursday evening, June 12th, the gymnasium was the scene of the commencement exercises. The big room was handsomely decorated for the occasion, the platform carrying a large illuminated shield with the letters, B. C. S., in the center, and having as a background the wealth of foliage and flowers with which the stage was banked.

Keen disappointment was felt that Judge Ben Lindsey, who had kindly consented to deliver the commencement address, was on the advice of his physician unable to be present. His place, however, was acceptably filled by Prof. W. F. Carlton, of the department of economics in Albion College, whose subject was "The Lure of the Far-Away." Professor Carlton showed in an inspiring way that it has always been a characteristic of humanity to take the deepest interest in and to prefer the far-away thing. "The oldest of the sciences, astronomy," he said, "is the study of the remote. The dreams of men and women have mostly concerned the things that might be possible in circumstances and places other than those of the present. Sympathy has often been given on account of distant ills, while the evils and troubles at home are neglected. Men have been fascinated with the hope of being differentiated from their fellows by fame and honor. On this account we have the phenomenon that the soldier has been more honored in the history of the world than

the more valuable civic worker." This regard for things removed from the common life is on the decline," said the speaker. "Science is aiding in this desirable work by showing that while there are unskilled workers there is no unskilled work, and through this discovery is removing the repulsive character of many occupations, and at the same time increasing the efficiency and results of labor. I congratulate you," he said, addressing the class, "that you are not to be spectators in the world, but to assist in lifting humanity, to lead a portion of it to a higher level, which certainly is the highest type of work for the twentieth century."

In presenting diplomas to the class, Dr. E. L. Eggleston emphasized the necessity of specific education in every line of activity, especially in the home, and congratulated the members of the class upon the opportunities that lie before them. A vocal solo by Miss Derr Lewis and a number of selections by the Sanitarium orchestra provided an excellent musical program.

#### WHEREIN A HEALTH ENTHUSIAST PRAISES THE NEW "POCKET HEALTH BIBLE"

WE commend to our readers a careful reading of the notice of Doctor Kellogg's "Health Lectures" that appears on another page of this issue. As showing the manner in which the lectures are being appreciated by the public we take pleasure in quoting from a letter received by the Good Health Publishing Company from a "Health and Efficiency Enthusiast," a man identified in a prominent way with public affairs in Washington, who had ordered a copy of the "Lectures" and *Good Health*.

"The 'Lectures' has been received and I have read it nearly through, and am delighted not only with the lectures themselves, but also with the manner in which the book is put up. The large type, clear cut phrases and much information in few words, all make the volume very valuable. I have read most all of these things, of course, many times in the Doctor's lectures in the BATTLE CREEK IDEA, but am glad to have this concise form for handy use. Please continue *Good Health* for another year. I think the present form of the magazine is very good indeed. A pocket Bible is a splendid thing. So is this pocket health bible."

#### WEATHER MAN DISCUSSES THE SANITARIUM AND THE FORECASTING OF WEATHER

THE Sanitarium has recently had the pleasure of entertaining a "weather man," in the person of Mr. D. C. Grunow of the federal Weather Bureau, and stationed at Washington, Oregon. (We at the Sanitarium are glad that the weather behaves so splendidly in Battle Creek, especially during the stay of one who might be so critical of weather.)

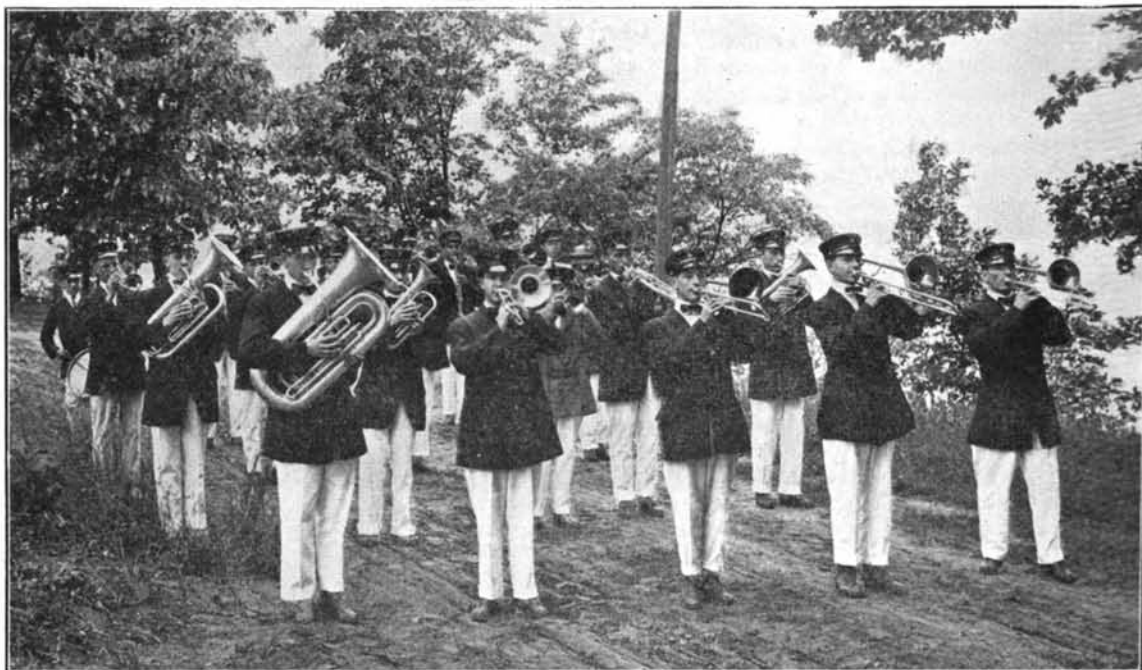
Mr. Grunow is a Sanitarium enthusiast. Concerning the institution and its work, he said, "I have nothing but good to say about it. I came here suffering from indigestion, and in a week the disorder has nearly left me. I have taken advantage of all the opportunities of gaining



"The biggest lilies I ever saw." This was the comment of scores of persons who saw the two big lilies recently displayed in the Sanitarium lobby. The flowers were about twelve inches across, the interior of the petals being flecked with red spots. Many persons asked the name of the variety. It is *Lilium speciosum rubrum*.

improvement, and feel that it has paid me to do so. The Sanitarium is working as closely in harmony with nature as human ingenuity can make it possible."

Of his profession Mr. Grunow speaks modestly, and while admitting the value and importance of the service rendered by the Bureau, he makes no extravagant claims for the department. The conditions, he declares essentially work against more than an approximation to correctness. "Especially is this so in the mountainous districts and along the coasts. The accuracy of forecasting varies too with the season, during the stormy season it being very difficult to correctly indicate the weather that may be expected. As a result of constant study, however, improvements are continually being made in methods, and with better results."



**"The best amateur band in this part of the State"—thus some one the other day characterized the Sanitarium band. And no one who has heard them perform would for a moment question the accuracy of the statement. Music is their specialty, not din and noise, as is the case with too many organizations of the kind. Every man is a musician, although less than two years ago, when the band began its existence many of the members scarcely knew the difference between a tuba and a sackbut.**

#### **AN IOWA ATTORNEY TALKS ABOUT THE SANITARIUM AND ITS METHODS**

MR. W. K. HERRICK, a popular attorney of Cherokee, Iowa, has recently visited the Sanitarium, making many warm friendships while here. Discussing the Sanitarium for the benefit of our IDEA readers Mr. Herrick stated that he had been deeply impressed by the remarkable facilities for the diagnosis of patients. "My own doctors were unable to tell exactly the nature of my illness, and advised me to come to Battle Creek. With the methods employed here, it has been an easy matter to settle the question and to take steps to remedy the difficulty. I have long had friendly feelings toward the Sanitarium, for both my father and mother, as well as other relatives, have been here. A number of my friends in Cherokee are also former patients. I have been so pleased with the institution that I have sent literature to eighteen or twenty people who I thought might be interested."

as a result of a diet from which meat has been almost entirely excluded for several years. After a stay in a hospital for several weeks, Doctor O'Donnell came to the Sanitarium to build up. "It is the only place where hydrotherapy, the treatment I most need, is thoroughly understood. I have been coming to the Sanitarium once a year for the past four years, and esteem the institution very highly. I am especially impressed with the atmosphere of cheerfulness and healthfulness, both physical and spiritual, which pervades the Sanitarium and I attribute the success of the institution in no small measure to these two very important factors. I regard as of very great value the educational side of the work done at the Sanitarium, for this gives patients an understanding of the laws of health." Doctor O'Donnell read not long since a paper before the Allegheny County Medical Association on the subject of the low-protein diet, giving extended excerpts from Sanitarium literature upon this subject.

#### **NEW YORK PHYSICIAN APPROVES OF EDUCATIONAL ASPECT OF SANITARIUM WORK**

A REMARKABLE testimony to the efficiency of hydrotherapeutic and other treatments in use at the Sanitarium is given by C. W. O'Donnell, M. D., of Andover, New York, a guest at the Sanitarium. Doctor O'Donnell recently suffered extraordinarily severe burns in a fire that occurred in his home. Although recovery in cases of such severity are extremely rare, yet the Doctor is making remarkable progress, thanks, he says, to his condition

#### **DR. J. T. WILLIAMS, OF TENNESSEE, GIVES HIS OPINION OF X-RAY EXAMINATIONS**

THE aim of the Sanitarium system is not only to cure sick people, but to give each guest a health photograph of himself that will make it possible for him to know the weak places and to guard them accordingly when he has left the institution. This is a statement made by Dr. J. T. Williams, of Nashville, one of the most successful physicians of Tennessee. I myself came here chiefly to get an X-ray examination," said the Doctor, "and now I shall be able to treat myself intelligently. The principles upon



which the Battle Creek Idea is based are absolutely sound, and I have been much interested in the remarkably complete equipment of the institution. The diet is beneficial, and I am convinced that most people eat far too much meat. I am also much interested in the complete and full program furnished the patients, a factor especially valuable in treating nervous people."

### COOKING IN CAMP

CAMPERS who have tried more elaborate culinary performances over a camp fire than frying or boiling know, says Mr. S. R. Quigley, in *Outing*, how fatiguing a task it is to preserve "the happy means between no fire at all and a fire that will burn everything to cinders."

"This difficulty," says Mr. Quigley, "may be obviated and a wholesome variety added to the menu by using a camp fireless cooker. When preparing your outfit this summer, pack some of your belongings in a soap or a cracker box that has a fairly close-fitting lid. Take along an old white quilt or a blanket that can be folded into a pad to fit the box, or make a crude pad out of unbleached muslin with cotton batting about one-inch wide. Include in your outfit a granite cooking pail commensurate in capacity with the size of your party. In setting up camp, the soap box is to be lined with three or four thicknesses of newspaper. This can be done easily with the aid of a few tacks and filled with clean hay or straw packed firmly, and a close little nest hollowed out to fit the pail. This camp fireless cooker has been tested and has proven a pleasant luxury, as well as a convenience in camp life. It makes possible cooked cereals, rice, evaporated fruits and slow-cooking vegetables, where otherwise they would be excluded from the menu. If there are children in the party, these things are particularly desirable. Keep the soap box in a sheltered place. Let the food in the cooking pail begin to boil briskly over the camp fire. Then remove it, seeing that the cover is tightly closed (it should be a cover that sets in), and place it in its hay nest. Tuck over it the cotton pad and three or four thicknesses of newspaper and shut down the lid of the box. Breakfast cereals may remain in the cooker over night.

"It is not necessary to have ice for keeping stuff cool and sweet in hot weather. The fireless cooker which conserves heat at the boiling point for many hours, will also conserve cold, or, more properly, keep heat out. A box lined with paper, packed with clean hay, straw or shavings, and securely covered is all that is needed. The bottle of milk, received ice-cold from the dairyman's wagon and placed directly in this device will keep sweet as long as nature desires it to."

### BATTLE CREEK SYMPHONY ORCHESTRA ENTERTAINS SANITARIUM GUESTS

THE evening of June 10th, the Battle Creek Symphony Orchestra gave the Sanitarium guests a rare treat in a program that included numbers from Mendelssohn, Thomas, Mozart, Suppe and others. The entire program follows:



EDWARD PAYSON WESTON  
Photograph taken at the Sanitarium entrance.

Mr. Edward Payson Weston, the world's greatest walker, many of our readers may be interested to know, is taking another long walk, this time from New York to Minneapolis. A year ago Mr. Weston spent a week at the Battle Creek Sanitarium, during his visit taking Sanitarium guests on several walks and teaching them how to walk correctly and with ease. We wish Mr. Weston all success in his new venture.

March, from the "Midsummer Night's Dream"

	Mendelssohn
Fantasie, "Traumbilder"	Lumbye
Duet for Flute and Clarinet, "The Butterfly"	Bendix
Selection from "Maritana"	Wallace
Entr' act from "Mignon"	Thomas
Waltz, "Militaire"	Waldteufel
Largo (Violins in unison)	Handel
Allegro from "Serenade"	Mozart
Overture, "Light Cavalry"	Suppe

Each number was interpreted with true feeling, the "Traumbilder" being particularly worthy of remark, as also the Bendix and Thomas numbers. The orchestra and conductor, Mr. John B. Martin, are to be congratulated upon the successful concert season which closed with the Sanitarium program.

## Dr. Frank Crane on "The Gospel of Water"

THE stand taken by Secretary of State Bryan in forbidding wines to be served on his table recalls one of those delightful essays written by Dr. Frank Crane, entitled "Water."

"The gospel of the twentieth century is—water," said Doctor Crane. "You have read many a learned treatise, doubtless, including Edmund Demolin's 'Anglo-Saxon Supremacy; to What Is It Due?' in which is sought the cause of the English race overrunning the earth. The real cause is that the Englishman has not been afraid of water. He sails on it, tubs in it, drinks it.

"From the hygienic point of view, there is no medicine like water. About nine-tenths of the ills of the flesh can be washed out.

"People go to Hot Springs in Arkansas, to Manitou Springs in Colorado, to Carlsbad, and to Vichy, and are cured. They praise the salts in the waters. The truth is the greatest curative property is in the plain water that holds the salts. They might be healed at home if they would drink there as copiously as they do at the spa.

"The human body is mostly water. When we die the liquids are dried up.

"Drink a large glass of water as soon as you arise in the morning; headache, constipation, and physical meanness in general will disappear.

"Get the drink habit. Keep a bottle of water by your office desk and go to it often. See how much water you can hold. This is nature's remedy for doldrums, nerves, premonitions, and general depression.

"Most of the morbidities, anarchies, and crimes come from the unwashed in body or soul.

"The root difference between Russia and the United States consists not in the contrast between their respective forms of government, but in the contrast in habits of bathing.

"You do not need water that costs money, charged and bottled waters. The liquor that runs from the tap in your kitchen, that flows in the mountain brook, that lies in infinite plenty in the lake, that comes from your well or that falls down from the clouds, is good enough, provided there be no pollution.

"Use it. Immerse your body in it. Flush your mouth and nose with it. Swallow it to your capacity. So will all your solid flesh rejoice, your vital organs operate smoothly, your mind clear up, your soul be content.

And the cares that infest the day  
Shall fold their tents, like the Arabs,  
And as silently steal away.

"No wine ripened for years in the cellars of Rheims, no concoction produced by the most skilful of chemists in the laboratory, no juice of herbs or compound of mineral can compare with nature's own beverage and medicine.

"It has in its crystal body the simplicity of heaven, which is the vigor of earth.

"It is the liquid smile and good will of God.

"Without it the bodies of men would die in torment, and all the beauty would pass from hill and meadow, and his globe would spring through space a lifeless hell of fire.

"In hell there is no drop of water. In heaven the central charm is the river that flows through the place."

### MISSISSIPPI PHYSICIAN MAKES THIRTEENTH VISIT TO THE SANITARIUM

ONE of the oldest and most beloved physicians of Mississippi is Dr. J. W. Hough, of Jackson, who has practised medicine for over sixty years. During the past eighteen years, he has been paying frequent visits to the Sanitarium, having recently made his thirteenth trip. Speaking of the Battle Creek system, Doctor Hough said, "If I did not heartily approve of the Sanitarium system, I should not, of course, return so frequently. I heartily endorse the methods of treatment in use here. I myself have been a vegetarian for the past forty years and believe heartily in the low-protein diet. To the best of my knowledge and belief the Sanitarium has no equal in the United States."

Doctor Hough has made many important observations with regard to the effect of cane sugar in disorders of children, and has frequently found that eczema is curable only after eliminating sugar from the diet.

### PROMINENT ILLINOIS MANUFACTURER DISCUSSES FIRST VISIT TO THE SANITARIUM

MR. F. S. J. TURK, a Kankakee manufacturer, and Mrs. Turk have just returned home after a few weeks' stay at the Sanitarium, where they made many friends among guests at the institution, and the staff. Speaking to an IDEA representative of his sojourn, Mr. Turk said, "Our stay has been shorter than I could wish, but I am better, my wife being especially helped by the thorough examination and the Sanitarium diagnosis of her case. We are very much satisfied with everything we have found and shall hope to arrange a visit to Battle Creek later on. I am particularly pleased with the equipment which I find at the Sanitarium. This, with the careful guidance of the physicians must benefit all who follow the Battle Creek Idea.

### DETROIT PHYSICIAN FINDS SANITARIUM A GOOD PLACE TO REST

DR. GEO. L. RENAUD of Detroit, Michigan, "discovered" the Sanitarium last December. On his first visit the Doctor found what he says is a place where genuine recuperative rest can be obtained. Since his first trip, he has made us three subsequent visits, besides sending several of his patients to us. "I myself have visited several 'cures,'" he says, "but none of them

possess the features which one finds here, where the life is simpler and more conducive to real rest. Indeed, I have enjoyed the place so much that I shall continue to come here frequently for short visits and thus keep in the best of physical trim. I have sent several patients here, and they feel about the Sanitarium as I do."

### WHOLESOME IDEALISM

The theories of idealists are generally impractical. The ideals of natural living which are an essential part of the Battle Creek Idea are not open to this objection. "The more I see of the Sanitarium, the better I like it. It is one of the greatest examples of applied idealism ever conceived." In these enthusiastic terms Mr. Louis Van Ordin, principal of the Washington Commercial and Normal School of Washington, Pennsylvania, gave to an IDEA representative his estimate of the Sanitarium and the principles upon which it is based. The present is Mr. Van Ordin's third visit to the Sanitarium. "I return to the Sanitarium," says Mr. Van Ordin, "because the general conditions here are almost ideal. Everything in the environment leads to health. And so far as the diet is concerned, I am certainly in favor of the system employed here. I have always been a vegetarian, and so have personal knowledge of its benefits." Mr. Van Ordin's sister, Mrs. A. McGill, of East Liverpool, Ohio, is also a guest at the Sanitarium.

### A NEWSPAPER MAN'S OPINION

"A HIGHER perfection of diagnosis and prognosis has been reached here than in any other institution I know, I believe," said Mr. R. G. Adams, a newspaper proprietor of Poplar Bluffs, Missouri, the other day to an IDEA representative. The thoroughness and accuracy of the examination have impressed me very strongly," he said. Mr. Adams made the interesting observation that the principles of the Sanitarium are based on common sense and hence are scientific. "The equipment, too, is probably the finest in the United States. I am not alone in this opinion, for I have heard the same thing said by several physicians of note. I am pleased with the wholesome moral and religious atmosphere which pervades the place."

### THE LOW-PROTEIN DIET USEFUL IN TREATMENT OF DENTAL DISEASES

IN dental circles of the middle west one of the most prominent figures is Dr. L. M. Cates, of St. Louis, Missouri. Doctor Cates has recently spent a fortnight at the Sanitarium where he made many friends. In discussing the work of the institution, he remarked especially upon the value of the diet employed here. "In treating dental diseases, and especially pyorrhea, I find that one of the greatest enemies to healthy gums are the thick, juicy steaks which people are in the habit of eating, and while in the very nature of the case I cannot restrict the diet of my patients, yet I do advise them in these cases to cut down on the use of meat, at least to reduce the meat ration to a minimum. In this way, I find the Sanitarium diet very practical."



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### THE INCONSISTENCY OF ICE-CREAM

Now that the ice cream season is on, a statement made the other day by one of the Sanitarium physicians in reply to an inquiry from one of the patients is very timely. "My objection to ice cream," he said, "is that it is inconsistent. Consistency is a rare jewel, we are told, and there is no consistency whatever in ice cream. In fruit ices there is some consistency, but there is none in ice cream. Ice cream has some food value. It contains proteins which must be digested in the stomach. It contains fat, which is always slow of digestion, so that if the ice cream were not frozen and you were to put it in your stomach, you could take a very little of it and it would be repulsive to you so that you could not even swallow it. To prove it, take a little ice cream that is not frozen and try to eat it—your natural instinct will rebel against it, you will find it almost impossible to take. But when the ice cream has been frozen, the stomach does not recognize the true nature of it, the sense of taste being killed and the gustory nerves being paralyzed to the point where it cannot perform its function. The consequence is that the stomach accepts the food because it does not know its true nature.

"Moreover, the frozen condition of the ice cream paralyzes the stomach. Did you ever try to do fancy work when the fingers were benumbed with cold? Did you ever hear of a scientist trying to use a microscope or an artist to use an engravers' tool when his fingers are frozen stiff? Now the stomach when filled with ice cream is in precisely the same condition as are the fingers when they are benumbed with cold. The stomach can no more digest food than the frozen fingers can write or draw or do other delicate work.

"Not only is the flow of gastric juice inhibited, but other activities of the stomach cease operations. Thus the food that is taken into the stomach when it is in this benumbed condition remains there for hours, with the result that it ferments and decomposes and putrefies. The results of this process may often be felt the morning following the taking of the dish or two of ice cream. You will observe that the tongue has a thick coating, and that there is a bad taste in the mouth, and not infrequently there is a headache that makes effective mental work impossible.

"The effects of ice cream, I say, are especially bad because ice cream contains considerable food value. In the

case of fruit ices the situation is different because fruit ices contain practically no food value whatever and what nutrition is present is absorbed quickly from the stomach and does not remain there to set up putrefaction."

### THIS KIND OF SWEAT SHOP IS COMMENDABLE

IT is difficult for a man who does not work hygienically to eat hygienically, said a Sanitarium physician the other day. An individual who does office work to the total exclusion of all other kinds of labor is never really ready for his meals, and his digestion, so essential to health, is impaired. A healthy life without at least some muscular work is positively impossible. The Lord told Adam he must earn his bread by the sweat of his brow, and when a man refuses to obey this injunction, he soon finds some part of his digestive system deranged.

For some unknown reason, there is abroad a great antipathy to sweating. The average man is looking for a job of some kind in which he can earn a living without sweating. Most people seem willing to sweat their brains a great deal more than they will sweat their muscles or their skin. But what we need is more skin activity. You find many people with brown spots on their hands, brown circles under their eyes and with a dingy skin—all because they do not sweat enough. To find people with the very finest complexion in the world, one must go to North Africa or to Scotland, or in the extreme northern part of Sweden. When in Russia I was surprised to see the wonderful complexion of the Russian people, but I soon discovered the secret of it. It is this, that the people sweat. In the summer time it is hot enough so that they are able to sweat in a natural manner, but in the winter time they make it a habit to visit the sweat house regularly, entire families going together. In the St. Petersburg sweating house one finds a room in a corner of which

*(Continued on page twelve)*

### WORLD FAMED X-RAY SPECIALISTS INSPECT THE SANITARIUM DEPARTMENT OF RADIOLOGY

AMONG the many physicians who visited the Battle Creek Sanitarium during the week of the American Medical Association's annual meeting at Minneapolis, were a number of prominent X-ray men who were the guests of Doctor Case. Among Doctor Case's guests were Dr. G. E. Pfahler, of the Medico-Chirurgical College, Philadelphia; Dr. L. G. Cole, of New York City, Radiologist to the Cornell University Medical School; Dr. A. Luger, who was for several years assistant to Professor G. Holzknecht of Vienna, one of the leading X-ray specialists of the world, now a member of the faculty of the Harvard Medical School; Dr. Kennon Dunham, of Cincinnati, a member of the medical staff of the University of Cincinnati Medical School; Captain L. T. LeWald, Radiologist to the Charles M. Gibbs X-ray Laboratory, connected with the Bellevue Medical College, New York City; Dr. H. W. Van Allen of Springfield, Mass.; and Dr. S. J. Dodd, of the Massachusetts General Hospital, Boston, also connected with the Harvard Medical School. Doctor Dodd began his X-ray work early in 1896, within a few months after Roentgen's discovery of the X-ray.

## LOBBY NOTES

At the Children's Day exercises held in the chapel June 14th, to a very beautiful and inspiring service the little ones added a charming rendering of the cantata, "Hearts of Gold." Flowers, which constitute the characters in the cantata, were represented by the children with delightful grace and charm.

FROM that great center of the American furniture industry, Grand Rapids, Michigan, comes to the Sanitarium Mr. R. P. Tietz, a prominent furniture manufacturer. Mr. Tietz was able to stay but a few days, though long enough to become much interested in the various methods of treatment employed, and to purpose to return at short intervals for rest and treatment. Concerning the diet Mr. Tietz said to an IDEA representative, "I enjoy the food here very much; I have, in fact, never been a heavy meat eater."

WORD has been received by their friends in Battle Creek of the marriage on June 3d, at Mansfield, Ohio, of Miss Pearl Schettler and Mr. Howard B. Hayes. Miss Schettler was a former nurse and graduate of the Battle Creek Sanitarium Nurses' Training School, while Mr. Hayes is a prosperous farmer living near Shelby, Ohio. The IDEA joins their many friends in wishing the happy couple much joy.

APPLAUSE as vigorous as that which follows a home run at a critical stage of a baseball game greeted the star attraction of the spring term exhibition of the Normal School of Physical Education. The feature was the Swedish Gymnastic drill given by the Juniors and Seniors under the direction of Dr. Lewis Collin, whose quick, sharp commands kept the men "on their toes" all the time. Tumbling by Messrs. Offinger, Bergin, Ambler and Miller also featured. Work with wands, Indian clubs, parallel-bars, German horse and flying rings completed a very successful program.

THE students of the Sanitarium School of Home Economics gave a sale of baked goods in the parlor Thursday, June 5th. The products put on exhibition provided most convincing proofs of the high quality of the work done in the School. A very good patronage of the sale left practically no food unsold at the close, and netted the students \$60.00, this sum to be devoted to additions to the school branch of the library in the College Building. June 10th the school also gave in the Annex an exhibition of the work done by the sewing class.

No physician on the Pacific Coast is better known or more popular than Dr. T. L. Adams of Oakland, California. Doctor Adams is making a tour of inspection of the more important hospitals and sanitariums throughout the country and spent June 9-11 as a guest of the Sanitarium.

ANOTHER California physician we have been glad to meet again—Dr. T. S. Whitelock, of San Diego. Doctor Whitelock was formerly a student of the American Medical Missionary College of Battle Creek, and is now engaged in medical practice.

THE same week the Sanitarium has had as its guest a Nebraska physician, Dr. J. B. Shively, of Lincoln. Doctor Shively was at one time a member of the Sanitarium staff.

MR. JOHN M. BEFFEL, a member of the editorial staff of the Detroit *Free Press*, registered at the Sanitarium recently, being in the neighborhood of Battle Creek on a business trip. "It is a remarkable institution and I am amazed at the many sidedness of its work," said Mr. Beffel. I have taken dinner here and have greatly enjoyed the meal, trying, if possible, to dine without meat and other articles of food which figure on the menu of the average dinner table."

THE following physicians from the Sanitarium attended the recent American Medical conference in Minneapolis: Drs. M. A. Mortensen, W. F. Martin, E. L. Eggleston, J. T. Case, B. Colver, and A. W. Nelson. A paper was read by Doctor Case on "The X-Ray Examination of the Liver and Bile Passages, and Especially of the Gall Stones."

MR. G. B. NEVILL, of Meridian, Mississippi, one of the best known lawyers of his State, is spending a few weeks at the Sanitarium in rest and recreation. Two other "Meridianites," as they style themselves, visited Mr. Nevill last week: Mr. Tom Lyle, the very popular head of a large wholesale grocer business, and Mr. E. S. Bostick, President of the Bostick Lumber and Manufacturing Company. Mr. Bostick and Mr. Lyle, who have since returned home, expressed themselves as being deeply interested in the Sanitarium work, especially in the Sanitarium equipment for giving therapeutic treatments and exercise.

## SPICE—THE HYGIENIC KIND

WHEN he had carefully examined the shoes the physician had brought in for repairs, the German cobbler handed them back, saying, "Dem shoes ain't worth mending, Doctor."

"Very well, Hans," said the doctor, "then, of course, I won't have anything done to them."

"Vell, but I sharge you feefty cents, already yet."

"Why, what for?"

"Vy, ven I came to see you de udder day you sharged me t'ree dollars for telling me dot dere ain't noddings der matter mit me."

IKE SILVERMAN was arrested and taken to the city prison. His condition was so uncleanly that he was told he would have to take a bath. A look of dismay spread over his face.

"Do you mean I haf to go in de vater?" he asked.

"Yes; take a bath; you certainly need it badly," responded the other. "How long is it since you have had a bath?"

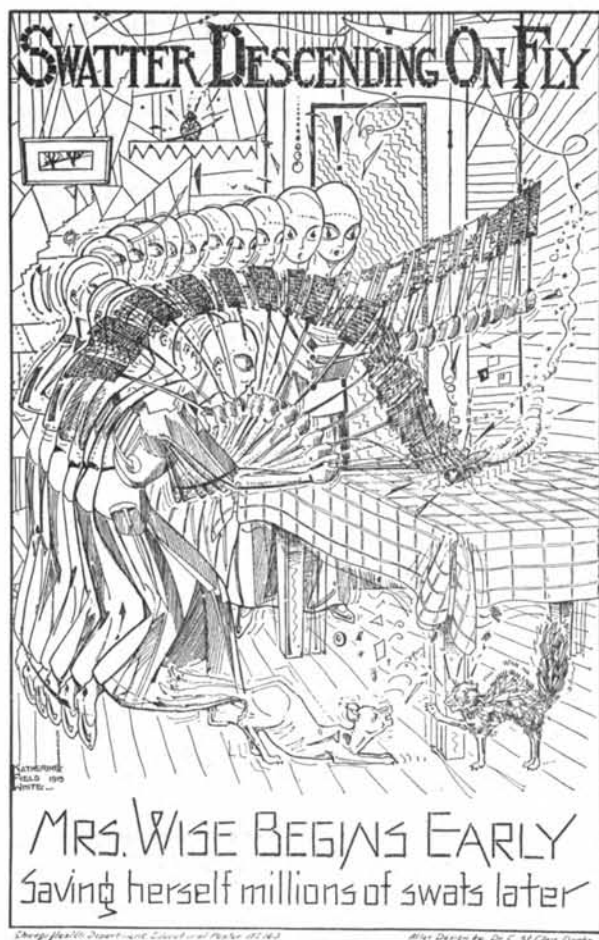
"Vell," said Ike, holding up both hands, "I never vas arrested before."

"I HEAR your wife is very sick, Uncle Rastus. What seems to be the matter with her?"

"Well, suh, de doctah done say she is sufferin' from a tumult in her stummick."

"WELL, Doctor," said Jones, "Mr. B. is dead, notwithstanding that you promised to cure him."

"But," the Doctor replied, "you were absent; the man did not follow the progress of the cure. He died cured."



A Cubist Fly Fantasy.

### FLY PHILOSOPHY

THE following "fly aphorisms" should be pasted in the hat or hung in some other convenient place:

"It is better to screen the cradle and wear a smile than scoff at the precaution and wear mourning."

"Flies in the dining room usually precede nurses in the sick room."

"Screens in the windows prevent crape on the door."

"Flies as well as bad water spread typhoid."

"A fly in the milk may mean a member of the family in the grave."

"A fly has natural enemies; the most persistent and the most effective should be man."

"It costs less to buy a screen door than to get sick and lay off for a month."

(Continued from page ten)

is a large porcelain stove, containing a place for the fire, and above it an oven-like place for heating stones. Arranged about the room are shelves on which people stretch themselves, unclothed. The attendants throw water on the hot stones, causing great clouds of steam to rush out and fill the room, and causing the people to perspire very freely. The people on the upper shelves, of course, get the greatest heat, so the patrons gradually move up from the lower shelves until they reach the topmost. After

sweating here for half an hour or so, they are given a cold shower bath and shampoo.

This, of course, is in St. Petersburg. Go a little farther north and one finds sweating houses that are crude, of course, compared with the elaborate St. Petersburg affairs, but for all that quite as effective. Each home has behind it one of these small sweating houses. In these northern regions, indeed, the sweating house is often the first building to be erected. Before his marriage the prospective groom builds a sweating house, first of all, into which he moves with his bride until they can build a house in front of it for permanent residence. These sweating houses do not contain facilities for cold showers and that sort of thing, but the people are acquainted with the value of the cold reaction to the skin, so after sweating the proper length of time, they run out of doors, quite without clothing, and roll in the snow for a moment and dash back into the sweat house again. There is little wonder that these people have the finest complexions in the world.

One observes with astonishment that the people who indulge in this extreme form of sweating do, at the same time, a vast amount of physical work. Here in our own country, we find a large proportion of our population engaged in indoor and sedentary work, without physical exercise—and also without sweating baths of any kind. The result is, of course, that most people never perspire, and yet they go on year after year, eating quite as heartily and of as hearty food as the man who is obeying the Lord's injunction to Adam to get his living by the sweat of his brow.

(Continued from page three)

in the newspaper man. "Gentleman," I said, "this is Charley Deal. This man here is Peterson, the cop. Peterson does not believe that we can depend upon Charley's honor, but I do. Charley has no money in the bank, but he has what is better, a sense of honor that can be banked upon. And Charley, I am going to tell this man that I am right and Peterson is wrong, and in the story they will say, 'Charley did not throw the Judge down.' Am I right and is Peterson wrong, or is Peterson right and I wrong?"

He looked up into my face and said, "Judge, you trust me. Just give me the writ and watch me. I will stay wit' you, Judge, and we'll fool that guy Peterson."

And Charley tore down the steps as fast as his little feet could fly, ran to the railroad station, climbed aboard a train and got off at the little shack there at the foot of the mountain and trudged up the long hill into the very place he had so often run away from. He walked into the Superintendent's office like a little man, handed him the writ, and the next day I got a paper, not from an accompanying officer, as usual, but from Charley himself, which read, "This is to certify that I, Charley Deal, have delivered myself into the hands of the Superintendent upon trust and honor."

And Charley wrote me a few days afterward and said, "Say, Judge, I wisht I had been there to see the mug of that guy Peterson."

What the policemen could not do without handcuffs and chains, we had done by banking on the honor of the kid.



# Battle Creek Ida

JULY 15

1913



Scene on the  
Battle Creek Stream



## HOW THE REFLEX CENTERS AUTOMATICALLY CONTROL IMPORTANT BODY FUNCTIONS

FROM A LECTURE IN THE PARLOR BY DR. J. H. KELLOGG

THE physician is frequently asked the question, "When and how do the reflex centers get out of order?" a question about as difficult of answer as when and how an automobile gets out of order. For this body-machine of ours, the "corpomobile," we might say, runs itself to a considerable degree, these reflex centers being the automatic mechanism of the machine. In locomotives there is an arrangement by which the engine, if it gets to going too fast shuts off itself, when it goes too slow turning on more steam and thus speeding itself up again. This automatic regulation keeps the engine going at quite a uniform rate.

### How the Temperature is Controlled

The body has regulators of the same kind. For example, it is necessary that the temperature of the body be kept at about 98.4, or practically 100, degrees on the inside of the body. This temperature should be continuous. Supposing, now, we fall asleep and we become too warm. We perhaps dozed off without turning off the steam and the room became overheated. It would not do for the temperature of the body to reach 115 or perhaps 120 degrees; the result would be death or serious injury. What happens? Why the body must be cooled, and so Nature sets up a cooling process by increasing the amount of water poured off through the skin, the evaporation of water serving to cool off the body.

Now in the evaporation of water, about 1000 heat units are required to convert a pound of water into steam without raising its temperature, this amount of energy being used up in expanding the molecules of water, spreading them out in gaseous form. That is to say, when the water is converted into steam it expands 1000 times and the energy in the heat is expended in expanding the molecule of water rather than in raising the temperature. (Raising of the temperature is due to the rapid movement of the particles, while the gaseous state is due to the fact that the orbits through which the particles

move are increased in size; that is, they swing back and forth through wider orbits and thus increase the volume of the liquid when it is converted into gas.)

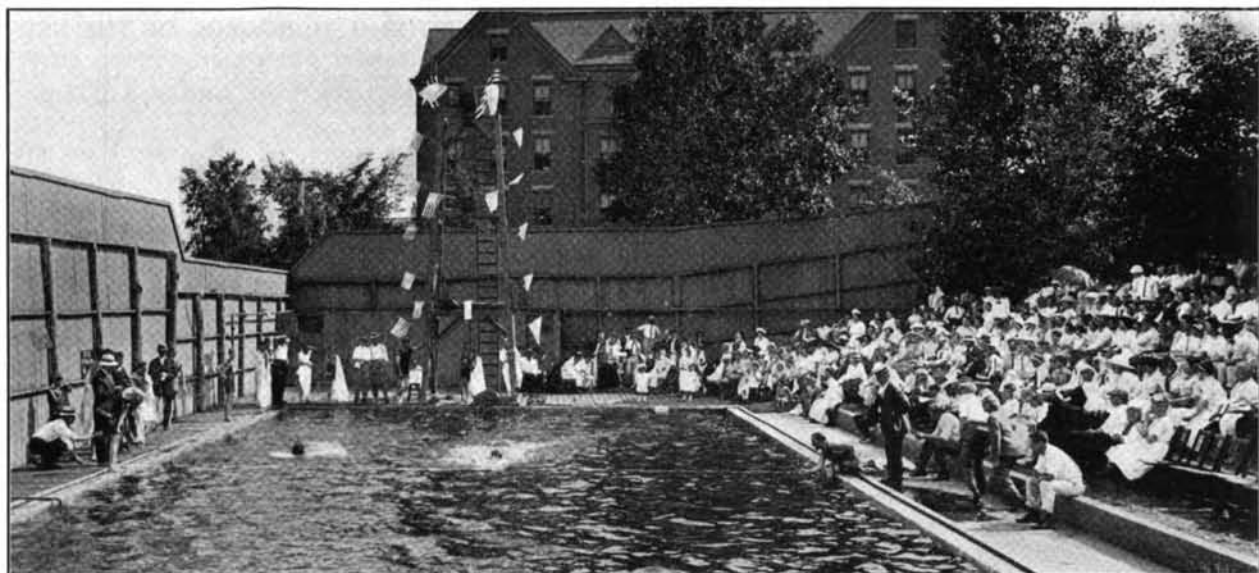
The body, by pouring off water on the skin and compelling the evaporation of this water, eliminates an enormous amount of heat. Water ordinarily evaporates from the skin at the rate of an ounce and a half an hour, but when the body is overheated and one begins to perspire freely, the water pours out at the rate of a pound an hour, thus relieving the body of approximately one thousand heat units an hour, which is a very appreciable lowering of the temperature on a hot day.

Or, to figure it more accurately, a body weighing one hundred pounds and eliminating one thousand heat units an hour through perspiration will lower its temperature ten degrees, though the net result is less striking, for the body is, of course, producing heat in its natural functions, so that it maintains a constant equilibrium.

Thus the automatic regulation of the temperature is constantly going on. If the temperature of the air rises one degree there is a readjustment of the heat-producing and the heat-eliminating functions of the body. If the temperature falls one degree there is still another readjustment.

### The Temperature in Fever

Now, in fever a person has lost his power to regulate temperature. His skin becomes dry; evaporation of moisture from the skin ceases, so that the temperature of the body rises. This explains why water is such a splendid remedy in fever, why it relieves the patient to fill his body with water. The fever patient may drink a tumblerful of water each hour. That is all that is necessary, a better remedy than all the medicines that are known combined. If the patient cannot swallow the water, it can be introduced through the bowels, a pint of water each hour. I have seen scores of patients' lives saved simply by deluging the body with water in this way. Water carries off the poisons generated in cases of peritonitis, cholera in-



## Sanitarium Keeps Safest and Sanest of Independence Days

FOR downright safe-and-saneness we commend the Fourth of July celebration afforded the Sanitarium guests by the natatory athletes of Battle Creek in a program run off in the men's outdoor gymnasium. The occasion was the third annual mid-summer water carnival, under the direction of Mr. Howard Province. An occasion of this kind affords all the excitement that a normal set of nerves is in need of, and it is about as conducive to danger and mutilations of the body as an old-fashioned quilting-bee.

The big event was the fifty-yard dash for the championship of the city, won by Mr. Alfred Judd, of the Sanitarium, in thirty-four seconds. In "Some Classy Stunts" Professor L. A. Summers, Assistant Physical Director of the Sanitarium, and Mr. Glenn Lichtenwalner distinguished themselves, as did also the Misses Cassiday, Warren, and Hunter in "Ladies' Swimming Exhibition."

The "Boy's Obstacle Race" and "Plunge for Distance" were won by Howard Welton and Wilfred Nelson, respectively, the latter also winning the prize for "Fancy Diving for Men." "Fancy Diving for Boys and Girls" was taken by Miss Cassiday for the girls and for the boys by William McClure.

If an exhibition of this kind cannot produce accidents, it can, given a first-class imitator, give a good imitation of one. A most practical and instructive feature of the program was a life-saving exhibition in which Miss Pearl Hunter brought to shore Miss Ivy Griffin, tipped out of a canoe by Mr. Howard Province, and resuscitated by Mr. L. A. Summers by the Schafer Method. The afternoon was one that will be long remembered by the large audience that was present, and to the American people is an object lesson in providing a Fourth of July celebration that is safe and sane without being tedious and dull.

fantum, or other infectious diseases that people contract from germs.

The action of the heart is another splendid illustration of the self-adjusting power of the "reflexes." One is not obliged to think about his heart to keep it beating. Not that the heart continues to beat without any direction: this is not the case, for as a matter of fact the heart must have notice every time it beats.

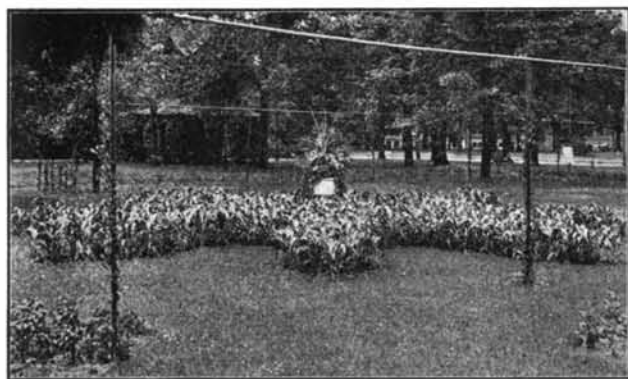
In Berlin a few months ago I talked with an eminent specialist in heart diseases about the various functions of the organ and he explained to me one very interesting fact. The heart, you understand, has four cavities, two auricles and two ventricles. Now, just above the heart on one of the blood-vessels there is a little knot called the "aortic sinus," and from it runs into each ventricle and each auricle a little nerve which carries from the sinus—a central telephone station, as it were—an order to beat. When one is lying down quietly, for instance, the heart beats once each second because the order comes from headquarters each second to contract.

Now this automatic control that manages the heart and other internal organs is an Intelligence above ourselves. This is the great hope for the sick man: that there is a power in charge of our bodies that is greater than ourselves, that keeps the heart beating while we sleep, that keeps the lungs working without thought from ourselves. A beautiful thing it is to contemplate—that the same force that made us becomes our servant, dwelling within us and carrying forward all the complicated processes of life independently of our wills.

## Burbanking in Battle Creek

THE connoisseur of flowers need not go to California to see the wonderful creations of Burbank, the great flower wizard. The Battle Creek Sanitarium now has on its premises what is probably the most complete and largest Burbank garden in Michigan. The garden has taken the form of a group of twenty beds, of different





Bed of "Rainbow Corn."



Ornamental Bananas.

shapes and sizes, laid out against a rich setting of lawn. Of these, perhaps the most striking is the large flower-shaped bed containing the Burbank rainbow corn. This plant has a brilliant foliage of red, white, green, rose and bronze type. Other productions are giant zinnias, corona roses, evening primroses, verbena, platycodon, or Chinese bell flower, and dianthus, or pinks.

Of greatest value are the Burbank gladioli, some of which cost as much as fifty dollars a dozen. Of the thirty dozen of this plant which were put on the market this year, the Sanitarium has planted two dozen, with five dozen ornamental bananas, not yet put on the market, but sent by Mr. Burbank as a gift to the Sanitarium.

Other plants not of the Burbank specimens are found among the beds, such as pansies, Spencer sweet peas, the Dutchman's pipe vine, bitter sweet, vitis Henriania, turquoise berry vine, wistaria, and climbing hydrangea. The hydrangeas are now in bloom and a beautiful sight they are. The Skinner overhead pipe system is used for watering the garden. This consists of overhead pipes about eight feet above the ground, and perforated by small holes. The sprays cover a space of thirty-two feet. Most watering systems have been faulty owing to the fact that an even pressure cannot be procured for the entire length of the pipe. This objection, however, is avoided by having the pipe of graduated size, beginning at one inch in diameter and diminishing at each joint, thus procuring an even distribution of pressure in all parts of the garden.

### MEDICAL DIRECTOR O. H. ROGERS, OF THE NEW YORK LIFE INSURANCE COMPANY, POINTS OUT UNIQUE FEATURES OF SANITARIUM SYSTEM

A VERY important factor in the success of any life insurance company is the Medical Director. Upon him depends the standardizing and selection of risks, and the devising of new policies. The New York Life Insurance Company has been especially fortunate in having as its Medical Director Oscar H. Rogers, M. D., a man of wide scientific attainments, and an executive of unusual ability. Doctor Rogers became associated with the New York Life in 1890 as Medical Examiner, in 1893 becoming Assistant Medical Director, and, in 1902, head of the department. In insurance circles Doctor Rogers is widely known as having originated and developed a scientific method of medical selection by means of which insurance is offered on equitable terms, not only to standard risks, but to "health standard risks," as well, the first successful attempt to establish medical inspection upon a scientific basis. In this work he was assisted by actuaries Weeks, Frankland and Hunter.

Doctor Rogers has just paid a visit to the Sanitarium, making a careful inspection of the various lines of work which go to make up the Battle Creek Idea, and very kindly consented to present to our readers the points in which he regards the Sanitarium methods as quite unique.

"It is difficult to give my impressions of the place," said the Doctor, "because it is different from any other place on earth. First of all, the diet system is wonderful. I have been at Karlsbad, Vichy, and other watering places and so-called 'cures' in Europe, and have studied as carefully as I could in a short time their methods. Nowhere in the world do I know where the accumulated knowledge of modern science is applied more thoroughly and systematically than it is here. I do not know anything like it, outside the laboratory of a specialist. I have visited the laboratories to see the urinalyses, fecal examinations, and other analyses, and to my mind it is remarkable to think that every man who comes here has to go through the same careful analytical machine. I think it is in a class by itself.

"Then another thing that impresses me very much is the careful adjustment of the food intake to the needs of the body economy and the avoidance of throwing on the liver the hard work or overwork that people who know nothing about dietetics are constantly subjecting their livers to. This, to my mind is very wonderful. I did not know it was possible outside the laboratories of the government at Washington to provide a means by which metabolism may be so studied that one can be told exactly the amount of proteins and the amount of fats and carbohydrates necessary for him to eat in order to keep up his vital machinery. They do not touch it at Karlsbad. The Doctors there are guessing very much as they did in the Dark Ages when Charles gave his name to the place.

"The hydrotherapeutic work, while not absolutely unique as are those other features of the work I have mentioned, are, nevertheless, extraordinarily well applied and complete."



The "talent."

### SANITARIUM TALENT PRODUCES SHAKESPEARE COMEDY FOR GUESTS

WEDNESDAY, July 9th, was Shakespeare day at the Sanitarium. The physicians and nurses all regret, of course, that the great Master could not have been here in person to be given a salt glow, a percussion douche and the many other interesting treatments which can be had to perfection only in the Sanitarium bathrooms. But Shakespeare's most delightful comedy, "As You Like It," was accorded fine treatment by the large audience which viewed it, and the attraction was unanimously voted a huge success. The play was staged in the men's outdoor gymnasium, the cast being made up entirely of employees of the Sanitarium, under the direction of Mrs. H. Otto Packard. Skillful abridging cut down the production to an hour and a half, without losing the essence of the spirit of Shakespeare that pervades the entire play. For "As You Like It" will always remain the comedy which embodies most completely the humor of the great poet. The "Midsummer Night's Dream" is more airy

and delicate, "Merry Wives of Windsor" is more rollicking in its fun, while many scenes in "A Winter's Tale" contain more beautiful pastoral scenes. But in "As You Like It" all these qualities are combined in a play whose humor is subtle and at the same time very human, playful without being coarse, while the Arden scenes lend the play touches of charming rusticity without interfering with the action of the plot, as sometimes happens in Shakespeare's comedies, while among all Shakespeare's heroines, we submit, there is none superior to Rosalind in womanliness, wit and resourcefulness.

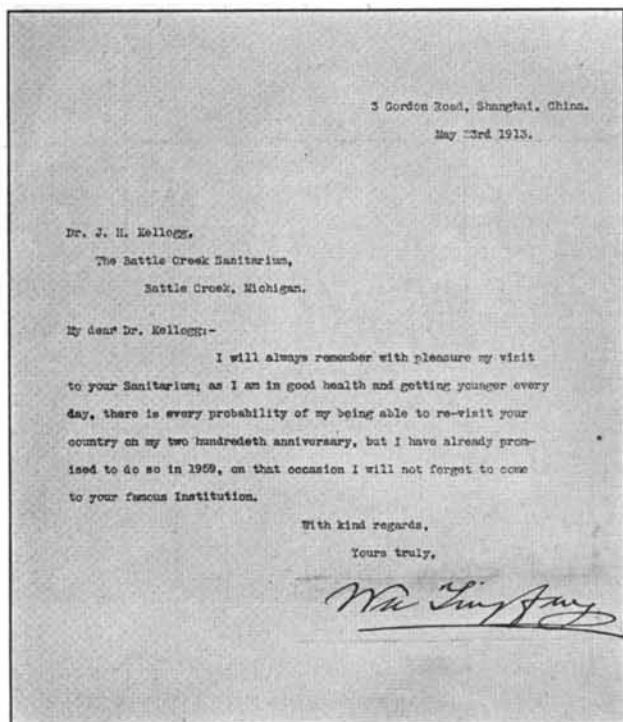
To interpret Shakespeare the actor as well as the teacher must enter heartily into the substance of the Elizabethan period, and this the Sanitarium players did in a most remarkable way. So much so that their enthusiasm became contagious and the frequent applause with which the lines were greeted shows to what extent the Elizabethan spirit still lives in the modern mind when it is called forth by the proper kind of appeal. So popular has proved the production that calls have been made for an enlarged Shakespearean repertory and for engagements in other places.



Touchstone and Audrey.

### CALIFORNIA PHYSICIAN GIVES IMPRESSIONS OF RATIONAL TREATMENTS EMPLOYED HERE

DR. HOWARD C. GATES, an eminent California physician-surgeon, is an honored guest at the Sanitarium. Doctor Gates, whose home is in Los Angeles, has had a splendid training for the successful work he is doing. To his medical studies in this country he added a period of two years in Europe, studying at Vienna, Berlin, Berne and London, specializing in surgery. At Berne he took work under Doctor Kocher, "the father of surgery in Europe," as he has been called, and famous, also, for an operation for goiter which he originated. A place of special interest to Doctor Gates was the Winternitz Sanatorium at Kaltenleutzen near Vienna, at which he



#### WU TING FANG, CHINESE MINISTER FOR FOREIGN AFFAIRS, COMING TO THE SANITARIUM

WU TING FANG, former Chinese Minister to the United States, and in the new Republic holding the exalted position of Minister of Foreign Affairs, visited the Sanitarium in 1909. He took a deep interest in every phase of the Sanitarium work, and proclaimed himself a confirmed "sanitarian," as he quaintly put it. Minister Wu promised at the time to return to the Sanitarium for a visit in 1959, fifty years later. That he has not forgotten the appointment is seen in a letter just received by Doctor Kellogg, and a reproduction of which we give above. All of our IDEA readers, then, we invite to the Sanitarium in 1959 to meet one of the world's most enthusiastic health apostles.

stopped. This is one of the oldest institutions for hydrotherapeutic treatment existing, and has a full and splendid equipment for about three thousand patients at one time. "It perhaps more nearly compares with the Battle Creek Sanitarium than with any other institution in the world," said Doctor Gates. "This Sanitarium, however, does not suffer by comparison. Indeed, there is nowhere another such as this, I believe. The entire system is wonderful. The treatment is physical, psychological and dietetic, and close observation of the patient is kept. Although elaborate, the methods have nothing superfluous, but are complete, and no case need fail to receive benefit if the patient only does his part. The bright and cheerful atmosphere maintained is a notable feature, as also the great courtesy of the attendants, who are always ready and willing to give any assistance that may be required, even at the cost of their own convenience. It would be

difficult to say too much in commendation of the Sanitarium as a whole."

Doctor Gates is accompanied to the Sanitarium by Mrs. Gates, who is also a physician.

#### GRADUATE OF SANITARIUM SCHOOL BECOMES DIETARY EXPERT AT THE NATIONAL CASH REGISTER COMPANY

MISS MARGARET WATERS is a graduate of the Sanitarium School of Home Economics. After graduation she accepted a position as Matron of the Commons of the University of North Dakota, in which position she was responsible for the catering to three hundred and fifty students. About fifty of the men assisted her in the kitchen and dining room and through her became interested in a practical way in the Sanitarium system of dietetics.

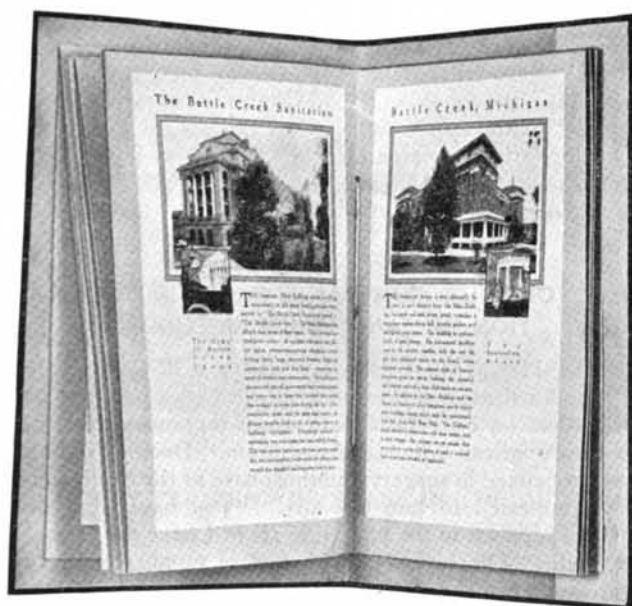
"One great trouble I found was rapid eating," says Miss Waters. "Although students naturally have big appetites, the dining-room was usually empty in twenty minutes. I tried to impress on my charges the advantage of leisurely eating and thorough mastication of food, however, and I believe I was able to help them in this regard. A number of them became interested in the low-protein diet. We used a good many Sanitarium foods—especially rice biscuit, which were very popular. Miss Waters has now accepted a position as dietary expert at the National Cash Register Company, in Dayton, Ohio, a part of her work being to engage in welfare work among the girl employees.

#### EMINENT GEORGIA PHYSICIAN GIVES HIS IMPRESSIONS OF SANITARIUM FACILITIES FOR TREATMENT

DR. G. L. SMITH, a practicing physician of Swainsboro, Georgia, and surgeon for both the Georgia and Florida and the Wadley and Southern Railways, is making his first visit to the Sanitarium. "My experience has given me great confidence in the institution," Doctor Smith declared. "It is an ideal place for rest and treatment. The equipment is excellent and the system of baths, massage and other forms of treatment is most valuable. I readily endorse the low-protein standard of diet. The home-likeness and the sociability of the place is also a very delightful and most remarkable feature. I shall now be able to recommend the institution to my patients, which I shall not hesitate to do."

A POPULAR Boston doctor tells this story of his active nine-year-old boy. Not long ago his teacher kept him after school, and had a serious talk with him. Finally, she said, "I certainly shall have to ask your father to come and see me." "Don't you do it," said the boy. The teacher thought she had made an impression. "Yes," she repeated, "I must send for your father." "You better not," said the boy. "Why not?" inquired the teacher. "'Cause he charges \$3 a visit."





Reproduction of pages from "The Battle Creek Sanitarium."

### SANITARIUM ADVERTISING DEPARTMENT ISSUES DELIGHTFUL NEW BOOKLETS

THE advertising department of the Sanitarium has added two delightful booklets to its growing list of attractive brochures which set forth the various features of the Sanitarium methods. One is an edition de luxe of Doctor Kellogg's "The Simple Life in a Nutshell;" the second, entitled "The Battle Creek Sanitarium," gives in a nutshell the scope of the Battle Creek idea, the various methods by which it is applied, besides calling attention to the advantages of the outdoor life that are accessible at the Sanitarium. Both booklets are reproduced herewith. "The Simple Life" is artistically printed in brown and gray on a fine quality of buff-tinted paper, with fly leaves of rich brown cover stock and bound in a very heavy paper of the same quality and color, with title and design embossed and ornamented with gold. The feature of the design is a pasted photograph of a pastoral scene. The booklet bears portraits of Old Parr at the age of 152 years, and Cornaro at 100 years. "The Battle Creek Sanitarium" is a still more elaborate production. It is eight and one-half by twelve inches and printed in three colors—black, buff and pale green. The cover is a beautiful gray affair, with the design printed in light blue and embossed. The booklet is bound with gray silk cord. Copies of both booklets may be had upon application to the Battle Creek Sanitarium, Battle Creek, Mich.

### A "WONDERFUL CONCEPTION," SAYS FLORIDA PHYSICIAN

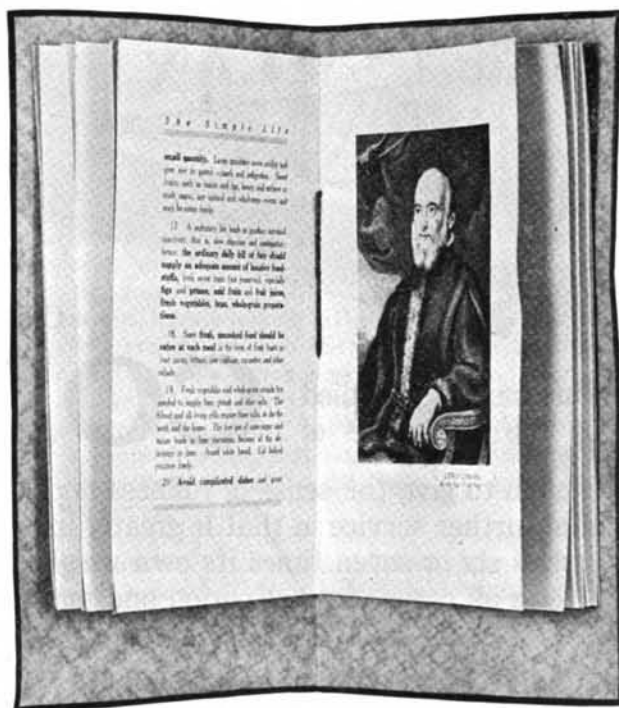
"THE Sanitarium is a wonderful conception," said Mr. C. L. Myers, of Jacksonville, Florida, the other day. "It is valuable, not only for the sick man, but for the well one. When a horse has been working hard all winter, and you turn it out to pasture in the spring, the rest and change of diet make a remarkable change in its condition. Men are like that. They need to get out of

the harness after a season of work, and there is no better place than the Battle Creek Sanitarium in which to get a fresh start. I confess I found the diet and restrictions irksome the first week, but since then I have enjoyed the regimen. After being here three weeks, I went away for a fortnight and I had no desire for meat."

Mr. Myers is manager of the Peninsular and Occidental Steamship Company, which plies between Florida points, Nassau and Cuba. A service to Panama when the canal is opened, is in contemplation. After a short stay in the Catskills, he will spend the rest of his summer yachting at New London, Connecticut.

### MOBILE PHYSICIAN ATTRACTED BY SANITARIUM "TEAM WORK"

DR. SEALE HARRIS, a Mobile, Alabama practitioner, spent a few hours in Battle Creek, last week, visiting an old friend, Physical Director Miller of the Sanitarium staff, and inspecting the work of the institution. Asked his impressions of the work of the Sanitarium, Doctor Harris said, "I have been much gratified at everything I have seen. The various methods of diagnosis employed here particularly interests me, as does also the outdoor gymnasium work. Another feature of the institution which has pleased me is the thorough coordination between the various departments and the smoothness with which they all run." Doctor Harris, in speaking of the diet, remarked that his own part of the country was learning the value of the simple diet, coming to discard to an increasing extent the use of fried foods and indigestible pastries. Doctor Harris, by his genial personality and the progressiveness of his ideas, made a great many friends while here, and all trust he will return and give us an opportunity to become still better acquainted with him.



The "Simple Life," with portrait of Cornaro.

### AN ARDENT TEXAS BOOSTER, REVISITS BATTLE CREEK

THE Sanitarium has within its gates a considerable group of delightful men and women from Texas, every one of them a booster for the Lone State. And in boosting enthusiasm, none excels Mr. F. T. Buell, of Dallas, a holder of extensive lumbering interests. Mr. Buell first visited Battle Creek five years ago. "I was about the country a good deal," said Mr. Buell, "and I found my digestion going wrong. I was referred to the Battle Creek Sanitarium; I came here and received great benefit. After going home I carried out so far as I could the ideas I learned here and they have kept me in the very best of health. I return now, not because I need the treatments especially, but for recreation, and to learn still more concerning Battle Creek principles."

### TEXAS GUEST JOINS BODY OF TRAVELLERS ON IMPORTANT TOUR TO THE COAST

THE officials and directors of the Chamber of Commerce of the United States, in an extensive tour which starts at Chicago July 5th, and ends in San Francisco July 15th, takes from our midst Mr. John W. Philp, of Dallas, Texas, a director of the organization. Illinois, Nebraska, Wyoming, Colorado, Utah, Nevada, Arizona, California, Washington, Montana, North Dakota, Minnesota and Wisconsin will all be visited by the travellers, the purpose being to instruct the cities of the western

states in the functions and need of Chambers of Commerce. "I expect to be gone about twenty-two days, and about twenty-five or thirty officers of the organization will make the trip," said Mr. Philp on leaving. "The purpose of the trip is to introduce the advantages of the Chamber of Commerce idea in the west as it has been found of great advantage in the east." Mr. Philp has many friends here, all of whom wish him a very pleasant journey.

### NEW YORK SURGEON MAKES CAREFUL EXAMINATION OF SANITARIUM METHODS

DR. HENRY F. GRAHAM, Assistant Surgeon at the Methodist-Episcopal Hospital of Brooklyn, stopped off two weeks on his return home from the annual meeting of the American Medical Association. Doctor Graham has specialized in surgery and this phase of the Sanitarium work appealed to him strongly. "You have here the finest equipment in the operating room I have ever seen," he said. "The surgical ward, too, is supplied with facilities that make possible excellent results." Doctor Graham was also impressed with the diet system: "I have been greatly interested in the use of the caloric system in the regulation of the amount of foods given the patient. This is most important, as often stomach and intestinal troubles are aggravated by an excess of food. But where the amount of food is adapted to the condition there is an opportunity for recovery. Again, I have never seen such a fine corps of workers. I have been treated by them rather as a friend than as a guest."



## CONSTIPATION

### A BURDEN UPON CIVILIZED LIFE

The average food ration does not contain the amount of coarse, fibrous substance the system seems to require.

Hence a sluggish condition of the bowels.

CONSTIPATION follows as a natural result.

# COLAX

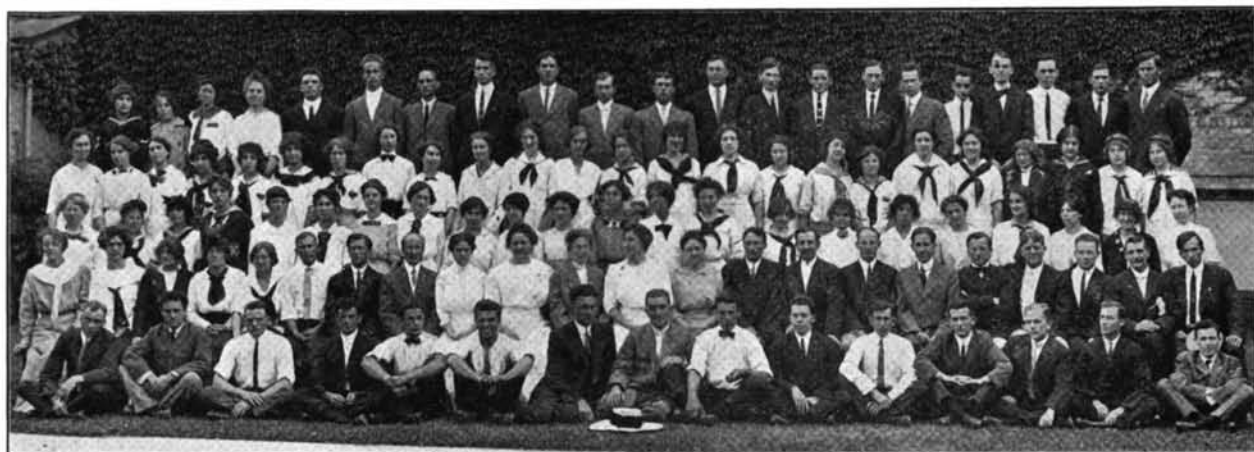
This can be remedied  
by the daily use of

enough to give the sense of fullness and stimulate normal peristaltic action. COLAX is of further service in that it greatly increases the moisture in the lower intestine. It carries six or seven times its own weight in water, prevents the dryness so disagreeable in all cases of constipation and makes possible a normal discharge.

It adds the necessary  
bulk, fills up the in-  
testinal tract just

Write for the COLAX book and get full information regarding this interesting product.

**THE KELLOGG FOOD COMPANY, Dept. R-6 Battle Creek, Mich.**



The Faculty and Student Body

### FIFTY PER CENT INCREASE IN THE ATTENDANCE OF THE NORMAL SCHOOL OF PHYSICAL EDUCATION THIS SUMMER

THE youngest of the group of Sanitarium Schools has this summer attained its majority by passing the hundred mark. Its growth during the past four years under the leadership of Dean Hastings has been remarkable. Several of the leading schools of the United States, twenty years old, have not as many students.

But the most significant growth of the school consists not in the mere number of students—one hundred and seventeen to date—but in the large number of college men and women and others of fine personality who make up the student body. The school emphasizes quality rather than quantity. The strength of courses and the high standards of its requirements for admission and for graduation are responsible for the increasingly fine personnel of the students.

The wide reaching influence of the school is indicated by the demand for its graduates and the extended territory from which its thirty-eight instructors and one hun-

dred and seventeen students come. The instructors are from the following states: Mississippi, Pennsylvania, New York, Kansas, California, Wisconsin, Michigan, New Jersey, Rhode Island, Iowa, Texas, Arkansas.

The students are distributed by states as follows: Ohio, fifteen; New Jersey, four; Massachusetts, five; Missouri, five; Kentucky, one; Iowa, five; Illinois, ten; Kansas, four; Pennsylvania, four; Wisconsin, nine; Washington, D. C., one; Mississippi, two; Indiana, six; New York, two; Alabama, one; Texas, five; Tennessee, ten; Ontario, three; California, two; Arkansas, one; Oklahoma, two; Michigan, fourteen; Idaho, one; England, two; Minnesota, one; Turkey, one, and Russia, one.

Before the close of the Summer Term at least one hundred and thirty-five students will have been registered and the majority of these students will remain for the fall and winter and spring terms.



"Like the veriest nymphs."

### TEACHING CHILDREN TO PLAY

THOSE cynics who hold that boys and girls of today cannot play, and what is more, do not want to play, that the modern child is too wise for his generation and has a double dose of original sin, should visit the remarkable playground which Doctor Kellogg has thrown open to the public at his residence in Battle Creek. It is a neighborhood affair, and from two hundred to two

hundred and fifty children visit the grounds every day. They are of all sizes and vary vastly in shape and condition, but all are alike in the pure and unrestrained joy with which they play. Two play directors are constantly in attendance, one for the boys and one for the girls. And wonderful things they have accomplished, too. The army of youngsters who first came were like an army of raw recruits, utterly lacking in discipline and not knowing, and little caring, what to do next. But under patient leadership they now march in perfect order and alignment and execute difficult figures; they do folk dancing with all the artless ingenuousness that belongs to children; they play a game of volley ball, in which open playing and fairness predominates; and they swim and splash water like the veriest nymphs.

The playground, which is situated in a beautiful bit of woods, contains a baseball diamond, swimming pool, wading pond, basket ball court, swings, sand piles, a shower bath, dressing rooms with a piano to assist in the various marches and drills. It would be difficult to find a more completely equipped playground than this, and one that is yielding larger returns in happiness and joy.



# The Battle Creek Idea

PUBLISHED SEMI-MONTHLY AT  
BATTLE CREEK, MICHIGAN

## SUBSCRIPTION RATES

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VOL. VI

JULY 15, 1913

No. 14

## WALKING THE WORLD'S WORK

ALMOST without exception great workers have been good walkers. Some one has said that the inspired books of the world have been walked as well as written, and if this is true of writers it is quite as true of workers in every branch of human endeavor. One can get quite as much exercise in the gymnasium, and quite as much fresh air from one's house top, but there is only one way to get the supreme benefit of the two combined, and that is by getting outdoors and walking.

Thanks to the Boy Scouts and other organizations walking is undergoing a renaissance, the benefits of which we trust will be lasting. Industries, too, are seeing the importance of getting their employes in the out-of-doors and receive tremendous returns in increased efficiency. Foremost among these is the National Cash Register Company, of Dayton, Ohio, near whose magnificent plant is a vast tract of open country traversed by delightful roads and paths. The company has equipped for the benefit of its employes a splendid gymnasium, equipped with all the latest appliances, much of which was supplied by the Battle Creek Sanitarium. But the officials recognize the superior advantage of the value of tramping, and are sparing no pains to encourage the recreation among its people.

As one means to this end the Company has published a beautiful brochure, entitled "Hills and Dales," from the name of the tract referred to, containing a map of the region, a bird's eye view, extensive photographs and a delightful article on "The Call of the Country-Side," by Arthur Dilks, from which we quote the following very sensible paragraphs:

"Most of you must continue to live in the city for a time, and it is to you I want to make an appeal. Come out and see the countryside; not once and again, but frequently. You reply that you have no automobile. All the better; come out without it. Take the electric car until you reach the uttermost fringe of houses, and then take to your feet and stretch your legs. But the road is dusty! So it is; leave it to the automobiles and take to the by-ways and the lanes and the fields and the woods. Get on the high ground and look around you; it is worth while. You will begin to find how you have neglected one great branch of education, that which comes from nature study. There is no need to be a botanist in order to enjoy flowers and trees. Birds and squirrels in the open will afford you pleasure and amusement, although you may be

very ignorant in regard to natural selection and the latest guesses of science.

"Perhaps the chief advantage to be gained from the systematic walking exercise to which I invite you, is the physical tone which it will provide for the whole body. The muscles of the chest, abdomen and limbs will acquire a vigor which will please and surprise you. When walking, cultivate deep breathing; get huge quantities of oxygen into your lungs. You will be delighted to find that Frank Crane is right when he says there is a variety of tastes in the air, and you will be able to detect the varying flavors. 'Taste of the morning air, of the evening air, the taste of the air of the uplands, the taste of the charged and fearful air preceding a storm, and the taste of the high, cool air after it.'

"We all recognize the liberality of the sun in supplying us with light and heat, and we are scarcely aware that he is equally lavish with another quality of wave energy,  
(Continued on page twelve)

## SWAT! WHAT? WHY THE FLY

If the following essay, written by Dr. Frank Crane, and reproduced from the *New York Globe*, does not make every IDEA reader enthusiastic about fly swatting, we do not know what will:

"If ten terrible monsters came every spring to this country, and all summer long devoured the people, chewing babies as we eat blackberries, biting off the heads of young men and sucking the blood of damsels, goring the aged to death and stalking about among us as a lion among the martyrs of the Colosseum, we should be up and doing, militia would march forth to give them battle, colonels would wave swords, guns would belch, and no enthusiasm would be lacking.

"But when the monster is small and playful and common, we let him ravage. He doesn't somehow appeal to our imagination.

"Yet he does more harm, being ten billion or so, than any ten Minotaurs, Polyphemuses, or dragons that ever posed in the pages of tradition.

"He is the common house-fly.

"Although much has been said about him and his deadliness, the people are not yet alive to the enormity of his crimes. There are thousands of kitchens where flies still swarm and infect the food, thousands of babies over whose faces and upon whose lips flies spread their poison, thousands of restaurants and lunch-counters where flies are busy at the work of thinning out the human race.

"The mass of the people do not yet realize that the fly is the dirtiest object known, so inconceivably dirty that it is difficult to write about it for publication.

"The fly is the creature of the dung-heap, the garbage-can, and of all such unmentionable things. It is from these vile places he comes as he sails gayly into your unscreened window. He enters the human habitation loaded down with the most deadly microbes. He is a microbe sponge.

"His feet and legs are covered with the seed of typhus. His back is burdened with venom. He is far, far deadlier than the spider. He is a sort of a little flying rattlesnake. He is the enemy of human life.

"Screen your windows! If you cannot get wire screening, use mosquito bar. Screen your doors! Keep out the fly as you would keep out the devil, for he is a devil.

"Swat the fly! Keep a fly swatter for every room in the house. Cease your game to kill the fly. Stop conversation with your company and chase that fly. Swat! Never mind knocking over the vase or upsetting the lamp. Swat!

"Swat 'with a high hand and a stretched out arm.' Swat from the rising of the sun until the setting thereof.

"This is no time for mercy or gentleness. The land is invaded. Our enemies are upon us. The black typhoid fever brigade advances.

"Kill, entrap, burn. Spare not.

"But swat!"

## LOBBY NOTES

MR. L. C. BEATTY of Kansas City, General Agent for the Kansas City and Southern Railway, is a guest at the Sanitarium, coming for a period of treatment.

FROM Japan come Mr. and Mrs. L. T. S. Miller, missionaries of the Lutheran Church. Mrs. Miller is taking treatments.

DR. W. K. SIMPSON, Professor of Diseases of the Nose, Ear, and Throat in the Columbia University Medical School, and Mrs. Simpson are guests at the Sanitarium, having arrived June 7th.

MR. VESPASIAN WARNER has had a distinguished career. For several years he was Commissioner of Pensions for the United States, and for ten years Member of Congress from Illinois—from 1895 to 1905. Mr. Warner has spent a few weeks at the Sanitarium, accompanied by Mrs. Warner.

DR. AND MRS. J. H. KELLOGG gave a lawn party to the faculty and students of the Normal School of Physical Education, Saturday evening, July 5th. About one hundred and fifty guests were present. Refreshments were served and the Sanitarium band gave a pleasing program.

MISS MARGARET J. BILZ, national lecturer for the W. C. T. U., gave a very interesting and instructive address in the Annex Parlors Sunday afternoon, July 6th. Miss Bilz chose for her subject "The Twentieth Century from a new View-point." The audience present took the deepest interest in the subject as presented in so forceful a way.

THE Sanitarium has on several occasions, had the honor of entertaining physicians attached to the United States Army and Navy, the Battle Creek Idea gaining considerable footing in both branches of the service. We now have the pleasure of having as a guest Dr. L. W. Bishop, a surgeon in the Navy.

THE Sanitarium guests were treated the evening of June 28th to a delightful reading by Miss Marguerite Miller, of Chicago, from Shakespeare's "The Taming of the Shrew." The reading calls for great versatility in portraying the many characters, both male and female,

and Miss Miller's interpretation was splendidly done. Particularly good was the forwardness of "Kate," contrasted with the gentleness of her sister, and later on her own submission. Miss Miller has a very pleasing personality and a voice full of promise.

MESSRS. D. W. McLAUGHLIN and A. Bouquet, members of the California State Commission dealing with the Japanese and other important questions, are recent guests at the Sanitarium. The work facing the commission is exceedingly important and these gentlemen left us in good physical trim for the strenuous duties ahead of them.

MISSISSIPPI, Florida, Missouri and Michigan, are States represented at the Sanitarium by newly arrived physicians. Dr. H. O. Leonard is a well-known physician of Coffeyville, Mississippi. Doctor Leonard is accompanied by Mrs. Leonard. St. Louis Missouri sends us Dr. M. D. Jones, while from St. Johns, Michigan, comes Dr. J. B. Bodde. Fort McCoy, Florida, is represented by Dr. T. F. Lisk, one of the best known physicians of the State.

## SPICE—THE HYGIENIC KIND

SHE was reclining in an arm chair when the physician entered.

"Oh, Doctor," she said, "I have sent for you, all right, but I must confess I haven't the slightest faith in modern medical science."

"That doesn't matter in the least. You see a mule has no faith in the veterinary surgeon, and still he cures him all the same," replied the Doctor, with an assuring smile.

"No, I haven't anything for you today. You are the man I gave same pie to a fortnight ago?"

"Yes, lidy, thank you; I came back because I thought p'r'aps you'd like to know I'm able to get around again."

LUKE, the butler, had an endearing affection for long words. Also he had a relative, Aunt Lindy, who was eighty-six years of age, and a great aunt, Sally, who claimed more than ninety years. An octogenarian and a nonagenarian Luke had heard the folks "at de big house" call them. He was telling a visitor about his family.

"Yas'm, ma'am, Aunt Lindy's eighty-six year ol'."

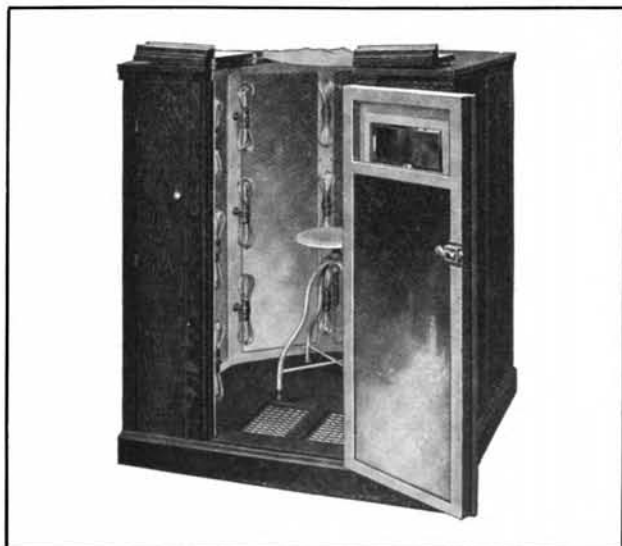
"That is very old indeed, Luke," the visitor commented. "And Sally's—"

"Sally's mo' 'n dat, ma'am," Luke interrupted. "She's a nonentity, ma'am."

A MAN who had been troubled with bronchitis for a long time called on a rather noted doctor. After a few questions the doctor told him he had a very common ailment that would readily yield to treatment.

"You're so sure you can cure my bronchitis," said the man, "you must have had great experience with it."

"Why, my dear sir," confided the doctor, "I've had it myself for over twenty years."



Sanitarium Electric Light Bath Cabinet, part of equipment.

## SPECIAL SANITARIUM EQUIPMENT FOR BUSINESS MEN

By Harvey I. Allen, Dayton, Ohio

[EDITORIAL NOTE: Mr. Allen is Physical Director of the Dayton Y. M. C. A., a "Y" that has a nation-wide reputation for the progressiveness and success of its physical department. Indeed, the activity of the Dayton organization is regarded by other directors as a model, and its recommendation of the Sanitarium appliances is indeed praise from Sir Hubert. We reprint the following article from *Physical Training*, the official organ of the Physical Directors' Society of the Young Men's Christian Association of North America.]

Realizing, as I do, that to many of the older men in Association physical work anything smacking of the sanatorium is a rank heresy, I cannot refrain from giving you our experience in Dayton in the last year with a Battle Creek equipment manned by graduates of the Battle Creek Sanitarium. At the cost of several thousand dollars, we built a Business Men's Gymnasium Club, an exclusive affair on the plan as conceived by Roehm, of Columbus, and which had been worked so successfully there for a year previous.

Instead of putting in a mere Turkish bath rubber, we secured a graduate nurse from the Battle Creek Sanitarium. There were local conditions, of course, which made it wise for us to do this. For instance, the National Cash Register Co., who have a tremendous influence on the health education of this community, have sent hundreds of people to Battle Creek to look over their equipment and have also brought many of their people here to give lectures upon the work of the Sanitarium.

We also looked into the matter carefully and on the advice of a number of physicians we employed a man who had graduated in their massage, hydrotherapy, medical gymnastics and nursing courses, and who had had five years' experience with them. We were careful in guiding him in his relation to the physicians of the community, to be sure that he was perfectly ethical, and he and the medical adviser of the Association are working hand in hand

in introducing these treatments in the city. He doesn't make any diagnosis, leaving that to the physicians, and often urges men to go back to a physician for a diagnosis when they come to him describing their symptoms.

We find that the physicians of the city have a great many cases where they prefer that a drugless treatment be given. After a number of months, the demand from outsiders who had heard of the good work became so strong that we decided to install a public equipment, which we did, putting in a second Battle Creek graduate. This second department is open not only to our members, but to the general public, which puts it on a more than self-sustaining basis.

We find after carefully watching the matter for a year that these departments have made us a great many fast friends, and almost universally they are friends of a class of business men whom we have not been able to interest in any other way to any great extent. They are men of influence and generally are men of means whose friendship eventually proves valuable to the "Y."

## WALKING THE WORLD'S WORK

(Continued from page ten)

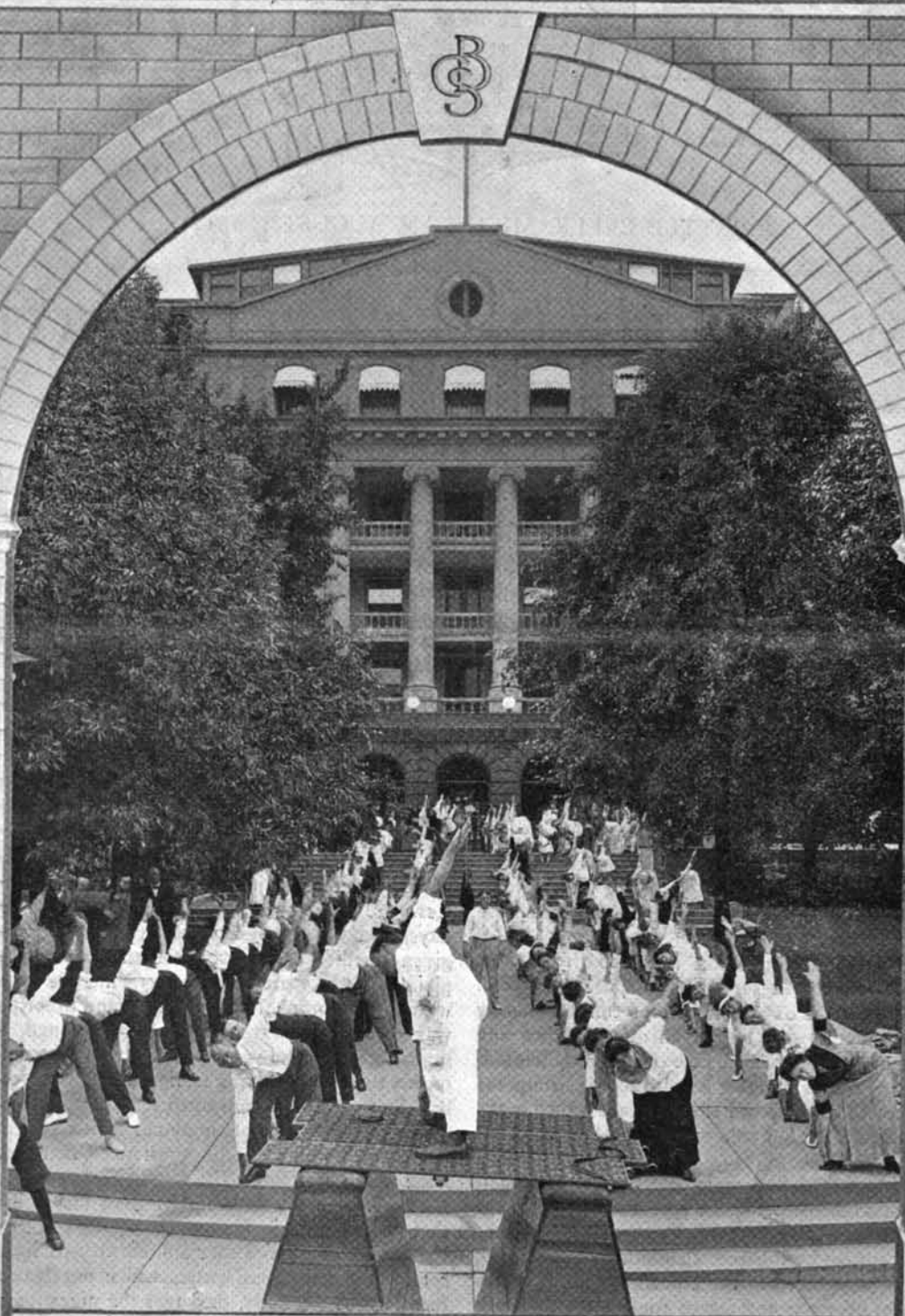
for which indeed we have no simple name, the Sun's actinic rays. The light rays and the heat rays we can make use of by reflection; we can only get good value from the actinic rays by bathing in them, and it must be in an atmosphere free from dust and smoke.

"Should you walk by yourself, or with a single companion, or in a company?—all three. Occasionally one wants to be by oneself; there is a problem to think out, some question of duty, some great decision, perhaps a puzzling thought suggested by a sermon. Then get away by yourself to the hillside or the wood, and seek inspiration and help from nature. Go out in the evening and study the heavens; try to grasp the immensity of God's creation, realize that each one of the tiny stars is a great sun with full equipment of planets and moons; and then bring your mind back to earth, our own earth, which looms so big in our imagination, and consider how small an object it is amidst the great creation of the heavens; and then consider yourself and your troubles and learn how insignificant both are. When you have occupied your mind with big thoughts, there will still be room for the little ones; but the small things of life will assume their just proportions; you will have gained perspective.

"The solitary walk must not be indulged in more than once in a while; regard it as medicinal and corrective, and don't let it become a habit. There is more health and happiness in the social ramble. Find a companion, one of your own sex for preference. There are golfers who make it a rule to play only with those who are better exponents of the game than themselves. They know that in this way they are more likely to become better players. So imitate the golfer and improve your game. Our best friends, those who remain friends through life, are those with whom we have had the close personal relations which are best cultivated by such companionship as is afforded by the long country walk; heart is opened to heart and there is a mutual exchange of the treasures of knowledge."



# THE BATTLE CREEK IDEA



"Morning Exercises on the Terrace"

Vol. 6

AUGUST 1

No. 15

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# HOW TO REGAIN A LOST APPETITE

FROM A LECTURE IN THE PARLOR BY DR. J. H. KELLOGG

MANY people who find themselves without a natural appetite, and to whom it is irksome to eat even two meals a day, reason something in this fashion: "Now, my bill of fare says that I must take so much potato; I don't like potato, but I suppose I must get it down in some way." So they proceed to eat the potato, or other food, with no natural relish. Some resort to condiments and salads of various kinds as appetizers.

But one does not need to take his nourishment in this way. Nature has placed at our disposal a large number of means by which we can stimulate the appetite without at the same time injuring the digestive apparatus. First of all, there is sleeping with open windows. On retiring at night, throw the windows wide open and let in all the fresh air possible. It may be winter, but do not let this interfere with your fresh-air supply. Have plenty of bed clothing and bundle up as though going for a sleighride. Take care to keep the ears well covered, but keep the nose open to the air.

On arising next morning, take a cold bath of some kind. A cold sponge will serve the purpose very well. Even a cold air bath is of service. This consists merely of standing without clothes before an open window and vigorously rubbing the entire surface of the body while it is exposed. Any means, indeed, is helpful that brings the skin in contact with cold. After the bath take a turn in the out-of-doors, either in a brisk walk or other vigorous exercise.

Most people would find their appetites improved if they sweat more. Most often the real trouble lies in the fact that the body is charged with live poisons—poisons taken into the system by tobacco, alcoholic liquors, drugs, and poisons manufactured in the alimentary canal by decomposing meat-products and excess food and as a result of the ordinary cell activity that is constantly taking place within the body. This production and introduction of poisons in the body is constantly taking place without there being to offset it a corresponding outlet for the poisons. The means upon which the body depends for

eliminating these poisons are chiefly the perspiration, the exhaled breath and the kidneys. The kidneys and lungs get rid of a large proportion of the toxins, being fairly active in the majority of men and women, except where through the constant breathing of foul air and the overworking of the kidneys by eliminating poisonous wastes these organs become incapable of performing their appointed work. With the skin, however, the case is different. Man was enjoined in the beginning to earn his bread by the sweat of his brow, but as society has organized itself a vast proportion of men and women have forgotten what it is to perspire. The result is that the poisons which should be eliminated by way of the skin remain in the system, clogging the tissues and inhibiting normal muscular and nerve action.

An eminent eastern student of nutrition told us here at the Sanitarium just the other day of a man in the Carnegie Nutrition Laboratory who fasted for thirty-one days, and who made no end of trouble because he was given distilled instead of undistilled water. He complained of the variety of flavors which he detected in the water—turpentine, he said, tallow and other poisons. He was certain the water was being poisoned, when, as a matter of fact, the various tastes which he detected were on his tongue. He was tasting himself. Not eating, he had had no bowel movements, with the result that the waste products had accumulated in his system and saturated his body with the substances that produced the taste which he found.

So it is in the case of the "bad taste" in the mouth that people who do little or no active work complain of. Failure to give the proper amount of activity to the body retains the poisonous wastes which paralyze the natural functions of the body, deranges the digestive system, and accounts more often than not for lack of appetite.

What every such person needs is some procedure by which he can be made to sweat. In the far northern regions, people go into a sort of hibernation, much as do bears. In order to keep themselves free from serious



Rounded up for the Camera Man.

## Texans at the Sanitarium Hold Round-Up and General Rally

Seventy-six Representatives of Lone Star State Organize a Permanent Texas Organization at Sanitarium

MONDAY, July 21st, was Texas day at the Sanitarium, and was observed by the Texas guests in a fitting fashion. That a Texas Club would be in order had been felt for a long time, since there were nearly three times as many people from the Lone Star State as from any other Southern State. So when the call was sent out for a Texas round-up seventy-six names were enrolled in the club book as charter members. Not that this is the total number of Texans at the Sanitarium, for the State register puts the number much nearer a hundred; but for various reasons some could not attend the first meeting.

The company met in the main parlor at 1:15 P. M., where they were presented with a card-board star on which the name and home town of the individual was

written, and after a social twenty minutes the start to the dining room was made. The banquet was a decided success from the very start, and the bouquet of pansies at each place quickly found its proper place.

Doctor Kellogg, acting as chairman, stated the object of the Club as being not only the meeting and gathering together of congenial people, but the perpetuation of the ideas and ideals of the Sanitarium. Through organization the members of the Club could spread these ideas in their home towns and create a greater efficiency in the nation as a whole. Mr. R. J. Kleberg, of Kingsville, Texas; Miss Mary E. Carroll, of Corpus Christi; Mr. A. C. Cohn, of Fort Worth; Mrs. Clifford Weaver, of Texarkana, and Mr. T. P. Young, of Marshall, also responded with short speeches. At the close a copy of *Good Health* and the BATTLE CREEK IDEA were presented to each one, and then the Club adjourned to the north-east lawn, where the Club picture was taken.

The Texas Club will be continued as a permanent organization and from time to time will have meetings. Another banquet will be held next month.

disease, they have sweat houses, into which they go once a week. Onto a pile of stones heated to a high temperature they pour cold water which, being converted into steam, fills the room with a hot vapor that makes them perspire very freely, their skin becoming extraordinarily red. In the midst of the process they rush out and roll in the snow, then dash back into the sweat house again, and again into the snow and back. By the profuse sweating which results they compensate for lack of physical exercise.

The electric light bath is one means of securing the sweating that one does not get by natural means. Every business man who is not able to take active physical exercise should have some such means of making himself perspire. It is one of the most effective means of combating old age and removing brown spots from the face and the black circles from beneath the eyes.

How closely related are these symptoms to a sedentary life may be shown by an incident which happened the other day. I was pointing out brown spots on his skin to a man about fifty years old. "I inherited them," he said.

"My father had them before me." "Yes," I said, "but your father did not have them at your age, did he? How old was he when he acquired them?" "Well," he said, "he was about eighty years old."

That is, the father did not have them until he became old and gave up active work, becoming a sedentary man and ceasing to sweat.

Yes, the best way to produce sweat is by real work. Every day one ought to obtain a vigorous perspiration by half an hour's active exercise. Why, athletes in training for prize fights or wrestling matches have the very finest of skins, got as the result of sweating. In England when a prize fighter is in condition to meet his antagonist the

(Continued on page twelve)





### GOING CAMPING IN ONE'S BACK YARD

PROFESSOR F. E. MILLER, Physical Director at the Battle Creek Sanitarium, has demonstrated that one need not leave his own back yard in order to go camping, by means of a tent which combines all the advantages and pleasures of camping out with the conveniences of every-

day life. Over all, the tent measures  $14\frac{1}{2} \times 21\frac{1}{2}$  feet, contains four rooms, each  $7 \times 7\frac{1}{4}$  feet, with a hall or sitting room  $7 \times 14\frac{1}{2}$  feet in the center. The floor and siding are of shiplap, boarded up to the height of  $3\frac{1}{2}$  feet, with wire netting extending from the boarding to the top. The eaves extend 12 inches beyond the walls, the space between the outer edge of the eaves and the walls being screened and left open, thus providing plenty of circulation, even when the walls are drawn up. The floor is made of  $2 \times 6$  timbers, with  $2 \times 4$  timbers for studding.

The tent has accommodations for eight people and affords an ideal living and sleeping place for one who works indoors all day and wishes to spend the summer in the open air. The tent, being solidly constructed as it is, can be used outdoors at least six months in the year in nearly every State in the Union, and in many parts of the country the year round.

## Eminent Yale Instructor Commends Principles of Battle Creek Idea

THE Sanitarium has recently had the honor of entertaining for a short time a distinguished physical educationalist in the person of Dr. W. G. Anderson, Physical Director at Yale University. The prominence given to physical education in that University makes the position of Doctor Anderson, with the supervision of the health of the students, and the charge of the athletic training in its various branches, a very important one. For his work he is highly qualified by many years of study and of practical experience in teaching. The work at the University is done with thoroughness. Each student is given a complete examination, and exercises are prescribed in accordance with individual requirements. Yale has exceptional facilities for the necessary training. The gymnasium, occupying three buildings, is one of the largest and is the most complete in the world. The playground plant, including fields, boat-houses, gun club, golf course, tennis courts, etc., is valued at \$1,250,000. A new swimming pool, the gift of Mr. Andrew Carnegie, has recently been added to the equipment.

Great as have been his services to Yale University, they form but part of the work in which Professor Anderson has been engaged. For many years he has been connected with the University of California during the summer months. He organized the school for physical training at Chautauqua, of which for twenty-one years he had charge, while he was prominent in the commencement of

the Summer School of the Sanitarium Normal School of Physical Education two years ago.

Speaking of the latter school Professor Anderson said: "The opportunities here are unapproached elsewhere. This is due to the connection of the School with the Sanitarium, which affords very fine clinical facilities."

Of the Sanitarium itself he spoke most appreciatively. "The Principles of the institution commend themselves to me, and I heartily favor them. There have been brought together here the best medical and surgical appliances the world has to offer. Those at the heads of the departments are experts. They have made improvements upon



The Tent from the Outside.

the work of others in the use of the appliances at their disposal. The whole plant is, indeed, overwhelming.

"I am constantly sending people here. They come to me seeking my advice, and I say 'Go to Battle Creek.' But the best compliment I could pay the Sanitarium lies in the fact that I have brought Mrs. Anderson here for treatment. I should stay for treatment myself, except that I lack the time."

Doctor Anderson holds a high standard for the teacher of physical education, believing that such should be not only thoroughly trained in his special work, but that the highest efficiency demands also good general culture. His own scholarly attainments justify his making such a claim. He holds no fewer than six degrees, including that of a Fellowship in the Scientific Society of England.

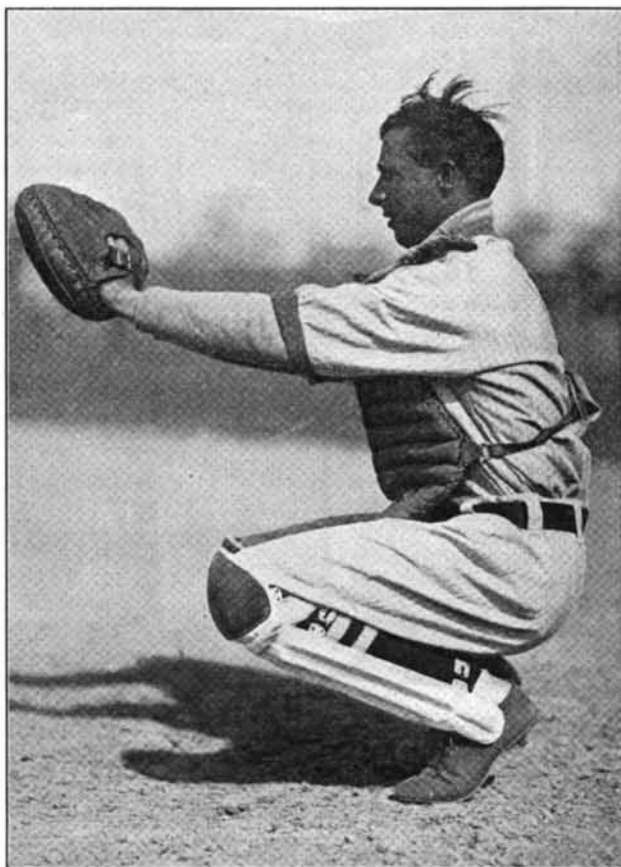
#### PROMINENT WESTERN RAILWAY OFFICIAL TAKES NEEDED REST

ONE of the busiest and best known officials of the Kansas City and Southern Railway is Mr. L. V. Beatty, General Agent. Mr. Beatty first came to the Sanitarium three years ago, when, as he remarked to an IDEA representative, "I enjoyed my treatment here very much, being greatly benefited by it. I have been here two weeks this time, and feel that I would be entirely well if I could only remain here another two weeks. My duties, however, necessitate my leaving at the end of the week, as other of our officials will be leaving on vacations. I am grateful for what the Sanitarium has done for me. I can, and heartily recommend it, not only because of my own experience, but because I know a great many others who have been here, all of whom have been benefited."

#### MISSOURI PHYSICIAN GIVES HIS IMPRESSIONS OF SANTARIUM EQUIPMENT

OF singular charm of personality is a Missouri physician, who has recently been a guest at the Sanitarium, Dr. M. D. Jones, a St. Louis nose, ear and throat specialist. "I consider the Sanitarium a credit, not only to the State of Michigan, but also to the United States," said Doctor Jones to an IDEA representative. "I have met several people who have been abroad, and they have told me that they have found no institution so complete in its equipment. The methods employed are perfectly sound. The physicians are sympathetic, and I have never met such uniform courtesy as from the attendants here. I cannot sufficiently praise the institution and its workers, and I shall use my influence to induce people to come here." Doctor Jones also mentioned very favorably the equipment that is employed here. "The only wonder," he said, "is that people of means do not install many of these appliances in their homes. I intend securing some of the Swedish mechanical apparatus for my personal use."

On a very cold day a Highlander, who still wore the kilt, was asked by a modernized fellow-clansman, "Sandy, are ye no' could wi' the kilt?" "Na, na," replied the loyal Sandy, "but I'm near kilt wi' the cauld."

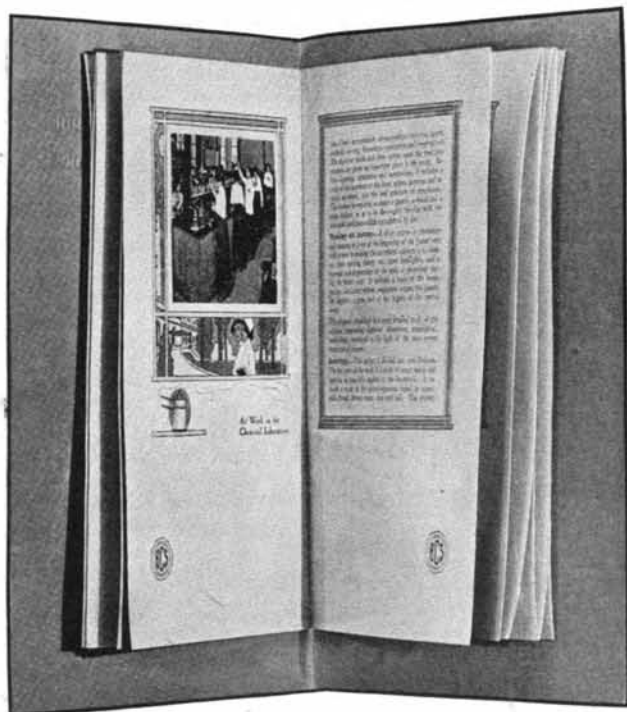


The "Chief" in Action.

#### Battle Creek Idea Successful on Baseball Diamond

THOSE of the Sanitarium guests who have visited the grounds of the Battle Creek team of the Southern Michigan Baseball League and seen the "Crickets" in action have been struck by the spectacular work of the Battle Creek catcher, Mr. Garland Nevitt, whose endurance and prowess are doing much toward keeping Battle Creek easily at the head of the percentage column. Mr. Nevitt is a young man of remarkable physical endurance, has a swift and accurate "whip" to second, hits well, bats from either side of the plate as occasion demands, and is being watched by several scouts from the major leagues. "Chief" Nevitt, who is a full-blood Indian of the Delaware tribe, has a record that few professional back-stops can equal. Last year out of 128 games, he played 127, for 110 contests making a clean score. Thus far this season he has been out of only one game, when one day a crippled automobile left him stranded in the country unable to get to the ball park in time for the game.

Mr. Nevitt's endurance can be ascribed to the exemplary life which he leads. While at school he never touched tobacco or liquor in any form—later on he smoked for a short time, but has now given that up. He drinks no coffee, and while in the winter he eats meat occasionally, in the summer he uses almost none at all. "Bad habits are the curse of ball players," he says, "and many a man has had to give up his uniform for good because he could not control himself. The Battle Creek team has done well this year because the boys take care of their



**Beautiful Brochure by Battle Creek Sanitarium School of Home Economics**

THERE has come to our desk from the Sanitarium School of Home Economics a delightful brochure, two pages of which are reproduced above, and which is quite up to the high standard set by the beautiful advertising literature which the Sanitarium is publishing.

The Sanitarium School differs from other schools of domestic science in that the entire course, both theoretical and practical, has been developed in harmony with the one dominant idea of health development and preservation. This, for example, is a school where one obtains a thorough knowledge of methods of foods and scientific dietetics, as well as a practical knowledge of institutional management. Thorough instruction is given in the scientific facts and the principles of modern housekeeping and methods as well as the hygienic principles involved; and the many departments of the Sanitarium afford an opportunity to see in actual operation the methods taught. These courses and the outline presented in the case are

health. I am a great believer in the Sanitarium methods and principles, and visit the institution frequently when the club is at home. I take some of my meals in the Sanitarium. The treatments are very effective, and I believe many ball players with sore muscles would come here if they knew about it. Twice I have been cured by hot fomentations applied here. I have also tried the mechanical Swedish movements. The Sanitarium massage cream I use on my arm all the time; I find it better than the strong liniment which most players use."

The "Chief" is the most popular man on the "Cricket" team. He has a boy's good humor, which appeals to the "fans." His manner is quiet and unassuming and he has made scores of friends during the two years spent in the League.

thorough and comprehensive. The facilities for theoretical as well as practical instruction are unusual because of the relation of the school to the Battle Creek Sanitarium, which gives the students the use of the splendid chemical and research laboratories of the institution, in which important work is constantly going forward, such as actual analysis of foods, microscopic and chemical, new experiments, dietary and other allied subjects.

Many inquiries are received by the management concerning the demand for graduates of schools of this kind, and the brochure informs us "that the school is constantly receiving calls for its graduates. The Battle Creek Sanitarium is seeking recruits for its own corps of workers, as it has constantly the care of more than two thousand persons, requiring the services of quite an army of dietitians, supervisors and housekeepers."

This local demand, however, is representative merely of a very general demand that is growing faster than the supply of material is increasing.

The booklet, we might add, is beautifully printed on a fine grade of buff paper, with heavy, overhanging covers, with special embossed cover design. Copies may be had free upon application to the Battle Creek School of Home Economics, Battle Creek, Michigan.

#### **DR. T. D. CROTHERS, NOTED AUTHORITY ON INEBRIETY, CHARACTERIZES SANITARIUM AS "THE GREAT FOUNTAIN OF ETERNAL YOUTH"**

DR. T. D. CROTHERS is this country's greatest authority on the subject of inebriety and alcoholism. He has written many books that are accepted as the last word on the subjects with which they deal, and is editor of the *Quarterly Journal of Inebriety*, the official organ of the American Medical Association for the study of Inebriety and Narcotics. In the last number of the *Journal*, Doctor Crothers describes the Battle Creek Sanitarium as "the great fountain of eternal youth, where the grand ideals of life can be realized and the obstacles overcome. This is demonstrated literally by the hundreds of people who are coming and going all the time, learning how to live better, how to enjoy life better, how to overcome disease. It is the largest and best equipped Sanitarium in America, if not in the world, and our readers can verify it, as we have done."

Doctor Crothers, too, pays tribute to the *Good Health Magazine*, which he says is "a charming little pocket publication, full of useful and most valuable facts. The editor addresses a large, unknown audience. A missionary returning from Central Africa brought with him an early copy of this magazine, which for a long time was used as an amulet by a noted chief. The chief reasoned that its printed pages contained silent voices, warding off diseases and evil spirits and brought success to its owner."

A bank sent to a relative of a physician, to secure data concerning his death. On the line asking "medical college and year of graduation" there was written: "licens were put in coffin we do not know." The "cause of death" is stated as "himerage of the lungs," while in the space at the bottom, set apart for "remarks," is written: "he died alone and his remarks are not known."





Lower lawn shrubbery, looking toward the Sanitarium

## FLOWERS IN SICKNESS

UNDER the above caption, the *American Florist*, one of the leading floral journals in the country, published under date of July 3, an extended article on the use that is made of flowers in the system of therapeutics employed at the Battle Creek Sanitarium. From the very first the Sanitarium management has believed strongly in the beneficial effects of flowers. No efforts have been spared to keep the floral department up to date in every respect. At the present time the institution has four large greenhouses, their capacity to be doubled soon by four great greenhouses that are under way at the present time. The article follows in full:

"The influence of flowers in lightening sorrow and suffering has always been recognized, but their employment as an actual remedy in cases of sickness is recent. Laymen as well as physicians know the power of mental attitudes in helping invalids to health and the blooms so bountifully provided by nature are an obvious means of drawing the sufferer's attention from his or her condition to more cheerful thoughts. Perhaps nowhere, however, has this idea been so strongly adopted as in Battle Creek, Mich., famous as 'the health food city.' At the Battle Creek Sanitarium physicians prescribe flowers for patients just as they would order massage or an application of electricity.

"Many chronic sufferers have disorders of the stomach and nerves, which oftentimes cause severe depression of spirits. Modern medicine does not content itself with drugs, but lays stress on a pleasing diet, entertainment of a non-exciting kind, amusement and exercise suited to the case, and, in general, conditions which make life agreeable. When a patient here is feeling particularly in the dumps, the physician orders a blooming plant or a vase of flowers, and the effect is often pronounced. Of course, women are more susceptible to this influence than men, but some of the male invalids take a surprising lot of comfort from this 'medicine.' When a person is confined to his bed for a long period it often diverts his mind to have a plant near the bed which he can watch as the buds grow into flowers. A rich man who had had an operation and was preparing to go home asked the florist of the Sani-

tarium whether he might take with him a common plant of *asparagus plumosus* which was in his room.

"Of course, you are welcome to it," was the answer, 'but it will be a bother to carry it so far. You can buy one like it at home for a few cents.'

"It isn't a question of money," said the patient. 'I want to have it properly packed and shipped by express. I have watched that plant for eight long weeks that I lay in bed, before and after my operation, and I have come to love it.'

"This man is one of the keenest and most successful business men in his State. Probably few of his associates would think of him as being sentimental. Yet a simple plant was thus able to twine itself around his affections. It is doubtful whether any other big institution in the country pursues such a liberal and telligent course regarding flowers at the Battle Creek Sanitarium, and a similar

policy on the part of hotels, hospitals and sanitariums generally would be an enormous boon to the florists' trade. Everything is supplied free. A patient will come to the green house and say:

"I'd like to buy one of those hyacinths."

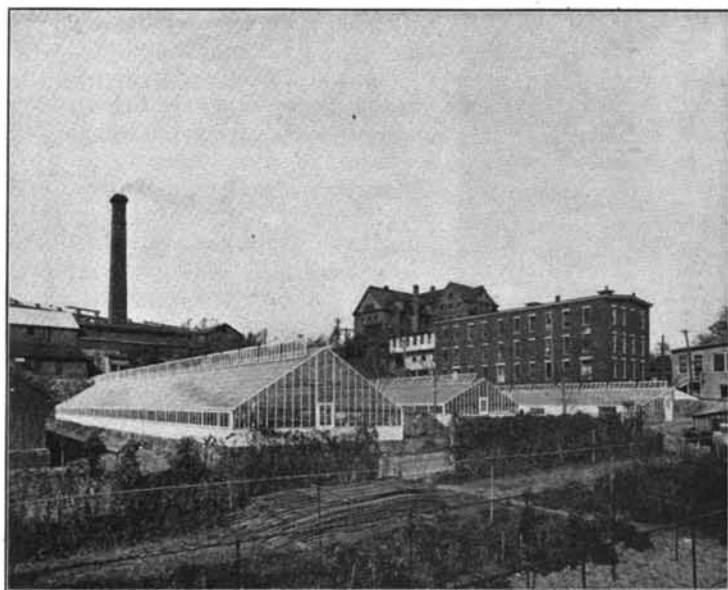
"We don't sell anything here," is the reply. 'Everything is given away. Just pick out the plant you want and I'll send it to your room. When that is through blooming, telephone to me and I'll send you another.'

"All potted plants are supplied on a mere request. Of course, cut flowers are more in demand and it would be impracticable to grow enough to supply 700 or 800 patients with all they asked for. Some would be unreasonable and get more than their share. The distribution is arranged through the physician. Surgical cases are regarded as most entitled to being cheered, and the rule is always to have cut flowers in their rooms. For the medical patients, the flowers are sent to the medical office four or five times a week. Each woman physician is asked



Part of an Ornamental Bed of Flowers.

for the names of the women on her list who are most in need of some brightening influence, and to each of these a bouquet is sent. Persons arriving at a sanitarium are likely to be tired from their journey, and despondent at being in strange surroundings, and a nosegay of roses or carnations has a marked effect in making life look less dreary.



Three of the Battery of Eight Large Greenhouses which the Sanitarium Florists' Department Will Soon Have at Its Disposal.

"Flowers are displayed in offices and in the dining room, while a big palm garden affords a delightful lounging place in winter. The exotic plants here are a great source of interest to guests.

"Roses and carnations are the favorite flowers, but a large variety is grown in the greenhouses, including sweet peas, tulips, hyacinths, lilies, stocks, bouvardias, stevias, geraniums, pansies, violets, lily of the valley, and chrysanthemums. In the summer months, the building fairly overflows with flowers, as the gardens yield their succession of blooms. Every year about 10,000 asters are planted. Supposing they yield a dozen flowers each, you have a huge mass of loveliness. Sweet peas there are, too, by the bushel basket, snapdragons, poppies, Sweet William, golden glow, sunflowers, bachelor's buttons, stock, gaillardia, cosmos, pinks, iris in many varieties, peonies, bleeding hearts, calliopsis, coreopsis, dimorphotheca, nigella, chrysanthemums, Shasta daisies, roses, gladioli, dahlias, snow-on-the-mountain, phlox, pansies, nasturtiums and others.

"The blooms are displayed in the numerous offices and on the dining tables, besides being supplied to patients in their rooms. As part of this liberal policy, the Sanitarium pays a great deal of attention to the beautification of its grounds. People who are away from their usual occupations and surroundings take an uncommon interest in everything they see and the flower beds, shrubs and trees are a source of pleasure and entertainment to guests and patients. To stimulate this attention, the landscape gardener has set out a great variety of plants, so that the place is almost a botanical garden. That people take notice of such things is proved by the fact that every man who is at work on the lawn or flower beds is besieged with questions of all kinds. The head florist is frequently asked for information and advice by guests who wish to reproduce at their homes the effects they admire at the Sanitarium.

"In a recent lecture Dr. J. H. Kellogg, Superintendent of the Sanitarium, said: 'Flowers are of great value to

sick people as well as to well people. Flowers help to make the environment about us pleasant. There is no question that the environment about a man has a great deal to do with his physical condition as well as his mental state. If one gets up in the morning, looks out and sees everything dark and gloomy, it has rather a discouraging effect upon him. He looks out of the window, sees the sunshine and a beautiful landscape, and it is inspiring, and so flowers in the sick-room are really messengers of health and healing, and when they come from friends represent the giver and are really messages of love and sympathy as well. We aim to have flowers all about the Sanitarium at all seasons of the year. We have large greenhouses which we maintain at considerable expense so as to keep the place supplied with flowers. If any of you want flowers or pot plants in your room, all you have to do is to call for them and you can get them.'

"This plan of spending a lot of money on flowers has been found profitable in Battle Creek. Business men and the heads of corporations are learning that cheerful and beautiful surroundings are a paying investment. The spreading of this gospel means a great deal to the florist interests of the country."

#### INDIANA PATIENT TAKES SANITARIUM HOME WITH HER

MRS. H. C. DAVIS of Kokomo, Indiana, is making her fourth visit to the Sanitarium. She first came to the Sanitarium three years ago with a severe case of arthritis. "I derived so much benefit from my first visit," said Mrs. Davis, "that I have returned at frequent intervals. A year and a half ago Mr. Davis said, 'Since the Sanitarium treatment has been so helpful to you, we will have a Sanitarium right here at home.' So we secured a Sanitarium nurse, installed in our bathroom an Electric Light Cabinet, and have been careful to carry out the diet as taught here at the Sanitarium. Considering the nature of my trouble," Mrs. Davis concluded, "I feel that the results have been wonderful." Mrs. Davis was for a number of years a member of the Executive Committee of the Indiana State Board of Charities.

#### GRAND COMMANDER OF SUPREME COUNCIL OF SCOTTISH RITE OF FREEMASONS A FREQUENT VISITOR AT THE SANITARIUM

A GUEST of the Sanitarium holding a position of prominence in the world of affairs is Mr. James D. Richardson, who is Grand Commander of the Supreme Council of the Scottish Rite of Freemasons. This is one of the two great Rites of Freemasons, the other being the York Rite, the larger body in point of numbers, the former, however, embracing a higher degree in Masonry. It is established in thirty-three States in this country, and in twenty-nine countries of the world. The Southern Supreme Council, with headquarters at Washington, of which Mr. Richardson is the head, is the oldest in the

world, and all others owe their existence to it, directly or indirectly. Mr. Richardson has recently completed a tour of fifty or sixty days, visiting various States in an effort to promote the growth and interests of the order, and reports a general flourishing condition, a constantly increasing membership, and harmonious working.

At the international congress, held last October, representatives from no less than twenty-four countries were present. As the head of the oldest council, Mr. Richardson presided. Asked his opinion of the effect upon international relations of such a congress, he replied: "It is calculated to promote international amity, and, indeed, that is one of its objects," adding, "Our Council a short time ago unanimously endorsed the proposals for international arbitration. I had, recently, an interview with Secretary Bryan upon the subject, and assured him of the support of our Council, and, I believed, of all the councils of the Order in all parts of the world."

Of the Sanitarium Mr. Richardson spoke with genuine and generous appreciation: "I have been coming here for the past six or eight years, and my opinion of the Sanitarium has been expressed in the fact that some members of my family have been with me on each occasion, at one time there being ten here together. Two of my daughters are with me now. A great work for humanity is being done here, and one that deserves high praise."

Mr. Richardson was a member of Congress for twenty years, for ten consecutive terms representing the Fifth Congressional district of Tennessee. He resigned in order to devote the whole of his time to the work of the Scottish Rite of Freemasons.

### PLEASE GUESTS AT SOCIAL HOUR

MR. J. E. GILLIGAN, Miss Julia B. Simpson and Miss Martha Bivins entertained the Sanitarium guests very delightfully at a recent social hour. Mr. Gilligan sang with remarkable effectiveness Green's "Sing Me to Sleep" and Metcalf's "In the Land where Dreams Come True," and the two concluding numbers, Wagner's "Star of Eve" and Bohn's "Still As Night." Mr. Gilligan is very popular among the Sanitarium guests, and his voice has not been heard, perhaps, to better advantage than on the present occasion. The numbers were especially appreciated by reason of the fact that he rose from a sick bed in order not to disappoint his audience. Miss Simpson sang "Rummel's "Ecstasy" with a sweetness and charm which lead all to hope for the pleasure of hearing her again. Miss Bivins gave two remarkably strong readings of "Skimpsey" and "Billy Brad and the Big Lie." Miss Bivins's interpretation was very sympathetic and the hearty encores expressed the appreciation of those who heard her.

### SOME TASTEFUL TOASTS\*

#### CREAM TOAST

1 pint milk (1/3 or 1/2 cream)  
4 slices of toasted bread.

Heat the milk and cream to scalding in a double boiler, add salt and pour over the toasted bread. Serve

in grain bowls with one-half cup of milk to each slice of bread.

#### CREAMED TOAST

1 pint milk                      2 tablespoons flour  
2 tablespoons butter        1 teaspoon salt  
6 to 7 slices bread

Make a thin White Sauce of the milk, butter, flour and salt. Toast the bread preferably until crisp. Pour over this the White Sauce. Serve at once.

#### SNOWFLAKE TOAST

1 pint milk                      4 tablespoons flour  
1/2 cup cream                  2 egg whites  
1 teaspoon salt                Toasted bread

Heat the milk to scalding in double boiler and moisten the flour with the cream a little at a time. Rub until smooth, then stir into the hot milk. Cook about 20 minutes. Add the salt and pour over the stiffly beaten egg whites, beating meanwhile. Moisten the toasted bread in a little hot milk or cream and pour over the toast the above sauce.

#### YOGURT CHEESE RAREBIT

1 cup yogurt cheese            1 egg  
1 cup cream                    1 tablespoon flour  
1/2 teaspoon salt

Braid the flour in a little of the cold cream. Beat the egg. Add the remainder of the cream, the salt, and the braided flour; then add the cheese and cook in a double boiler or in the blazer of a chafing dish. Stir constantly while cooking. When thickened serve on small slices of toasted bread.

Neufchatel or cottage cheese may be used in place of the yogurt cheese.

#### ASPARAGUS TIPS ON TOAST

Wash the asparagus carefully and remove the scales. Cut off the tough ends, which may be used for soup. If wilted, let stand in cold water. Asparagus may be kept fresh and in good condition for some time by standing in water one-half inch deep or more, set in a cool place.

Tie in bunches with soft tape and cook in boiling, salted water 10 minutes with the tips out of the water. Then lay the asparagus down so that it is wholly immersed and let boil for 5 minutes.

Serve on slices of toast with melted butter or with any preferred sauce.

#### CREAMED CELERY ON TOAST

3 cups cut celery                1 tablespoon butter  
1 cup milk                        1 tablespoon flour  
1/2 teaspoon salt

Clean, scrape and cut enough celery to make 3 cups. Put this to cook in boiling, salted water, cover and cook until tender, which will require about 45 minutes. Let the water boil away when done, leaving the celery with very little liquid. Prepare a thin White Sauce of the remaining ingredients and pour over the celery. Prepare the toast by trimming the crust from thin slices of bread. Cut diagonally, making triangular shaped pieces of toast.

(Continued on page twelve)

\*Taken by permission of author from advance pages of "The New Cookery," by Miss Lenna F. Cooper, to be published August 6, 1913.



# The Battle Creek Idea

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VOL. VI

AUGUST 1, 1913

No. 15

## THE COMMON HOUSE-FLY OUR WORST ENEMY

THE common house-fly has for a long time been regarded with suspicion. The agency of the fly in communicating ophthalmia in Egypt and blood-poisoning in hospitals everywhere has long been recognized.

Within the last few years sanitarians and entomologists have been making a minute study of the habits of this insect, and the result of the investigation has been that the common house-fly is probably more responsible than any other one cause, aside from bad water and infected food, for typhoid fever and various bowel disorders which prevail in the South, especially during the summer and autumn months.

Most vigorous efforts should be employed to combat this universal pest. The most important thing to be done is to keep the house and premises free from conditions and materials which feed and encourage the breeding of these insects. Garbage, house-waste, stable litter, and decomposing organic matter of any kind are conditions which encourage the multiplication of the house-fly. Absolute cleanliness is the best of all preventive measures—far better than fly-paper. Another measure recently recommended as better than fly-paper is a solution of formalin. Two teaspoonfuls of formalin in a soup-plate of water placed in a room will soon rid it of flies, provided no other water or liquid of any sort is exposed in the room. The flies feed upon the formalin solution as though it were ordinary water, and die quickly in consequence. The addition of milk to the water renders it more attractive to the flies.

## THE RESISTANCE OF THE BODY TO POISONS

It is well known that both human beings and animals may be gradually accustomed to the most virulent poisons, so that doses many times larger than an ordinary fatal dose may be taken without immediate or apparent injury. The reason for this cultivated tolerance is not fully understood, but some curious and interesting facts have been developed as the result of laboratory research by Faust and others. Faust found that dogs which had been accustomed to morphine had an increased power to destroy this drug. When morphine is injected under the skin, more than three-fifths of it may be recovered from the feces, showing that the poison is excreted by the mucous membrane of the stomach and intestine. Other investigators have shown that within half an hour after a hypo-

dermic injection of morphia, half of the drug may be found in the stomach.

When dogs were given increasing doses of morphine, it was found that the amount excreted grew constantly less, until at last none at all was excreted, notwithstanding the fact that the amount taken was several times the fatal dose. This clearly shows that the body acquires in some way the power to destroy this poison in unusual quantities, and this, in large part, explains the ability of certain persons to take habitually quantities of nicotine, opium, or other drugs sufficient to kill several persons not accustomed to the poison.

The conclusion must not be drawn from these facts, however, that a person accustomed to poisons is not harmed by them. A poison is a poison. It cannot change its character. No amount of practice in the use of a poison can convert it into food or a harmless substance. It is in the very nature of things hostile to the human tissues and this fact always remains. The body may acquire facility in dealing with a poison, but the mischief progresses, surely and definitely, even if slowly and insidiously.

## LOBBY NOTES

THE Sanitarium has had as one of its honored guests Mrs. W. J. Stone, wife of Senator Stone, of Missouri. Mrs. Stone was accompanied by her daughter.

As a matter of convenience, the first hour at which visitors hereafter will be shown through the Sanitarium will be 2:30 P. M., making the visiting hours 2:30, 3:30 and 4:30 each afternoon except Saturday.

A GUEST who always honors the Sanitarium by his visits is Mr. E. V. Griggs, of Athens, Pennsylvania. By his genial personality Mr. Griggs has made many friends at the Sanitarium, who are glad to welcome him again.

ONE of the most famous clubs in the United States is the University Club of New York City, and its very popular General Superintendent is Mr. Edward Gleason. With Mrs. Gleason Mr. Gleason is at present a guest at the Sanitarium, enjoying a much needed rest.

AMONG the most successful sugar planters of the South is Mr. H. Patout, of Patoutville, Louisiana. Accompanied by his physician, Dr. U. S. Perret, Mr. Patout arrived at the Sanitarium July 19th for much needed rest and recuperation.

THE afternoon of July 12th the Sanitarium guests listened to a delightful address delivered by Rev. D. O. Campbell on "Our South American Cousins." A feature of the service was singing in Spanish by friends of the speaker's.

MISS LENNA F. COOPER, head of the Sanitarium School of Home Economics, has returned from Ithaca, New York, where she attended the convention of the National Home Economics Association. The meeting was made notable by the opening of the new Home Economics Building of Cornell University, which represents the very latest ideals of educational architecture.

AMONG the physicians registered at the Sanitarium the last few days are three representatives of the Lake States. From Bloomington, Illinois, comes Dr. W. E. Neiberger and Mrs. Neiberger, who spent several days in rest and recreation. Dr. S. P. Good, a well known physician of Ashtabula, Ohio, is at present a guest, as is also Dr. G. W. Ross, of Onsted, Michigan, a returned guest.

A PROGRAM representing those three geniuses, Browning, Leigh Hunt and Schumann, provided the numbers are interpreted sympathetically, must be of the greatest interest. And of the greatest interest at the Social Hour last Thursday was a reading of Browning's "King Robert of Sicily" and "Aux Italiens," by Leigh Hunt, given by Mrs. E. C. Farnsworth, with dramatic effect and real insight into the poets' moods. The Schumann number was "The Two Grenadiers," sung by Mr. J. E. Gilligan in his usual very pleasing manner. Two other numbers, "Just For Today" and "Forever and a Day," were sung by Mr. Gilligan to follow respectively the two readings.

LAST Thursday evening the Sanitarium Christian Endeavor Society gave a lawn social on the College grounds for the purpose of raising funds for the support of two very worthy charities. Part of the \$57 which was received will go toward paying the salary of a Hindoo nurse in the Victoria Hospital, Benares, India, who is being supported by the Sanitarium Endeavor Society; and a part toward the support of a Spanish nurse in Porto Rico, to whom the Society Organization sends a certain sum each month. The guests were well entertained by moving pictures, refreshments and music by the Sanitarium Band.

#### SANITARIUM PATIENTS GIVEN ELOCUTION TREAT

PROFESSOR C. EDMUND NEIL, Professor of Public Speaking and Elocution at West Virginia University, gave a reading of "Captain Letterbair" in the gymnasium Saturday evening, July 12th. Professor Neil has the Battle Creek habit and his visits are always much enjoyed at the Sanitarium. As a reader he has a wide reputation, having appeared at numerous Chautauquas as well as at the parent Chautauqua, where one of the busiest weeks this year is to be given to his readings. The three act comedy, "Captain Letterbair," a charming sketch of English types, Professor Neil interpreted very effectively.

#### THE ART AND ETHICS OF DRESS

A SUGGESTIVE lecture upon an important subject was delivered in the Sanitarium main parlor Monday afternoon, July 21st, by Mrs. E. O. Farnsworth, Principal of Nicollette School, Minneapolis, who spoke on "The Art and Ethics of Dress." The instinct which has led men and women from the use of strings of shells to the modern clothes, has, said Mrs. Farnsworth, like every other human instinct, its distortions. These consist in failure to see the relative importance of things, and to keep the proportions.

"There are three principles of clothing: fitness, which is dependent upon the occasion; beauty, which depends

upon line and color, and ethics, which is related to the quality, and the relation of the cost to one's means. These principles may be taught. The folly of women's dress consists, not in the desire to make herself beautiful, but in ignorance of beauty, and of the intimate connection between beauty and utility. The matter of dress is of such large importance because a number of social and economic problems are bound up with it. It is part and parcel of the problem of the cost of living; of that of women's wages, and of the social evil. It is one of the every-day matters on which the moral and physical well-being of society rests. To be well and ethically dressed involves both artistic and healthful dress. Fashions are not to be ignored, for usually there is some reasonable idea at the foundation of the prevailing style. At the same time, individuality of style should be cultivated. The external arrangements of dress should arise out of, and indicate the figure and its requirements. Nothing can be artistic and therefore ethical in dress that impedes free and graceful action of the limbs attracts special attention to them, or exposes them unnecessarily. It is of first importance that the proportions of the figure should be preserved. Want of intelligent knowledge of the normal contour of the body is responsible for much that is reprehensible in dress. When, too, garments are regarded as an expression of character, and their careful adjustment an aid to the manifestation of mentality, the thoughtful consideration of hygienic and ethical ideas of dress will become an essential part of women's education, and develop into a fine art.

"More and more the American woman should give two impressions—that of style, and of individuality. These will give a distinctive American dress, which must be in a high degree ethical, and in keeping with the thoughtfulness, culture, and independence of the American woman."

#### PENNSYLVANIA GUEST DISCUSSES SANITARIUM

DR. A. A. DEACON, of Greensville, Pennsylvania came to the Sanitarium at the solicitation of a friend who himself had been here two months before, and who, as a result of Battle Creek treatments, had been much benefited and held the institution in high esteem. In an interview with an IDEA representative, Doctor Deacon said, "I am very much satisfied with the treatment I am receiving, and am much pleased with all I have seen here. I had been favorably impressed with the institution. The principles upon which it is based I believe to be sound, and in harmony with the best medical science. I am in favor of using but few drugs in the treatment of disease, but find that there is a great need for educational work along this line, for the idea is quite generally prevalent that drugs are necessary.

"The diet, too, is good. The system is worked out from a scientific standpoint and seems to me to be sound. Again, the moral standing of the institution has impressed me as being very high, while the courtesy and kindness of every one, physician and attendant alike, is very noticeable." Doctor Deacon's brother, Mr. G. E. Deacon is also a guest at the Sanitarium, and is being much benefited as a result of his stay here.

**SOME TASTEFUL TOASTS***(Continued from page nine)*

Toast in a moderate oven until crisp. Dip slices of crisp toast into some hot milk or cream. Serve with a spoonful of the creamed celery upon each slice.

**CREAMED SPINACH ON TOAST**

1 cup White Sauce	1 pint cooked or canned
$\frac{1}{2}$ teaspoon salt	spinach

Toast

Drain the liquid from the spinach and chop. Prepare the White Sauce and add the spinach to it. Add salt and reheat. Trim the crusts from the bread. Cut into triangular shaped pieces and toast in a slow oven until crisp and nicely browned. Moisten it in a little hot milk or cream and serve a spoonful of the creamed spinach upon each slice. Garnish with slices of hard boiled egg.

**ONIONS ON TOAST**

1 dozen small Spanish onions	3 or 4 hard cooked eggs
6 slices toast	1 pint White Sauce or Cream Sauce

Remove the skins of the onions under cold water; put to cook in boiling, salted water, and boil five minutes; pour off the water, drain, and cover again with boiling, salted water; cook 1 hour, or until soft and tender throughout, but not so soft that the shape is lost. Drain and serve two or three onions upon each slice of moistened toast. Prepare the sauce and serve one or two spoonfuls upon each serving. Garnish with slices of hard cooked eggs.

**GREEN LIMA BEAN TOAST**

2 cups stewed or canned green lima beans	1 tablespoon flour
$\frac{3}{4}$ cup milk	1 tablespoon butter
	1 teaspoon salt
	1 egg yolk

Put the stewed or canned green lima beans through a colander. Make a White Sauce of the butter, flour, salt, and milk. Add the bean puree and pour over the beaten egg yolk. Cook until the egg has thickened. Serve over moistened slices of toasted bread. The toast should be moistened in hot milk or cream.

**CREAMED OKRA ON TOAST**

To cook the okra pods, put them in boiling water, using one teaspoon of salt to a quart of water; add one tablespoonful of lemon juice to the water also. Cook about one-half hour, or until the okra is tender. Drain the water from the okra, reserving one cup of it for the sauce. Prepare the sauce as follows:

1 cup water from the okra	$\frac{1}{4}$ cup milk
$\frac{1}{2}$ cup cream	$\frac{1}{4}$ cup strained tomatoes
1 teaspoon salt	2 tablespoons flour
	2 tablespoons butter

Heat the okra water, the cream and milk in a double boiler. Rub the flour and butter together and pour over it a little of the heated liquid, stirring meanwhile. When mixed thin enough to pour, turn this back into the remainder of the hot liquid. Set in a double boiler and stir

until thickened. Add the salt and the strained tomato just before serving. Place three or four of the okra pods on a nicely toasted slice of bread, for each serving, and over this pour a spoonful or more of the prepared sauce.

**FRENCH APPLE TOAST**

$\frac{1}{2}$ cup milk ( $\frac{1}{3}$ cream)	4 slices bread
1 egg	1 cup apple sauce

Beat the egg slightly and add milk. Dip the bread into this mixture. Place in a buttered pan and bake until nicely browned. Upon each slice of the toast serve one generous tablespoonful of the apple sauce.

**HOW TO REGAIN A LOST APPETITE***(Continued from page three)*

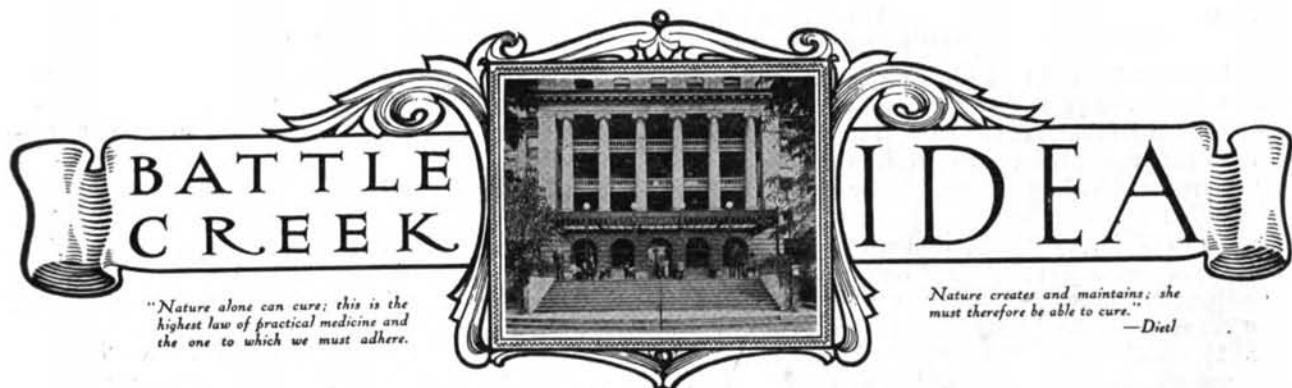
trainers say, "His skin is as white as a woman's—" which means that the man's body is in the very finest condition. By hard daily exercise and training the system has been freed from all the poisons which have accumulated, so that there is nothing to inhibit free action of the muscles and nerves on the day of the contest.

Now, every man and woman ought to be in this same pinkness of condition. There are a number of ways by which perspiration can be induced. Many people who take a street car for one, or even three miles, to work, could, by allowing themselves a little more time, walk the entire distance rapidly and briskly and obtain some of the perspiration which his forefathers probably got by work in the field. In summer, all outdoor recreations are to be recommended, such as tennis, rowing, golf, volley ball, etc. In the winter skating is open to those who are able to take a rather vigorous form of exercise. Winter walking is one of the best means of ridding the system of poisons and thus creating the demand for more food that expresses itself in appetite.

Appetite will also be encouraged by eliminating those foods which tend to the production of the poisons we have named. This means, of course, that meat of all kinds must go, since they encourage the production in the intestinal canal of vicious poisons, the elimination of which overwhelms the liver and kidneys and which, since the skin is often inactive as a result of lack of exercise, remain in the system and give to the skin the brown unhealthy color which often goes with the condition. Constipation also makes for an increase of poisons within the system, since the intestinal poisons, unable to leave the system by the natural means, undergo putrefaction and give off poisons, and only add fuel to the flame. Foods which discourage constipation, and which may form a considerable part of the diet, are the fresh fruits, coarsely fibered vegetables, such as beets and carrots, and coarsely ground flours, such as graham or whole wheat. Quantity as well as quality is important, and one should eat, not to satiety, but should partake of barely enough to answer the needs of the body.

If one carries out these few simple suggestions, most cases of lack of appetite will be remedied, we are sure. Where causes are deeper seated, more strenuous measures may be required, but most cases will undoubtedly be relieved by being in the fresh, open air as much as possible and by partaking of a diet that produces a minimum of poisons in the system.





VOL. VI, No. 16

BATTLE CREEK, MICHIGAN, AUGUST 15, 1913

PRICE, 5 CENTS

## HUMAN HEALTH AS A NATIONAL ASSET

By IRVING FISHER, Ph. D., Professor of Political Economy in Yale University

A Lecture Given in the Sanitarium Parlor, Thursday, July 31, 1913

[INTRODUCTION by Dr. J. H. Kellogg: I am sure you have all heard of the Committee of One Hundred. The aim of the Committee was to study the question of health and what could be done to improve the condition of the health of the American people. Some people have been discovering the fact that the civilized portion of the human race, at least, is deteriorating, and that it is necessary that something should be done to save further deterioration and degeneracy. The Committee of One Hundred, organized by Professor Fisher, did a great work that finally resulted in the effort to secure a national department of health, which within a few years will be in existence. Professor Fisher has also rendered the country a great service in what he has done as President of the Committee of One Hundred and member of the Commission on Conservation of Our Natural Resources, appointed by ex-President Roosevelt. In the efforts made for the establishment of a department of health Professor Fisher has not hesitated to invest thousands of dollars as well as many months and even years of arduous effort, to me a most unusual and a most remarkable thing, in view of the fact that he is a layman and not a member of the medical profession. As an economist of inter-

national reputation he has been able to look at the subject from standpoints which have not been fully considered before. We are very fortunate in having him with us tonight to give us the result of some of his researches in reference to this question of so great importance. I take pleasure in introducing Professor Irving Fisher.]



Professor Irving Fisher

Professor Fisher: Doctor Kellogg, I am afraid, has given you rather a false idea, unwittingly, of the services I have tried to render in the domain of health, and at the outset I want to say that anything that I have done has been very largely due to Doctor Kellogg himself and to the Battle Creek Sanitarium.

It is always a pleasure to come back to the Battle Creek Sanitarium, and a double pleasure to come back a well man instead of a semi-invalid, as I was when I first visited this place, nearly a decade ago. I passed as a fairly well man at the time. Some years before I had had tuberculosis and had been cured. I had had no relapse. There was nothing that was specifically a disease, and yet I realized when I came here that I was only half a man, that I could do only half a man's work, and I feared that my working power was crippled for the rest of my life. Incidentally, in studying this institution, I gained back the greatest

impulse toward health that I had received in all my life, including the few years that I was away from my home, an invalid from tuberculosis. And from the day I came here to the present there has scarcely a month gone that I have not received an addition to my working power, of which I could be definitely conscious, and which in most cases is due to the application of new knowledge largely received from the Battle Creek Sanitarium.

About five years ago I reached the stage where I had 100 per cent of working power again. That is, as measured by my old standard before I had come down with tuberculosis. But I was not satisfied with that, and since then I have been climbing up the ladder still further, until instead of being half a man, as I was when I came here, so far as working power is concerned, I am more than 100 per cent efficient today.

### Ill-Health an Unnecessary Waste

Now most people get their interest in health as I did, after they have lost it; they require some ten years to get back their working power, and many times they do not succeed in getting it all back. To these people the experience always seems an awful waste. Why can we not prevent in advance; why can we not interest people in health before they lose their health? And when I saw the self-sacrificing efforts that were made by men who contributed to save my life, men like Doctor Trudeau, men who helped to increase my working power like Doctor Kellogg, I made up my mind that I would always dedicate a part of my working power toward the public health movement, so that those who had not yet lost their health might in many cases be prevented from so doing.

Now, it seems to me this is a great national problem, and I appeal to you, as men and women who to a lesser extent have been through the same physiological phase of thought that I have mentioned, who have lost a little of their own vitality, regaining it and becoming thankful and resolving to do something for others—it seems to me that all who are indebted to the Sanitarium, or to any other institution that is doing such work, ought as a mere matter of justice to society, to say nothing of the pleasure it gives to themselves, to utilize the waste spots in their lives, to prevent, at least, corresponding waste spots in others' lives.

### Interest in Public Wealth, Not in Public Health

Now in this country there is not very much interest in public health, due to the fact that there is too much interest in public wealth and too little in public health. In fact, I found when I was ill in Colorado and in California that the ordinary way is for a man to lose his health, and then expend all his wealth in a vain pursuit of health again. Consequently it seemed to me that the appeal in this country would largely be based on the relation of health to wealth and on the folly of losing health to gain wealth. And I have, therefore, as an economist, tried to estimate in various ways what health means in relation to wealth.

In the first place, health is wealth. As Emerson said, "Health is the best wealth," a statement not only metaphorically true, but in a sense literally true. The capital

of a country consists not only of the lands, the buildings upon it, the stock within those buildings, the railways, the rolling stock, and other tangible accumulations of dead wealth, but it includes the live stock on the farms and it includes the human beings; and many economists are realizing today that this is profoundly true. Not only is it true, but the total assets of a country are always chiefly in the men, women and children in that country, and you can reckon out in dollars and cents to a certain extent what men, women and children are worth in their producing power as earning machines. What is it worth to this country to have efficient workers in our mills, to have efficient brain workers in our banks and counting houses, to have efficient men in public life, to have an efficient president of the United States who does not get sick? What is it worth to a country? Why, it is worth untold millions, untold billions of dollars, and any estimate of the worth must be a minimum estimate. We cannot give a maximum estimate, but we can work out the curtailment of working power, just as we can work out what tuberculosis costs this country, for instance—over a billion of dollars in cold cash: that is, loss of earnings, loss of working power, the premature cutting off of the breadwinner, amount to billions of dollars any year. Not counting the loss to the man himself, as a sort of sentimental way of counting—leaving that out, there is still a loss of \$600,000,000 a year to others than consumptives, because tuberculosis comes in the middle of life, when the working power is at the maximum, and, even when the consumptive recovers, or whether he recovers or not, there is a long period—at least three years, and probably an average of over four years—when he is largely incapacitated. During the first half of that period he is half a man in working power, and during the last half of it he is no man at all. He earns on an average half wages for a year, and then earns nothing for another year and a half before he dies.

### The Cost of Sickness

This is the usual course of people who die of tuberculosis. Those who get well have a still longer period during which they are invalided. I recall, as one example, the case of a broker who went to Colorado Springs. He was not what one would call a rich man, but he said that tuberculosis from the time that he discovered it had been costing him, in loss of earnings, in medical fees, in traveling expenses, and in other ways, at least fifteen thousand dollars a year, and would continue to cost him at least half of that for the rest of his life, because he did not believe he would ever be able to go back to resume his work at his old place. He had therefore stayed in Colorado and sacrificed this earning power because he had to.

Now tuberculosis is only one of more than one hundred maladies that are costing this country a vast sum of money. Only yesterday I was reading an account of the loss from typhoid fever. Various economists have tried to estimate the cost of typhoid fever, and on the basis of their estimates it is safe to say that typhoid fever costs this country at least one hundred millions of dollars annually. This of course is a small figure compared with tuberculosis, and yet it is quite a tidy sum, to say the least. And, I say, typhoid fever is only one of the hundred dis-



THE MAIN BUILDING OF THE BATTLE CREEK SANITARIUM

This bird's eye view also shows East Hall, another of the large buildings in which patients are cared for, together with one of the eight greenhouses, power house, laundry and machine shop. At the left is shown one of the several buildings in which special foods are manufactured for the use of Sanitarium guests. Besides these buildings the Annex, shown on page 4, and twenty-five other buildings are required to accommodate the present large family of guests, numbering this month 1,325.

eases, the unnecessary sickness from which involves a loss to this country of at least one billion and a half of dollars every year.

#### Infant Death Rate Cut Down 50 Per Cent

These figures are large, but they are conservative. For instance, in Boston recently figures have been shown pertaining to the unnecessary death rate of infants up to one year of age. Simply by purifying the milk supply, nearly 50 per cent of the deaths of infants under one year of age were prevented in a certain district that was experimentally tried three years ago. In my report on national vitality, to which Doctor Kellogg referred, the unnecessary deaths of infants were placed at about 40 per cent, which, the Boston figures show, was inside the facts. And undoubtedly with other preventive measures applied a still larger percentage could have been saved. Or to approach the economic side of the question from another direction, I am at the present time secretary of a tuberculosis association which has a sanatorium near New Haven that has now been running nearly ten years. It has been found that the savings of the earnings of the young men and young women who go through this sanatorium are far greater already than the cost of the institution and of their maintenance. That is, by actual count, the earnings of these young women and young men since they left the institution have exceeded all the cost of saving their lives. In fact, to put it briefly, we estimate there that for every dollar that the State of Connecticut puts into the institution, the State of Connecticut gets back ten dollars. It was on that basis largely that the legislature has given us generous appropriations.

#### Personal vs. Public Hygiene

Now in this country we have achieved a good deal in spite of our lack of interest in hygiene. You know there are two great branches of hygiene—there is a public

hygiene, and there is a private or personal hygiene, which corresponds very roughly to the two great kinds of human ills—*infectious diseases*, like typhoid, smallpox, scarlet fever, diphtheria, pneumonia, and tuberculosis on the one hand, and on the other hand *chronic diseases*, which are due not so much to germs as to bad habits, which produce strain of the liver, the heart, the nerves, the kidneys, and pave the way for Bright's disease, arteriosclerosis and all the diseases of which you have heard so much since you have been at the Sanitarium.

Now, these two kinds of diseases require two kinds of treatment, and so different kinds of lines are set, but in this country we have gone on only one of those two lines, that pertaining to the former class. The health officers of this country—what are they familiar with? They know about vaccination for smallpox, they know about disinfection, about inoculation, about pollution of water supplies, about pollution of milk supplies, about clean streets, about a correct sewer system, etc., but they know and care very little about eating and drinking and smoking and breathing, and what is more, they do not regard it as part of their business. Most of the physicians of this country are violating most of the rules of personal hygiene, and they are doing it very largely through ignorance, perhaps more often through indifference, chiefly because this country has not yet waked up to this one-half of the problem. The same thing is true in most countries. People are boasting of the decline of the death rate all over the world. It is true the death rate is declining all over the world. But why? Because we are fighting so successfully infectious diseases. But while we are getting rid of those diseases, the chronic diseases, the degenerative diseases, the personal diseases are for the most part increasing. And when you analyze it you find, too, that the decline in death-rate is confined to those ages at which the infectious diseases have their greatest maximum incidence; namely, to the younger ages. And therefore, if





The Sanitarium "Annex"

you work out the death rate in terms of what is called the expectation of life, you will find that while the average duration of life is increasing, the expectation of life, as it is called, is not increasing at all ages. The expectation of life at birth, age 0, is increasing; that is, an infant today may expect to live longer than an infant ten years ago would have done, or twenty years ago, or thirty years ago; a child ten years old today may expect to live longer than a child could expect to live a generation ago; a youth twenty years old may expect to live longer than a youth twenty years old of the last generation; in the case of a man or woman thirty years old, the expectation of life is a little greater today; of forty it is about the same; but of fifty it is a little less; of sixty it is considerably less; of seventy it is still less, and so on. Now, the relationship by which the mortality late in life is found to be greater, while the mortality early in life is less than it used to be, this relationship, I say, exists all over the world, save in two countries, England and Sweden. In England there is an improvement in the early age and no falling off in the later age; in Sweden there is the improvement in the early ages, but also an improvement in later ages, and Sweden is the only country of which I know this to be true. In fact, I can assert with considerable confidence that it is the only country for which we have statistics of which it is true.

#### Results of Personal Hygiene in Sweden

The reason is simply this, that in Sweden instead of attending merely to the problem of infectious diseases, the people have been attending to personal hygiene as well. They have been watching very closely for years the death rate from chronic disease, as well as from infectious disease,

and have been trying to find out ways of preventing both kinds of diseases, and as a result one finds there the greatest strides in the warfare against alcohol and tobacco, in improvement in dietetics, in increase in exercise, etc. In Sweden the decline in the use of alcohol is more striking than in any other country in the world; they are seriously thinking there of something that would make people laugh in this country—of nothing less than prohibition, not only of alcohol, but also of tobacco. In Sweden people live on coarser, and by that I mean better, food. They use hard Swedish bread. You know, most of the ills from lack of personal hygiene start in the first three inches of the alimentary canal, with misuse of the teeth. The Swedish people have to exercise their teeth to eat their bread, and that is what Nature intended. In this country we shirk that. We ask our flour mills in Minneapolis or elsewhere to do all our chewing for us, and then we swallow the soft bread that is produced out of the fine flour which we ought to have ground up with our own grinding mill; likewise we mash our potatoes, and we make puddings of everything we can. We have soft liquid food and it pours right down into the stomach without due mastication and without the use of the teeth. Therefore, we are all subject to decayed teeth. Why, the only man I know in this country with a perfect set of teeth is a Swedish dentist in New Haven. In Sweden, in short, they are taking up the very problems which are being studied right here in America at the Battle Creek Sanitarium, with more diffused understanding among the people than in any other country in the world, and they are getting their dividends, and if we live another generation we shall see that Sweden is getting dividends in other ways than merely in length-

(Continued on page eight)

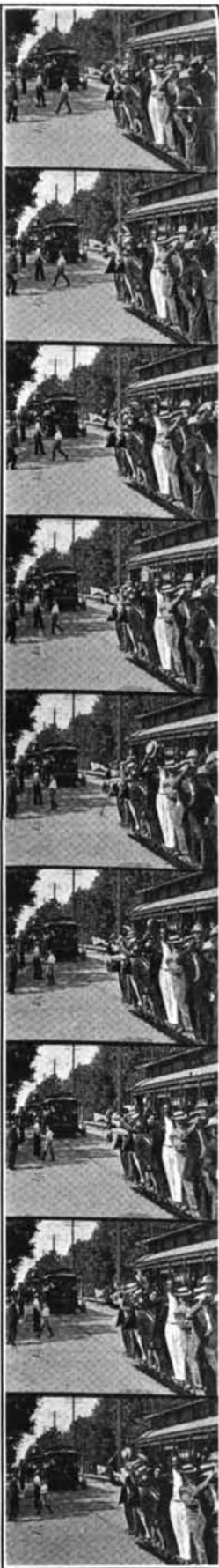
## A RECORD THAT WILL STAND

THE Battle Creek Chautauqua established last week what we believe is a unique record and one that will stand for many years—until at least it is improved upon by Battle Creek itself. Tuesday, July 29th, was "Sanitarium Day," and owing to the success of the Sanitarium in advertising the Chautauqua program among its guests and employees, a thousand people went from the Sanitarium—by street car, by automobile, by truck and afoot they went. Among this number went from the institution representatives of forty different States and twenty-six foreign countries. We submit that this is a record of which any Chautauqua might well be proud, and we think the Battle Creek Chautauqua was pleased with itself, at least to the extent of deciding by a very hearty response to continue the Chautauqua another year.

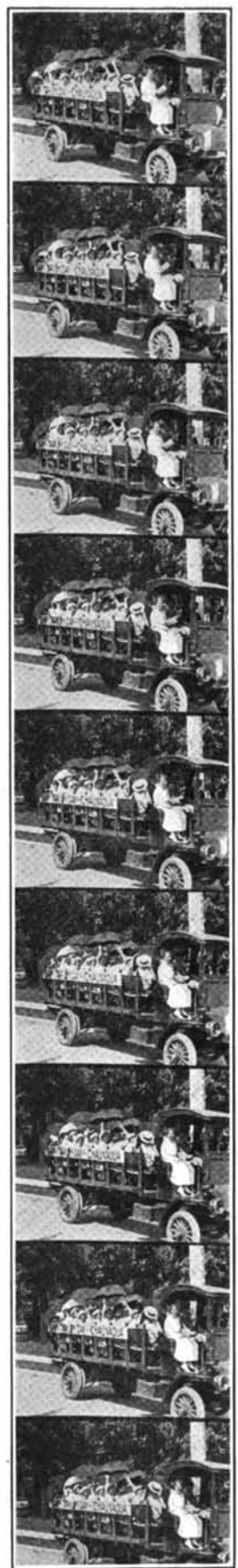
As we suggested above, a variety of conveyances were brought into requisition to transport the Sanitarium contingent to Lake Goguwac, where the Chautauqua grounds are situated. The large Sanitarium Grabowsky truck made several trips, a dozen street cars were furnished by the Street Car Company and filled to their capacity, while many of the more actively inclined cross-countryed the two miles to the Lake. On arriving at the grounds this great crowd was joined by the 175 girls from the National Cash Register Company, who were spending their vacation at Lake Goguwac. Stationed at a strategic point on the grounds was discovered the Sanitarium photographer, with a battery of cameras and a moving picture machine. In front of this latter a truckload of Sanitarium Normal School students gave the Normal equivalent of a "tiger" in so vociferous a manner as to make a dent in an overture being played by the Kryl Band—those inside the tent reported afterwards that the trombone soloist turned green with envy and that Conductor Kryl flushed to the roots of his hair, though this may be a mere report. The Sanitarium Band, too, was on hand, and did a turn before the moving picture machine, as did also the nurses, the National Cash Register girls and other groups. The aforementioned representatives of States and foreign countries then arranged themselves in an artistic grouping for their photographs, which are reproduced on another page.

And let us take this opportunity of commending to our readers the type of Chautauqua provided by the Chautauqua management. A partial list of the features includes Dean W. T. Sumner, Dr. Frank Gunsaulus, Ex-Governor Folk, of Missouri; Ex-Mayor Seidel, of Milwaukee; Hon. J. Adam Bede, of Minnesota; the Ben Greer Players in "Comedy of Errors," and the Mozart Concert Company. As many of the visiting speakers were entertained at the Sanitarium as their schedules would permit, all expressing the deepest interest in what they observed about the institution and its methods of treatment.

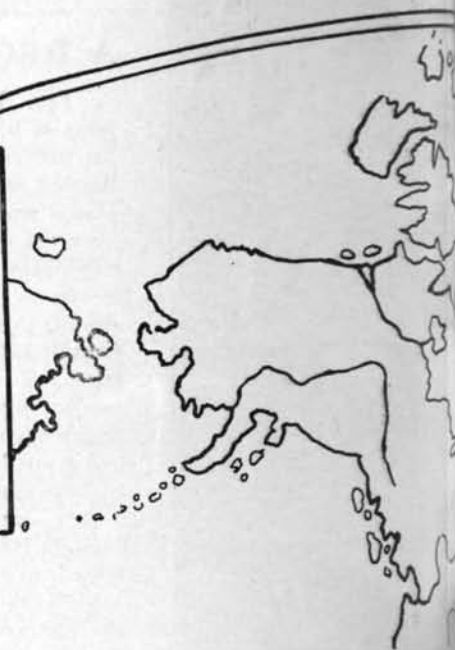
W. T. SUMNER, Dean of SS. Peter and Paul, Chicago, was the guest at dinner last week of Doctor Kellogg. Dean Sumner became widely known as the first clergyman to refuse marriage to couples not possessing from their physician a health certificate. He spoke at the Battle Creek Chautauqua on the subject of the "Dawning Consciousness of Woman's Sex Loyalty."



Off to Chautauqua by Trolley—



and Motor Bus



# *The World at*

*40 States and 26 Foreign Countries represented*





# The Sanitarium

at Battle Creek Chautauqua on "Sanitarium Day."

## HUMAN HEALTH AS A NATIONAL ASSET

*(Continued from page four)*

ened lives. We shall see it in their wealth; we shall see it in their politics; we shall see it in international respects, and in numerous other ways. No country can keep up in the international competition today that does not pay due regard to the vitality of its men and women. Sweden has great natural resources in iron. They have great water falls, and in the next generation, the next century, when coal gradually begins to give out, the country will be ahead that applies best its horsepower through electrical connection with the waterfalls, and here you will find Sweden using her increased vitality in increased enterprise and inventiveness, and there will be very apparent the relations between economics and health in the economic importance of that country.

### Measures for Popularizing Personal Hygiene

If we in this country are going to keep up with Sweden and with Japan, which is not very far behind Sweden and other countries which might be mentioned—if we are to keep up in this international competition we must do it by personal hygiene, we must take up personal hygiene as well as the study and prevention of infectious diseases.

Now the question arises, how are we going to introduce personal hygiene? Only this afternoon I was talking with a gentleman who has had a great deal of experience in many of these lines, and he said, "You know, if we tried to tell the general public on a large scale the truths that are preached to you here, and which rest on a substantial scientific basis, the world would simply laugh. They would say, 'Oh, that is the talk of a crank; that is fanaticism.' They wouldn't even stop to see whether there is a scientific basis or not." This statement calls attention to this important fact, that the great obstacle to the introduction of personal hygiene are the customs of the people. Talk about personal hygiene seems to reflect on personal habits, and personal habits are determined by imitation. If everybody uses soft foods the individual follows the crowd. He gets bad teeth because the general custom around him sets the example which he takes up foolishly, and which he would find it very hard to avoid following.

### Overcoming the Inertia of Custom

How then shall we overcome this inertia of custom? First let me call your attention to the fact that custom is not an active opponent. It is not a force operating in the opposite direction in an active way. It is more like a piece of putty than like a coiled spring. If you hit a coiled spring it hits back, but if you press putty it stays where you put it. You may find it very hard to press it. It won't go very far or very fast, but when it does go it stays where it is put. And that is the nature of the resistance of custom. In inertia there is nothing active; very little pressure counts, and the good that can be accomplished by the people in this room in their own community, if they did it in a tactful, systematic and persistent fashion is simply incalculable. As an example of what I mean I might cite an experience that I remember occurring when I was in Colorado Springs taking the tuberculosis treatment. I asked my physician why physicians did not preach fresh air. I said, "You are curing the patients here by making

them sleep out of doors and live out of doors twenty-four hours out of twenty-four, or as near that as you can. Why don't you preach that to well people? When you go into their houses to treat them for some other disease, why don't you say to the people, 'Open your windows. I do. Sleep with your windows open.'" "Why," he said, "they would run me out of the house. I could not talk like that. They won't change their habits; they don't want to be preached to about their personal habits. If I talked to them about how they sleep, about how they live and the room they live in, and tell them they don't eat right, etc., they would say, 'That is my business;' they would say, 'I hire you when I am sick and let you come and cure me, but don't talk to me about my personal habits.' I have given it up, and am not going to bother my head about it."

### Growth of the Fresh Air Idea

That was about twelve years ago. Think of the wonderful change that has occurred in that time. I am rather an optimist, but the use of fresh air has grown a great deal faster than I ever expected. Why, in New Haven only a few days ago an architect came to me to consult with me in regard to an outdoor school. I asked him, "Has this fresh air movement affected architecture?" "Yes," he said, "it has, very much. We have wider windows, different kinds of windows, and we have sleeping balconies."

Now this is just one example of the way the public attitude towards some of these problems of personal hygiene is changing, and I believe the time will come when it will be just as unfashionable to do the unhygienic thing as it is now unfashionable to do what is hygienic. One of the virtues of this institution, it seems to me, is the fearlessness in regard to custom. The object is to find out what is really hygienically the best, irrespective of what people actually do. There is no attempt to compromise with custom. I do not know that everything that is new on the code of hygiene in this institution is correct. It would be very wonderful if that were true. I venture to say, however, that the principles that are inculcated in this institution are nearer correct, far nearer correct, than the habitual code, the code of habit in the community in general. For you must never confuse the average with the normal. They are two entirely distinct things. I know an insurance company that has waked up to this fact. They used to take the average weight of people of whatever ages and say, That is the normal weight. Why is it the normal weight? Because it is the average. That begs the question. That assumes that the average is exactly right.

### The Average Not the Ideal Standard

It assumes that we all ought to imitate the average and try to approximate that. They now discover that the average weight of a person of fifty, is abnormally great. Most people are abnormally heavy late in life. What would you think of confusing the average with the normal in teeth for instance? If the average state of the teeth is correct then it is normal to have one tooth in two decayed, and to have it filled with gold or something of that sort, and it is not right to have a full set of teeth, for there is something abnormal about that condition. Evidently the normal and the average are two distinct things.

*(Continued on page ten)*



Members of the Tennessee and Missouri Sanitarium Clubs

## Guests from Tennessee and Missouri Form State Clubs

INSPIRED by the successful launching of the Texas Club among the Texas guests at the Sanitarium, patients from Tennessee and Missouri made a call for similar clubs, with the result that on the occasion of the visit to Battle Creek of ex-Governor Folk, who was born in Tennessee and became the leading citizen of Missouri, an organization banquet was arranged for July 30th. About sixty-five guests from Tennessee and Missouri met in the parlor, where they held a short reception for Mr. Folk, afterward proceeding to the banquet room, where the guest of the hour was given his first meatless dinner. An address by Mr. Folk was the feature of the day at the Battle Creek Chautauqua, and he could not spend as much time at the institution as the host of friends he made here desired. He was good enough, however, to take the time to deliver a delightfully characteristic and forceful address to the Tennessee-Missourians.

"I am very glad to be with you," he said. "I was born in Tennessee and my heart has long been in tune with my native State. I have lived long in Missouri, too, and I have traveled a great deal and I have seen a great deal, but I have not seen enough, as I find out every day. I am not like the man from Pike County, Missouri, you may have heard about. This man drank so hard that he began to become blind and had to go to a doctor to be treated. The doctor told

him frankly that if he would keep his sight he must stop drinking. After absorbing this information he went into the street, where he met a friend, to whom he told the news. 'What did you say to that?' inquired his friend.

'O, I told him I had seen about all I wanted to, anyway,' he replied. Now, I have not seen enough of anything. I have certainly not seen enough of this beautiful Sanitarium in the brief time I have been here, nor have I seen enough of Battle Creek; not nearly so much as I hope to.

"You people are here learning how to fight disease, Doctor Kellogg tells me. He spoke of my fight for the State and for cleanliness; the Sanitarium is fighting a similar fight. It is fighting for lives. And my friends, that is a beautiful thing, one which we can all profit by the example of. For, as the poet says, 'Life is a sheet of paper white, on which each one of us may write his little line.' The paper that is closed is so much waste paper and as such is useless, but the paper that is open for the use and beautification of the world is worth much. Shakespeare closed is a book not worth being dusted, but opened is a world of jewels. So, too, a life that is closed is worth while perhaps, but the life that is open is a benediction. There is a vast difference between a life of right and a life of wrong, between selfishness and unselfishness, and it is unselfishness that must always be found in

(Continued on page ten)



Ex-Governor Folk



## The Battle Creek Idea

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BATTLE CREEK, MICHIGAN

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### HUMAN HEALTH A NATIONAL ASSET

(Continued from page eight)

This institution is trying to find out what is the normal diet. Is meat a part of the normal diet? I am not an expert in this field, but I do feel sure of this, from a long study of the subject, a very complex and difficult subject, that the average diet is abnormal in regard to the use of meat; that whether the meat ought to be entirely eliminated or not, certainly the great bulk of it ought to be eliminated, and that in this country people are eating abnormally because they eat too much meat; and perhaps also it is true that they ought not to eat any at all. I am rather inclined to think that a very good case can be made on that score. Now, why do we know that people in this country in the use of meat are abnormal in various ways? Compare them with countries where they do not eat any meat or very much meat, as in China for instance. Compare the working efficiency. You will find that those countries that use no meat, or almost no meat at all, have very much greater physical endurance than those countries that use a very large amount of meat. A book has been written on this subject by an Englishman named Russell, that shows this very clearly. I took great pains some years ago to collect all the evidence I could, and I became convinced that that is true. One abnormal thing leads to another abnormal thing, and I believe that the method of eating I referred to a moment ago, the fact that we have our food ground up for us in the mill or in the kitchen, and try to swallow it without doing the work to earn the right to swallow it, as nature intended we should do—I believe this dietetic sin leads to decay of the teeth, and therefore to too much meat. For you know meat is one of the foods one can eat fast with impunity. You cannot eat grains fast with impunity; you cannot eat nuts fast with impunity, and people who eat naturally gravitate towards foods they find they can eat fast with impunity, and avoid the foods they cannot eat fast without doing themselves some harm. I sometimes put it this way: when you eat as fast as a dog you gradually crave the food of a dog; when you eat as slowly as a horse, you gradually crave oats and grain, foods that the horse eats. Why do we eat fast in this country? It is a part of our American hurry. We have a quick lunch counter, with so many minutes for refreshments. We have to work by the clock, we have engagements and do not allow sufficient time between engagements for proper eating. Even if we did have an abundance of time, we could not but eat fast because we

have that awful hurry in the back of our head all the time, due to artificial stimulæ—the railway, the hustle around us, the clock, the making of engagements. It is an abnormal life that civilization has built up. We cannot altogether get away from it, but we see it leads to all kinds of abnormalities, among them the abnormality of wrong eating, to eating flesh food that we can eat rapidly.

Abnormal habits are not confined to eating, however. They involve every department of life, and the aim of education in personal hygiene must be to show people the natural way and to induce them to follow it. And the time must come when human health will be judged of sufficient value to justify the same care and study that it receives in Sweden.

### GUESTS FROM TENNESSEE AND MISSOURI FORM STATE CLUBS

(Continued from page nine)

the life of devotion. The farmer must care for the wheat he plants. He must watch over it and protect it, for the seeds from the weeds will grow with the slightest chance and will flourish where wheat would die. They require no care for their growth. Should the farmer neglect his field it will grow weeds which in a short time will choke out the life that he has planted. It is so with the child. Most of the wrong that is done the children of the nation has been done through ignorance and neglect. Let us learn to be fighters, and not be like the farmer who lets the weeds grow. The health of the community and of the State is one of the assets of these United States and the people are not yet awake to it—they do not understand it. And it is institutions of this kind that must bring this lesson home to the people."

GUESTS of the Sanitarium were privileged to listen to an unusually excellent reading on Saturday, July 26th, by Professor C. Edmund Neil, of the University of West Virginia, who gave a dramatic interpretation of "The Henrietta." The presentation was carried through in a sustained masterly manner, and the various characters were made to stand out with remarkable faithfulness.

AN honored Sanitarium guest is Dr. J. H. Snowden, Editor of the *Presbyterian Banner*, Professor of Systematic Theology, in the Western Theological Seminary, Pittsburg, and one of the leading ministers in the Presbyterian church in this country. Doctor Snowden was the preacher at the regular service, Sabbath, August 2nd, and delivered a sermon strong in thought, and of large inspirational value.

DR. C. E. STEWART and Dr. J. T. Case, of the Sanitarium staff, are attending the International Medical Congress now being held in London, England. Both physicians will read papers before the Congress.

THE Sanitarium is entertaining a distinguished jurist in the person of Judge J. L. Monks of the State supreme court of Indiana.



National Cash Register Girls Boating on Lake Goguac near the Sanitarium Villa

## A Train Load of Young Ladies Visit Sanitarium for Outing

"Chee he! Chee he!  
Cha ha! Cha ha, ha!  
N. C. R. girls,  
Rah! Rah! Rah!"

This and a half a dozen other yells which were chanted at regular intervals gave the visitor to the east side of Lake Goguac the past fortnight no doubt as to who occupied the city of tents erected just behind the Sanitarium Villa. They came, lady employees of the National Cash Register Company, 175 strong, arriving from Dayton by special train, spent two glorious weeks—glorious at least for those whose pleasure it was to entertain them—

and returned to their work filled with new vim and energy ("pep," we believe is the more modern word) for another year's work.

From the very first the fair visitors were popular in Battle Creek. They were given a day's outing at Gull Lake, a beautiful stretch of water a few miles west of Battle Creek; they were entertained by several of the city's large industries, while the Sanitarium management turned over to them the keys of the institution and did everything in their power to make their stay at the Sanitarium Villa at Lake Goguac comfortable and profitable. The daily program included bathing in the Lake, as early





The "White City," Where the National Cash Register Girls Spent Their "Perfect Vacation"

as they cared to arise, which for many meant four o'clock; rowing; canoeing; motor boating; walking, and automobiling; while owners of concessions at the Lake presented them with blocks of tickets admitting them to the roller-coaster, the merry-go-round, etc. Meals were served in the Sanitarium Villa, immediately adjoining the rows of tents. What with these activities and frequent trips to the Sanitarium for lectures and exercises in the ladies' outdoor gymnasium, the visitors spent a busy but profitable two weeks.

This trip, the second to the Sanitarium, is a splendid

example of the remarkable manner in which the National Cash Register Company cares for the health of its employees. At the present time the Company employs two physical directors—graduates of the Sanitarium Normal School of Physical Education—to have charge of its Sanitarium-equipped gymnasium. Not only this, but the company employs trained nurses to look after the health of its employees and their families and to care for the first-aid cases which come to its well-appointed dispensary, and more recently has added to its staff a trained dietician, from the Sanitarium School of Home Economics.

#### A HONEYMOON AT THE SANITARIUM

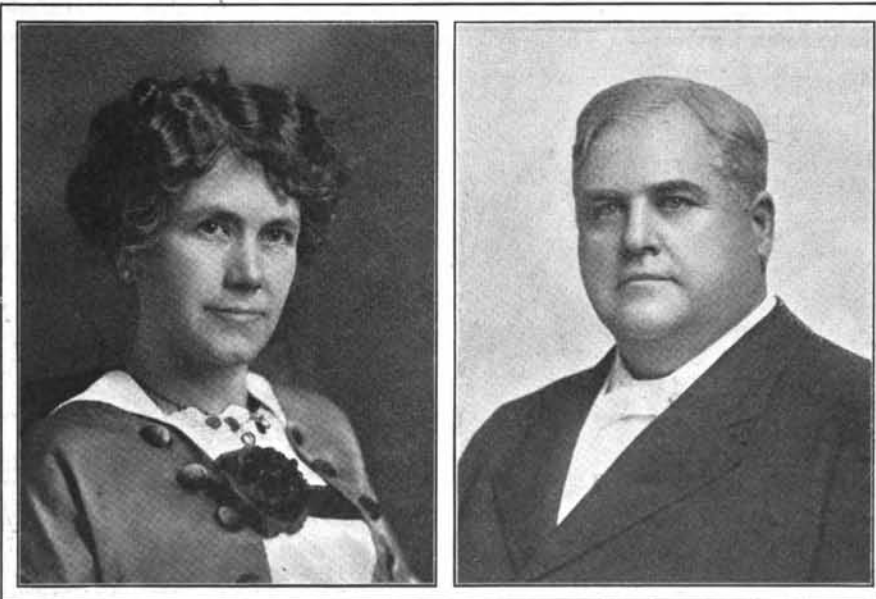
AN event of considerable interest to Sanitarium guests from Texas was the marriage recently of Col. S. E. Moss, of Dallas, Texas, a patient at the Sanitarium, to Mrs. Mamie Cartwright, also of Dallas, Rev. W. H. Phelps, of the First Methodist Church, Battle Creek, officiating. Colonel Moss is president and general manager of the Texas Drug Company, one of the largest concerns of its kind in the West. He served on the Governor's staff in Texas two terms under Ex-Governor Culberson, now

U. S. Senator from Texas, and under Ex-Governors Sayers and Lanham. He is well known in political and business circles in his State and is immensely popular. Mrs. Moss is the owner of a large ranch in Texas.

The guests at the five-course nuptial breakfast were Mr. James D. Richardson, of Murfreesboro, Tennessee, Grand Commander of the Scottish Rite of Freemasons; Mr. and Mrs. F. Z. Cartwright and son, of Tennessee; Mrs. R. S. Hindsell, Des Moines, Iowa; W. H. McCullough, F. T. Buell, J. B. Wilson, and Mrs. B. W. Repert, all of Dallas; Mrs. L. K. Covington, Bowling Green, Kentucky; Eugene Black, Murfreesboro, Tennessee; Rev. W. H. Phelps, Battle Creek, Michigan, and T. J. Manning, of Terrell, Texas.

After a short stay at the Sanitarium, Colonel and Mrs. Moss left on their honeymoon trip.

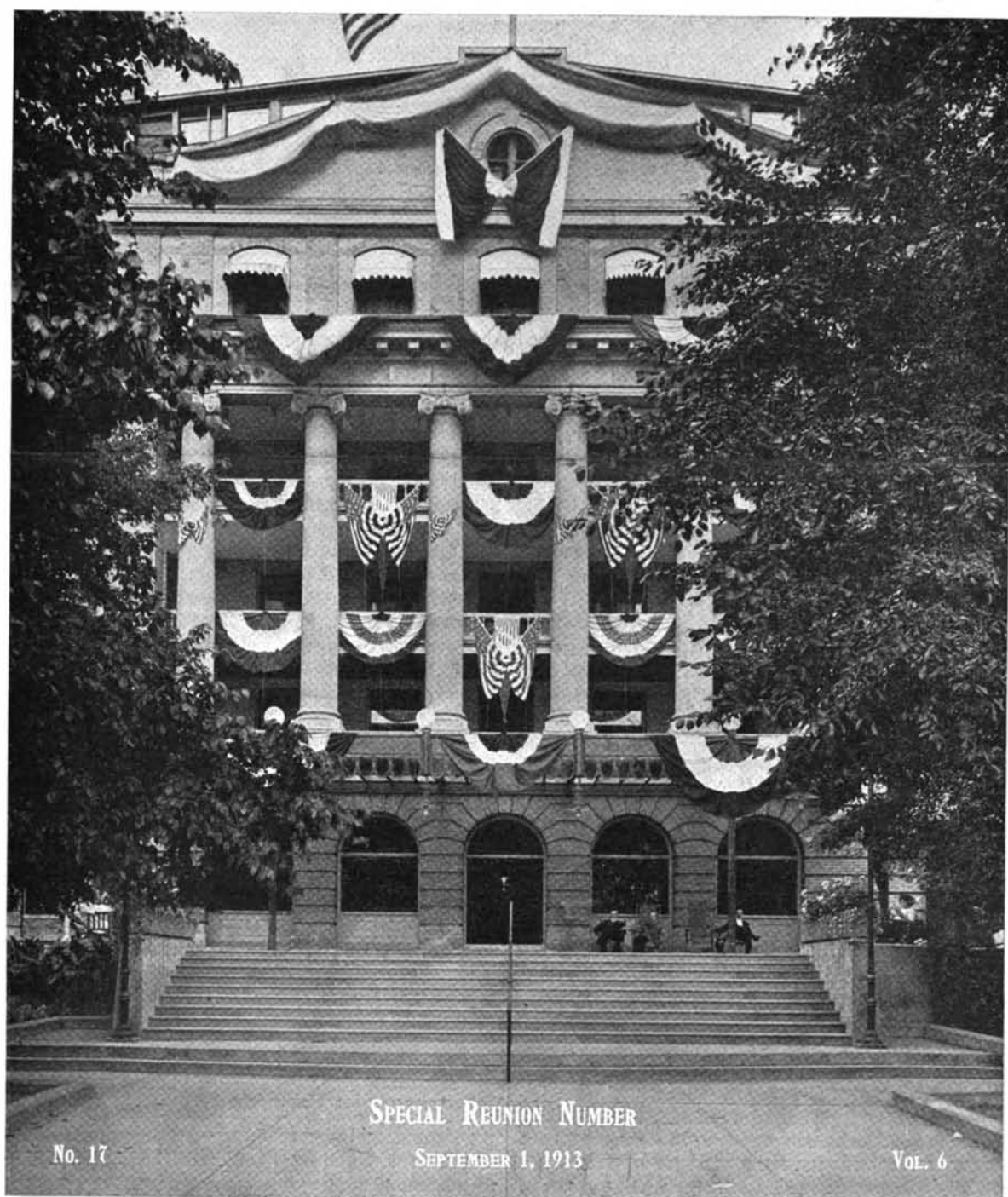
Colonel Moss is enthusiastic in his praise of the Sanitarium. "I have improved very much," he said to the IDEA representative. "I am absolutely satisfied with the institution. It is the finest in the world, has the best equipment for the diagnosis and treatment of disease, results being arrived at in this institution with more care than anywhere else I have been. In consequence, the best of effects are obtained here."



Col. and Mrs. S. E. Moss



# BATTLE CREEK IDEA



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## SANITARIUM GUESTS HOLD AN ANNUAL REUNION

### UNIQUE GATHERING HELD IN GYMNASIUM BY RETURNED PATIENTS

TUESDAY, August 12th, the Sanitarium Gymnasium was the scene of a meeting that was quite unique in the history of the institution. Two hundred and fifty guests, all of whom had been here at least once, some a dozen times before, held a reunion and told about other visits and other days, about why they first came and how they acquired the "repeating" habit. Doctor Kellogg, chairman of the meeting, was supported on the platform by Professor Irving Fisher, of Yale University; Dr. Oscar H. Rogers, Medical Director of the New York Life Insurance Company; Mr. S. M. Simmons, of Louisville, Kentucky; and Mr. C. H. Owens, of Pine Bluff, Arkansas, each of whom spoke most enthusiastically of the institution, its principles, its aim, and what it had done for him in a personal way. Doctor Kellogg then called for testimonies from the floor. There was a good response, several being on their feet when the time came for adjournment and the reunion photograph. Special interest centered about the remarks of Mr. Edgar Nelson Bradford, who first came to the Sanitarium twenty-nine years ago, when the institution was not so large as it is now, but when it stood firm for the same principles as now are known as the "Battle Creek Idea." At the close of the meeting the audience was treated to fruit punch, to which it did full justice. The addresses follow in order:

#### Wu Ting Fang, Chinese Statesman, to Attend Reunion in 1959

"This is the first attempt at a reunion of Sanitarium patients," said Doctor Kellogg, in opening the meeting, "but I trust it will not be the last. I hope the occasion may be repeated every year. Some fifty years from now Wu Ting Fang, Chancellor of the Exchequer in the new Chinese government, and formerly Chinese Minister to the United States, has promised to be with us again, also one hundred and fifty years from now. So those who are alive at that time will have the pleasure of seeing the astute Chinese statesman here, for he promised to come in 1956, then he is going to be here again fifty years later.

"We have been counting up heads the last day or two and are surprised to find how many we have who have been here before. We have today 1185 guests in our family, of whom 849 are sick people and here as patients, and of these 849 we find 225 have been here before,—'repeaters,' that is, in many cases first sent here by doctors or by friends in the hope that they might return home better people. They have acquired the Sanitarium habit to the extent that they came back—why, I met a guest the other day who told me he was on his twenty-eighth visit. Just this morning I talked with a lady visitor who said, 'Doctor, I have got to come again. I was here last year. I have been here twice, but I have got to come again. Doctor, I confess the truth, I backslide. I get along very well for about six months, then I backslide. I think I ought to come once in three months regularly; I think that would keep me right. But you know my husband is a very good feeder. He is healthy; a great big man and eats anything that comes along, and it is pretty hard for me to resist temptation. So after three or four months I begin to backslide and the first thing I know I am down again. I have those awful headaches. I wish I could get rid of them.'

"Here, then, are 225 people who have tried this experiment for nearly a thousand years—887 years, to be exact, is the extent of time during which these 225 returned guests have been living the Battle Creek Idea, and the value of this long experience in the ways of right living ought to be incalculable as a testimony to the soundness of Sanitarium methods. I have great pleasure in introducing the first speaker of the evening, Dr. Irving Fisher, Professor of Political Economy in Yale University:

#### Professor Irving Fisher Spends Vacation at Sanitarium

PROFESSOR IRVING FISHER: The first time I came here was, I think, eight years ago, and I have been a repeater to the extent of five or six times since. In fact, I come out here at every opportunity to spend a little vacation.



A part of the large gathering of "Repeaters."

In the technical sense I have never been a patient here, and yet the first time I came I could not boast of being truly a well man. I had had tuberculosis some time before, and was away from my work at Yale for three years, between 1898 and 1901, during which time I was under the best tuberculosis specialists in this country—Doctor Trudeau, of Saranac Lake, Doctor Corwin, of Colorado Springs, Doctor Flint, in Santa Barbara—and had gone back to my work at Yale without getting back my original power to work, which I was determined to restore if possible. I became interested in personal hygiene and endurance, as subjects which seemed important to me personally and which concerned my professional work as an economist; I have spent, I suppose, thousands of hours in studying personal hygiene during the last ten years.

During the first part of this period I became greatly interested in the work of my colleague, Professor Chittenden, on dietetics, whose experiments, as you know, is a part of the basis for the dietary here at Battle Creek, and because of the similarity between the low-protein ideas of Professor Chittenden and the non-meat ideas of Doctor Kellogg I became interested in the Sanitarium, stopping off at my first opportunity on a trip between my home and Chicago.

"I remember very well how fatigued I was from a scientific meeting I had been attending and remember telling Doctor Kellogg of it. 'I came here because I am interested in tuberculosis sanatoria,' I went on to say, for I had helped establish one near New Haven. 'But,' I said, 'I also would like to find out whether there is anything in this institution that can help me get back my working power.' I remember Doctor Kellogg smiling, apparently thinking there was certainly a great deal here that might be of use to me, which I found to be the case.

"I had supposed this institution to be merely a sentimental vegetarian institution, a one idea'd place

run by a one-idea'd man, and I expected the only advice I would get would be to give up meat. Much to my surprise Doctor Kellogg said, 'Professor Fisher, in your case I do not think diet has a great deal to do with it; in fact, as you have more or less adopted the Chittenden diet, I would not have a great deal to add on that subject.'

"'Well,' I said, 'then what do you think is the matter with me?'

"I was sitting in a chair in a stooped position, and he said to me, 'Your vest is wrinkled,' which did not seem to me to be a very coherent remark.

#### Why the Waistcoat Was Wrinkled

"I looked at my vest and saw the wrinkle, but I did not see the point, and I said, 'What of it?'

"'Well,' he said, 'if you will let me examine you I will find that your abdomen is wrinkled underneath.' Again I asked, 'What of that?'

"Said he, 'If you will let me examine you further I will find some sensitive spots on your back bone.' And I said, 'How do you know?' For reply he said, 'If you will let me examine you further, I will find your liver to be congested with blood.' Then I said, 'Doctor Kellogg, if you will tell me what is the matter with me according to your diagnosis, even if I don't believe you know it, I will follow faithfully your advice, because I am a great experimenter. Now, how long do you think it will take me to improve my working power very considerably?' I added, 'I have spent three years of invalidism traveling about the country, and I have spent two years at Yale doing half or quarter work, and while I have never had any recurrence of my symptoms of tuberculosis, and am listed as a cured man so far as that is concerned, I know perfectly well that I am good for nothing. I have spent these five years trying to regain my health, and if necessary I can spend another five years getting back my work-





The Sanitarium as it appeared when Mr. Bradford first visited Battle Creek, twenty-nine years ago.

ing power. I have improved a little in the last two years, but not very much.

"Well," he replied, "I think if you will follow my advice you ought to see some result in three weeks, and in another three weeks you ought to be doing double the work you are doing now." He spoke, I thought, altogether too confidently to inspire confidence, but I followed his advice. He found the sensitive spots he described, and he diagnosed my case as splanchnic neurasthenia, which in other words is congestion of the portal circulation, a malady which I now learn is exceedingly common among sedentary people, although very seldom recognized—in my own case, though I had evidently been suffering from it, knowing as I now do the symptoms of it, probably from twenty to twenty-five years of my life, no one has ever called my attention to it until my attention was directed to it here at this institution. It turned out even better than Doctor Kellogg said. Within a week I had noticed a distinct improvement, and within a month I was doing double the work I had been able to do previously, and since that time there has been scarcely a month of my life that has elapsed but that I have improved in working power enough to notice it myself. This was the biggest lift upward that I had received from any person or institution in the world, though I have since received many others, and I suppose altogether at least a half dozen suggestions received here have been of very great service to me."

#### Mr. C. H. Owens Encourages Rice Industry

Mr. C. H. Owens, next introduced by the Chairman, was converted to the Battle Creek Idea, as he puts it, four years ago. "I am a traveling man," he said, "and in my travels, of course, I am obliged to go to a great variety of hotels; some good, some bad. At the bad ones I have

to eat what they give me—rather, I try to eat some of the things they give me. But I have managed to get through and I have kept working until now a great many of them are adopting the Battle Creek Idea, so that when they see me coming they will go back and notify the cook, 'Mr. Owens is here; cook a lot more rice!' or, 'We will have rice for supper!'

"A little over four years ago I came to the Sanitarium, as near down and out as a poor fellow ever became. Immediately I was given the usual breakfast test, blood test, etc., and under the treatments I began to mend. Soon the nurses would wrap me up in blankets and wheel me out on the lawn, where I could breathe the fresh air, and as the diet quite suited me I picked up rapidly, until three months later I returned home, and have been traveling ever since.

"I come back every year now, but it is a pleasure to do so. I always look forward to the first of July as a time when we shall return to Battle Creek, for I love to come to the place that has done me so much good.

#### How a Student of Life Insurance Risks Regards Sanitarium

Dr. Oscar H. Rogers assured the audience that he was not present as a reunionist—"for the reason," he said, "that I never knew Battle Creek, except by way of rumor, as it were, until a little over two years ago. My work, however, has led me, I think, to be in a position to speak with a certain amount of confidence of the effect that the Battle Creek Idea has on people. My work for many years has been as a selector of risks for a large life insurance company, which means that it is my task to pass on each applicant for membership in the company, to afford a valuation which shall decide whether that person shall be admitted or not. And so I have come to look



## Arkansas and Oklahoma State Clubs Organized by Guests

ONE of the most successful banquets of the summer was held August 5th when the patients and guests from Arkansas and Oklahoma formed their Battle Creek Sanitarium Club. Over forty people from the two States reported for duty when the forming of the club was announced, and the State spirit ran high.

The parlor was the scene of a social gathering at 1:15

and as each guest arrived he was presented with a monogram letter O-A, upon which he wrote his name and address for purposes of identification. At 1:30 the party went to the dining room, where a long special table had been prepared and tastefully decorated.

After the banquet the party adjourned to the North East lawn, where the club picture was taken.

upon the human animal a good deal, if you please, as a veterinarian looks upon a horse—merely from the standpoint of the capacity of that animal to accomplish what is expected of him. Life insurance is a matter of longevity, and if a man is manifestly likely to live a much longer time than his fellowmen, it goes without saying that he is a much better risk for life insurance; and on the other hand, if he is less likely to live the average duration of life he is a poor risk for life insurance.

"My work, therefore, has concentrated my attention on the question of the probable longevity of any individual that happens to come before me, either in person or through the report of some other physician. And I want you to know of an experience that I have been having for many years which gives me a great deal of trouble. Men in apparently splendid health, men who seemed to themselves to be in the best of condition, who felt vigorous and strong and as if they were going to live to a great age, I found curiously to be only the shell of a man; the machine was burned out inside, and yet on the surface of things the individual was sound as he ever was; I saw that over and over and over again. Now what shall we do with such people? It is very easy to say we are sorry but we cannot accept them as risks for life insurance, but there has been running for nearly 2,000 years a tradition that the priest and the Levite when they pass by on the other side were doing the wrong thing, and I take it if we see a man in trouble, wounded and broken, it is up to us to do our best to help him along. And so there has drifted into my work the problem how best to offer help to these

cripples, who until they come before me feel that they are as good and vital subjects for insurance as anybody else.

"I had tried Nauheim and Vichy and various places in Europe, and many sanatoria in this country, and had seen the work of all of them. And I am sorry to say that on the whole I reached the profound conviction that when it was boiled down and concentrated it was not of the least value. It was practically a dismal failure and I came to have no heart at all in saying to a gentleman who was evidently in distress, 'Take the treatment at Carlsbad.' I knew it was as sounding brass and a tinkling cymbal, although I saw some exceptions.

"Then I happened to meet the distinguished head of this institution and talked with him long enough to get his idea, and I saw that he had arrived at what I believed to be the correct conclusion, and I have since then been an advance agent for the Battle Creek Sanitarium. And of the people I have been influential in sending to this place, I can say only that they drift back here from time to time, and so instead of being a leader of those people, I suspect that hereafter I too shall have to come back and in doing so, instead of leading them, I shall be following them—because I am coming to Battle Creek again.

### Remarkable Recovery From Nervousness

"Thirteen years ago I first came here," said the next speaker, Mr. S. M. Simmons. "I have been here five times since, a striking indication of the appreciation that  
(Continued on page fourteen)



A high dive at the Swimming Tournament, Homecoming Week.

## Sanitarium Takes Active Part in Battle Creek Homecoming Celebration

THE enterprising city of Battle Creek has just celebrated a "Homecoming and Home Celebration Week" that will long be remembered for the large army of home-comers it brought to the city, and for the tireless industry of those in charge of the splendid list of entertainments. Wednesday, August 20th, was "Sanitarium Day," when life was at its most strenuous here at the institution. In the forenoon an automobile parade participated in by practically every automobile in the city drove up Sanitarium hill, followed immediately after dinner by a program which included an able physical culture exhibition by the students of the Normal School of Physical Education and by an acrobatic performance by the "Ishakawa Japs."

In the Men's Outdoor Gymnasium there was being held a swimming tournament under the direction of Mr. Howard Province. In this, Professor G. H. Corsan, of the faculty of the University of Toronto, gave a remarkable exhibition of fancy swimming strokes, including the "Australian Crawl," the "dolphin" and "Submarine," the last named being of Professor Corsan's own invention. Professor Summers gave a practical demonstration of how to proceed in the resuscitation of a drowning man. Then followed a fifty yard dash, won in thirty seconds flat by Mr. Pengally, of the Sanitarium; a forty yard dash for boys, won by Edward McClure, son of Mr. S. S. McClure, Editor of McClure's Magazine, in forty-five seconds; diving for boys, won by George Armstrong; and diving for men, won by Professor Edward Angell of the University of Wisconsin, a guest at the

Sanitarium, Mr. Glenn Lichtenwalner, of the Sanitarium, being a close second.

The students of the Normal School again contributed to the program a baseball game, the students of the Summer School winning from the students of the regular course by a score of 10 to 2.

Tennis fans were also catered to, two sets of doubles being played by Johnson and Angell against Lewis and Blatherwick, the former 7-5 and 6-2. The game was exceedingly fast and the playing of the very best that has been seen on the Sanitarium courts this summer.

At half past five the "Flying Hubers" gave an exhibition of their remarkable aerial work on the southwest lawn of the Sanitarium. The performance was witnessed by an audience of several hundred people.

The after-supper program began with a children's gymnasium drill on the front driveway, under the direction of Professor L. A. Summers. Then followed moving pictures on the College lawn, of films made by the Sanitarium photographic department. Following these the audience adjourned to the front entrance of the Sanitarium, where Professor Irving Fisher and Doctor Kellogg gave short addresses. Professor Fisher, choosing for the title of his address "What the Battle Creek Sanitarium Means to Battle Creek," told in a few happy remarks of the high repute in which the Sanitarium is held in the outside world, of the advertising value of an institution like the Sanitarium to a thriving city, closing with a plea to the people of the city of Battle Creek to do their utmost to safeguard the reputation and the interests of an institution that means so much to every citizen. Doctor Kellogg took for his subject, "Why the Battle Creek Sanitarium is Situated in Battle Creek," in which he traced briefly the history of the Sanitarium from the very inception one hundred years ago of the principles upon which the institution is based, to the present day.



A set of doubles, Homecoming Week.

Then came another exhibition by students of the Normal School, who did some spectacular work in Indian club swinging, tumbling, and calisthenics.

At 8:30 was held in the Men's Outdoor Gymnasium the most notable event of the day—a performance of Shakespeare's "Twelfth Night," commented upon elsewhere. At 9:00 the "Flying Hubers" gave a second demonstration of their remarkable work.

Particularly worthy of mention was the work of the Sanitarium Band under the leadership of Mr. William Drever. The Band was everywhere at once and seemed tireless. Their playing was of a high order and contributed a great deal to the success of Sanitarium Day.





The Sanitarium Players costumed for "Twelfth Night."

### HOME TALENT PERFORMANCE OF SHAKESPEARE'S "TWELFTH NIGHT" WINS APPLAUSE

THE success of the delightful interpretation of "As You Like It" given some weeks ago by the Sanitarium Players led to calls for other of the comedies, in response to which the players presented "Twelfth Night" last Wednesday in splendid form. As before, the performance was held in the Men's Outdoor Gymnasium on a specially constructed stage. That brace of roguish wags, Sir Tobey Belch and Sir Andrew Aguecheek, two of the drollest characters in all Shakespeare, held the center of the stage. Malvolio, he of the ego, was a joy to behold, what with his broad smile and his cross-gartered calves, making a decided impression upon the audience—as well as upon her ladyship, Olivia! Worthy of particular remark was the Viola, as also the ever vivacious and resourceful Maria.

### UNIVERSITY OF WISCONSIN PROFESSOR INSTRUCTS MOTHERS AT SANITARIUM IN CHILDREN'S PLAY

PROFESSOR E. D. ANGELL, of the Department of the University of Wisconsin Extension Lectures, who has been lecturing upon "Play in Its Educational Relations" in the Normal School of Physical Education, recently gave an important course at the Sanitarium entitled "A Mother's Course in Play." "My aim," said Professor Angell, to an IDEA representative, "is to revive children's games, and to provide new play material. Our civiliza-

In honor of "Homecoming Week"—the Sanitarium was especially decorated, the front elevation being beribboned in gala fashion and the dining room being decked out with a plentiful supply of flags and bunting. Both patients and helpers entered into the spirit of the day, and the Homecoming spirit was everywhere in evidence, being commented upon by the eight hundred homecomers who went through the Sanitarium during the course of the day. The most cordial relation exists between the Sanitarium and the city in which it has its home, and the institution feels that in welcoming guests to its walls it is welcoming them to a splendid little city that has no superior in the world, and we hope this, the first of its Homecoming celebrations, will become an annual affair.

tion is responsible for play having to a considerable extent died out in our cities and large towns. Realizing the value and necessity of play to the child life, I am endeavoring to equip mothers to guide their children in their playing, and to supply them with necessary material for an adequate amount of play."

Professor Angell's qualifications for the work outlined above are found in studies that have continued over many years. He has also been an instructor in Harvard and Yale Universities, in the University of Wisconsin and in various other parts of the country. He is the author of a volume on play, and

is credited with having originated more recreative games than any other person in this country, these numbering some forty, together with other play material.

### BISHOP W. S. LEWIS, OF CHINA, COMMENDS BATTLE CREEK IDEA

BISHOP W. S. LEWIS, of Foo Chow, China, formerly President of Morningside College, Sioux City, Iowa, and now associated with Bishops Ashford and Perry, having charge of the missionary work of the Methodist Church of America in China and Korea, has again honored the Sanitarium by one of his frequent visits. In the course of a recent talk to guests he paid the following tribute to the Sanitarium:

"I desire to say a few words to express my appreciation of this great institution. My visit to the Sanitarium has been the means of bringing health and increased happiness to my entire family. I have found here principles of the greatest importance to health and life and to the welfare of the race, and which I have not found elsewhere. My acquaintance with the Sanitarium has been an inestimable blessing to me and to my entire family, and wherever I go in my travels about the world, I shall carry with me the things which I have learned in this institution."



Duel scene between Sir Andrew Aguecheek and Viola.



Guests from Georgia and Louisiana, sixth and seventh States to form Clubs at Sanitarium.

## Georgia and Louisiana Form Sanitarium State Clubs

Two more progressive States have formed clubs at the Sanitarium—Georgia and Louisiana, which organized August 13th. About forty people were found at the Sanitarium who hailed from these far southern States, and renewing of old acquaintances and the meeting of new friends was a pleasant occasion for all. At 1:30 the

party repaired to the new State banquet hall, which has been prepared to the south of the main dining room, where an elaborate menu had been prepared. At the close impromptu speeches were given by a number of representative people, and the party adjourned to the north lawn, where the club picture was taken.

### PHYSICAL AND MENTAL EFFICIENCY EQUALLY IMPORTANT WITH SHOP EFFICIENCY, SAYS EMINENT NEW JERSEY GUEST

AMONG the recent arrivals at the Sanitarium is the Hon. Charles O'Connor Hennessy, well known in New York as the head of the largest cooperative savings society of that city, and in New Jersey, where he lives, as a conspicuous leader of the Wilson Democrats in the legislature, last spring being the President's candidate for the speakership of the House of Assembly.

Mr. Hennessy was in Milwaukee last week, where he presided over the Convention of the United States League of Cooperative Savings and Loan Associations, coming from Milwaukee to Battle Creek to rest for a few weeks preparatory to entering the fall campaign in New Jersey, where he is to be the Democratic Senate candidate for Bergen County.

Mr. Hennessy thinks that the good health movement as exemplified at Battle Creek, through the application and diffusion of learning as to the simple and fundamental requirements of hygienic living is making a most important contribution to the education of the country. "I was much impressed," he said, "by the remarks of Professor Fisher, published in the last number of the IDEA, in which he called attention to the tremendous economic waste, as measured in dollars, of the ill health of a large section of the American people.

"In my own state, we recently established an Economy and Efficiency Commission to get rid of the wastefulness in the administration of the State government, and to make government a simpler and more efficient instrumentality for the common good. Similar commissions are at work in other States, and New York City has a special body of men studying the question. Every large business enterprise has at some time employed an efficiency engineer, whose business it is to study the business organization and bring it up to the best standard of simplicity, economy and efficiency. Little thought, however, is given to the most important factor in human efficiency,—the question of individual fitness through health. Some of the great manufacturing industries, it is true, have learned that well ventilated work rooms and hygienic surroundings pay dividends in the increased mental and physical efficiency of the workers, but as a rule, business men do not apply this idea, and least of all, though most important perhaps of all, they do not apply it to themselves. A tremendous impetus would no doubt be given to the productive activity of the American people if the simple principles of right living could be more generally diffused than they now are. The most effective result, therefore, that I see in the work being done at Battle Creek is not so much in the influence upon the individuals directly affected by the treatments and education received here, but in the influence which these patients will radiate in their home environment."

### AUTHORITY ON DECORATIVE ART IMPRESSED BY SANITARIUM ARCHITECTURE

ALL who have seen the imposing structures which house the Sanitarium will appreciate the following statement from Mr. Wm. R. Bradshaw, recently Editor of the *Decorator and Furnisher*, and Lecturer of the New York Anti-Vivisection Society: "As a connoisseur of architecture, apart from the hygienic merits of the enterprise, I must say I am surprised at the lofty plane of art achieved in the construction of the various buildings composing the Battle Creek Sanitarium, and in their interior fittings, equipment and adornment. The plant is one of the few places on American soil that rivals European architecture, and this, taken in conjunction with its hygienic progressiveness, constitutes a palace of the 'higher life,' physically, as well as, I believe, morally.

"I hope in the near future to make a longer visit, for I am among those who are troubled with certain functional ailments which such an institution as the Sanitarium would powerfully help and heal."

### NORMAL SCHOOL OF PHYSICAL EDUCATION STUDENTS HOLD BIG ATHLETIC MEET

THE second annual Outdoor Pentathlon of the Normal School of Physical Education was held on Sanitarium Athletic Field, Friday, August 15th. The program of events comprised a seventy-five yard dash, twelve pound shot put, running high jump, pole vault, one mile run. The winners were as follows: Seventy-five yard



Mr. J. F. Strain, highest point winner and the medal awarded him.

dash, Colville—eight and two-fifths seconds; twelve-pound shot put, Offinger—thirty-eight feet, five and one-half inches; running high jump, Offinger—five feet, three inches; pole vault, Strain—ten feet, six inches; one-mile run, Inman—five minutes, thirteen and three-fourths seconds. A solid gold medal, given by Doctor Kellogg to the highest individual point winner, was awarded to Mr. J. F. Strain, who made 79 points, four more than his nearest competitor.



The morning ride in the Pony Carts.



Mrs. Weaver entertaining the children with stories.

### CHILDREN'S HOUR AT THE SANITARIUM

THE merry faces, and the happy laughter of the children as they flit in and out of the buildings and play about the grounds is a constant pleasure to the Sanitarium guests. A series of entertainments for the children are provided during the summer months, having been arranged for the double purpose of benefiting the children, and assuring quiet to those who have sought the institution for rest and health. Mrs. Clifford S. Weaver, of Texarkana, Texas, who is well qualified by several years' work among children for the position, is supervisor of the children's work, assisted by Miss Pearle Leonard. The children may be seen often during the day on trips in a pony cart or automobile, trolley trips, nature study, tramps, outdoor games, cooking classes, gymnasium, and swimming. Not the least pleasurable is the Story Hour, when the children revel in fairyland, folklore, daring deeds of heroes or heroines, epic tales, etc. What better tonic for tired body, brain and nerves, than such a peep into the self-forgetfulness and utter abandon of Happyland as seen in the childhood of the summer days at the Sanitarium?

Besides the work for children above kindergarten age, there is a well-equipped kindergarten in the West Hall, where two efficient teachers, Miss Gretchen Saunders and Miss Flossie McFarren teach the children kindergarten games.

Mrs. G. S. Lowman is spending the month of August with us in the children's department. She, too, is a story teller of much experience and delights the boys and girls with her charming personality and story work.

"What has vaunted science done for nervous diseases?"

"Good heavens, man, it discovered them."—*Life*.





The missionaries staying at the Sanitarium, together with a few invited guests, numbering twenty in all, enjoyed a delightful picnic at the Sanitarium Villa at Gogua Lake, on July 24th. The party was conveyed to the lake by automobile. An excellent lunch was served at the Villa, at which Bishop W. S. Lewis, of Foo Chow, China, who was the guest of honor, made a powerful speech. Later in the afternoon the party participated in a very pleasant motor boat trip around the lake, the return to the Sanitarium being made by means of automobile.

## LOBBY NOTES

MRS. L. BREWER, wife of Governor Brewer, of Mississippi, is an honored guest at the Sanitarium.

JUDGE R. E. CAMPBELL, of Muskogee, Oklahoma, of the United States District Court, and Mrs. Campbell, are guests at the Sanitarium.

A RETURNED guest at the Sanitarium is Mrs. W. W. Stark, of Boston. Mrs. Stark is a cousin of President Wilson.

MR. J. H. PATTERSON, President of the National Cash Register Company, Dayton, Ohio, is a returned guest at the Sanitarium, coming for a period of rest.

AMONG recent guests at the Sanitarium is a well-known educator of the Middle West, Mr. J. A. Marquis, of Coe's College, Cedar Rapids, Iowa.

THE Sanitarium is also entertaining the wife of another distinguished educator, Mrs. M. C. Thompson of Columbus, Ohio. Professor Thompson is president of the Ohio State University.

MRS. C. S. ABEL, with her daughter, Miss Gertrude, is a recent arrival at the Sanitarium. Mrs. Abel is the wife of Lieutenant-Governor Abel, of South Dakota. Governor Abel accompanied his wife and daughter to Battle Creek.

PROFESSOR G. H. CORSAN, Professor of Swimming in the University of Toronto, is at the Sanitarium conducting classes in swimming during the present fortnight. Monday and Tuesday afternoons, August 18th and 19th,

Professor Corsan gave a remarkable demonstration of swimming strokes, fancy and racing, in the swimming pool in the Men's Outdoor Gymnasium.

DR. ADELAIDE ELLSWORTH, of Centre Moreland, Pennsylvania, who has accepted a position as resident physician of the Van Hoose School, Rome, Georgia, has recently visited the Sanitarium, investigating its methods and principles.

"WORK of Colored Women for Colored Women" was the subject of a very interesting and informing address delivered at the Sanitarium Sabbath afternoon, August 16th, by Miss Cornelia Bowen, Principal of Mt. Meigs, Alabama, Institute, President of the Federated Colored Woman's Clubs and Trustee of the State Reformatory of Alabama.

AMONG practising physicians who have registered at the Sanitarium are the following: Dr. G. L. Williams, Columbus, Ohio; Dr. G. S. Tracy, New York City; Dr. R. W. Rowland, Oxford, Mississippi; Dr. S. H. Russell, Wilmington, North Carolina; accompanied by Mrs. Russell and daughter, Miss Jane; Dr. Ellen Freeman, of Cincinnati; Dr. P. N. Sharp of Sadiz, Ohio, accompanied by his daughter, Miss Virginia.

THE College Library will soon be located in its new quarters in the north wing of the College building, on the second floor. Two large rooms are being fitted up for the use of the Library, one of which will be used as a study room in which students will be permitted to converse in low tones in the preparation of their lessons. The rooms will be decorated artistically and will be illuminated by indirect electrical lighting. The floor

space will be increased to nearly double its present area. The old library room will then be utilized as a chapel and recitation room for Bible classes.

## SOME TASTEFUL TOASTS\*

### BAKED TOMATO ON TOAST

6 slices of bread                      1 tablespoon butter  
6 thick slices tomatoes             $\frac{3}{4}$  cup milk  
 $\frac{1}{2}$  teaspoon salt

Trim the crust from the bread and toast to a nice brown. Select firm and ripe tomatoes. Remove the stem end and cut into two or three slices according to the thickness of the tomato. The slices should be about three-fourths of an inch thick. Place the tomatoes in a buttered pan; sprinkle with salt and dot each slice with a bit of butter. Bake twenty to thirty minutes in a moderate oven. Moisten the toast by dipping quickly into the hot milk. Place a slice of a baked tomato on each slice of toast. Garnish with a sprig of parsley.

### CREAM TOMATO TOAST

Prepare a Cream Tomato Sauce and pour over slices of toasted bread.

### DATE TOAST

2 cups dates                              4 tablespoons milk  
Water                                      1 tablespoon cream

Toast

Immerse the dates in cold water, remove the stones and wash in hot water. Put the dates to cook in an equal quantity of boiling water. Let cook until the dates are very soft and quite thick. Put them through a colander and add the milk and cream. Pour this over crisp toasted bread.

### PRUNE TOAST

Wash and soak sweet California prunes overnight in cold water. Then put on to cook on the back of the range and allow to simmer for one to two hours, or until perfectly tender. Remove the seeds and rub the prunes through a colander. When ready to serve, dip thoroughly toasted slices of bread or zwieback quickly into hot milk. Serve as individual portions upon small plates. Over each slice put a spoonful of the prune puree. If desired, this may be served with thin cream.

### FRUIT TOASTS

For each serving allow one slice of crisp toasted bread and one-half cup of a fruit sauce, such as apple sauce, peach sauce, etc. If berries or fruit juices are used thicken with the cornstarch to one cup of the liquid or sauce. If desired, two slices of breakfast toast or one slice of zwieback may be substituted for the toasted bread.

### BANANA TOAST

Peel very ripe bananas and mash through a sieve or colander. Proceed the same as for fruit toast except that the toasted bread should be moistened slightly with hot water or hot milk.

## MR. R. J. KLEBERG, OF TEXAS, A SANITARIUM GUEST

"My health is practically restored." This was the happy report given by Mr. R. J. Kleberg, of Kingsville, Texas, in an interview just prior to his departure, after a stay extending over several weeks at the Sanitarium. "I came to the Sanitarium in a very run-down condition," Mr. Kleberg explained. "I had intended to go to some watering place, but my physician suggested that instead I should come here in order to discover exactly what the trouble was. The cause of my condition was speedily



Mr. R. J. Kleberg.

diagnosed, and the treatments prescribed have benefited me so much that I am able to report as above concerning my health. My last test shows that my blood-pressure, which was high, has been reduced to normal, my blood is in perfect condition, my strength is normal for a man my age and size. Moreover, I have gained an understanding how to take care of myself in the future.

"I have found the Sanitarium well equipped to diagnose the nature of any one's ill-health, as also to treat it. I regard the institution as a great university of the science of living. I have enjoyed my stay, and expect to return." For a period of eight weeks, Mrs. Kleberg, with her son and daughter, was with Mr. Kleberg at the Sanitarium.

"Doctor, I want you to look after my office while I'm on my vacation."

"But I've just graduated, doctor. I have had no experience."

"That's all right, my boy. My practice is strictly fashionable. Tell the men to play golf and ship the women off to Atlantic City."—*Selected.*

\* By permission of the author from "The New Cookery," by Lenna F. Cooper, just published by the Good Health Publishing Company.



Members of the new Clubs

## Alabama and Mississippi Organize Large Clubs

MONDAY, August 18th, forty-two guests from Alabama and Mississippi met in the main parlors and formed their State clubs. It was the fifth meeting of the kind held this summer at the Sanitarium, and was a distinct success, as was also the banquet, which was served in the special dining room which has been set apart for the use of the various State clubs. The room had been decorated with boughs and flowers from the Sanitarium greenhouses and had also the appearance of a forest picnic ground.

After the banquet a program of short speeches was

given, including an original poem read by Mrs. Moses, which appears on another page of this number of the IDEA. As an original poem was somewhat of a departure it was received with much applause.

At the close of the speeches a flash light picture was taken of the banquet table and guests, the party then adjourning to the north-west lawn for the outdoor club picture. Complimentary copies of the BATTLE CREEK IDEA and *Good Health* were given to the members as souvenirs.

### THE SANITARIUM LIBRARY CONTINUES ITS RAPID GROWTH

THE Sanitarium Library is constantly receiving additions to its list of books, all of which are carefully selected for their adaptation to our readers. Among the latter acquisitions is a well bound set of the New Century Dictionary and Encyclopedia, consisting of twelve large volumes. This is one of the important and valuable contributions ever made to works of reference. Mr. J. R. Cook, of Rochester, Minnesota, for some years a guest of the institution, suggested the obtaining of this work and assisted materially in procuring it, having in mind especially the benefit that would accrue to the students and young people of the institution. Another valuable work just placed upon the shelves is the "Photographic History of the Civil War," published by the Review of Reviews Company, consisting of ten volumes of richly illustrated history, the pictures consisting of recently discovered photographs taken during the war.

### THE INDESTRUCTIBILITY OF CHEESE

DOCTOR KELLOGG was asked the other evening whether he recommended cheese, and he replied that it was difficult to recommend cheese, because one does not know what he is recommending, for there are so many

different things to be found there. "Another reason is this," said Doctor Kellogg, "that I believe in a low-protein diet and cheese is very likely to contain a well assorted menagerie. Cheese contains 'cheese mites,' for example. The cheese mite is the first cousin to the little mites that burrow under the skin in the miserable disease commonly known as 'itch.' In most cheese are found these little creatures, as also the maggot, a certain species of the fly. Flies, as you know, lay their eggs in decomposing material, such as barnyard litter, and these eggs hatch out later into grubs, which develop into flies. Now eggs are put by the flies into decomposing material of this kind simply because maggots are scavengers and the odor of the substance attracts the fly, which deposits the eggs there because the refuse contains elements essential to the fly's development. Now there is something about the smell of cheese that attracts the fly in the same way, with the result that the fly lays the eggs there, the eggs developing into maggots—which make cheese so very attractive under a microscope. You may remember the story of Charles Lamb, whose sister wanted some toasted cheese before she went to bed one night. It was dark and stormy, but nevertheless Mary wanted the cheese, so she said, 'Charles, there is no cheese in the house.' 'Alright,' he said, and out he went to the cheese-monger's to get the cheese for his sister. The merchant tied a string about it and said, 'Mr. Lamb, shall I send it home?' 'No,' he said, 'give me the string and I will lead it home.'"

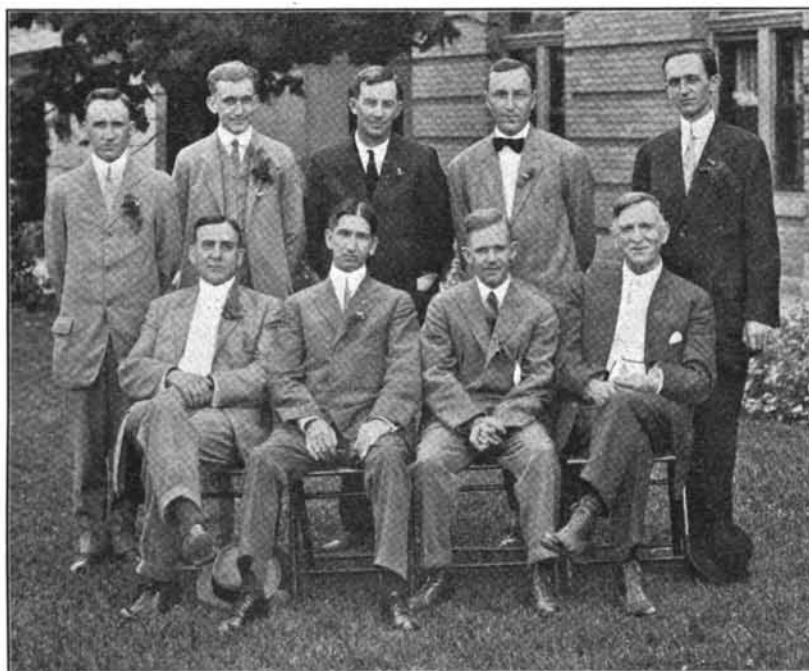


## ON A LOW PROTEIN DIET FOR FIFTEEN YEARS

DR. E. E. FITHIAN, of Grove City, Pennsylvania, recently paid his second visit to the Sanitarium, his first having been made two years ago. Before leaving, Doctor Fithian stated his appreciation of the institution, laying special emphasis upon the system of diet. "It has been mine," he said, "for the past fifteen years. I am convinced that a meatless diet is the proper thing, and I have been advocating it to my patients. I think a great deal of the Sanitarium, and expect to come here again next year."

## MICHIGAN HEALTH TRAIN OFFICIALS GIVEN DINNER AT SANITARIUM

AN important feature of the health campaign of the Michigan State Board of Health is the "Health Special," a train which is travelling about the State with health exhibits and facilities for lectures. The exhibits are made up of photographs, charts, diagrams and models designed to emphasize the importance, not only of the cure of disease, but more especially of its prevention. A model of a tuberculosis shack shows in a practical way the best means of housing tuberculosis patients, while other demonstrations show various kinds of sanitary water devices obtainable and practical means of avoiding the use of the public drinking cup and towel. The proper situation and construction of wells is featured, as also methods of ventilation and lighting. Doctor Kellogg, who is a member of the State Board of Health, visited the train during its stay here and gave an address. At noon the party accompanying the train, including Dr. R. L. Dixon, secretary of the State Board of Health, Deputy Secretary McClure, and State Food Inspector Helme were tendered a banquet by the Sanitarium, after which the party adjourned to the Sanitarium *al fresco* photograph gallery, where the above picture was taken.



Conductors of the Michigan Health Train.

## A RHETORICAL TREAT AFFORDED SANITARIUM GUESTS BY PROFESSOR NEIL

PROFESSOR D. EDMUND NEIL, head of the Department of Public Speaking in the University of West Virginia, and Mrs. Neil have been recent guests at the Sanitarium, Professor Neil entertaining several Sanitarium audi-



Professor and Mrs. Neil.

ences with his delightful readings. Notable among these was his interpretation of "Lord Chumley" before a large and responsive audience. Professor Neil is a Sanitarium enthusiast, this being his second visit. "I am very glad to have got hold of the principles of health which I have learned here, for they have enabled me to improve my health and efficiency. I can do twice as much work now as before."

## THE BATTLE CREEK IDEA

(Read at the Alabama-Mississippi banquet.)

BY MRS. CLARA L. MOSES.

The exercise each morning  
And the refreshing spray,  
Make one feel bright and cheerful  
The whole of the livelong day.

The food prepared by scientists  
Has trained our stomachs so  
That we can't eat pork or beefsteak,  
No matter where we go.

It's fun to count our calories  
And know just what we eat,  
To make us fat or lean or young,  
And thus our lives complete.

And so let's preach this gospel  
We've learned at the B. C. "San.,"  
And for the dear "ol' Miss' of the  
South Land

Good health and right living plan.

# The Battle Creek Idea

PUBLISHED SEMI-MONTHLY AT  
BATTLE CREEK, MICHIGAN

## SUBSCRIPTION RATES

One Year	.	.	.	.	\$1.00
Six Months	.	.	.	.	.50
Three Months	.	.	.	.	.25
Per Copy	.	.	.	.	.05

VOL. VI SEPTEMBER 1, 1913 No. 17

## THE PRINCIPLES OF IONIZATION

THERE seems no end to the interest which Sanitarium patients take in scientific subjects. Proteins, fats, carbohydrates are, of course, the most popular of all subjects, with exercise, sleep and kindred topics making a close second. A most unusual question asked the other night was as to the nature of ions and ionization. As Doctor Kellogg explained, "this is rather an intricate subject," but the audience were given a very clear idea of the nature of these inconceivably minute units of matter. "Every one who has not forgotten the physics and chemistry which he learned in high school," said the Doctor, "will remember the fact that the atom is considered to be the lowest form of matter; it is the ultimate unit of matter, as it were. It was formerly supposed that all matter could be divided and subdivided, and divided and subdivided, time without number, until we reached the atom, at which point no further subdivision could be made. These atoms, must, of course, be extremely minute, so inconceivably minute, in fact, that the mind cannot grasp their minuteness. Yet, it is a fact that their size has actually been calculated and found to be some fifty-four million trillionths of a cubic inch in diameter. That is to say, in one cubic inch of gas 54,000,000,000,000,000,000,000 atoms are to be found. This is in gas, where the atoms are comparatively far apart, whereas in a solid there will be many more atoms than the number just indicated; for example, ice is said to be composed of eighteen thousand times as many atoms as gaseous forms.

Now, soon after radium was discovered, it was discovered that radium was throwing off a gas, and investigation showed that these rays that are thrown off from radium possess atoms much smaller than the hydrogen atoms, which are supposed to be the smallest of all. These atoms were found to be a thousand times smaller than the hydrogen atoms, and a new conception was thus obtained of the constitution of matter. These minute particles were found to be loaded with electricity. Every one of those little particles, or ions, had a charge of electricity, and with these charges the atoms were saturated. Negative particles and positive particles were joined together, each one saturating the other, so that the atom itself showed no electrical properties; when the atom was broken up and the particles were separated, however, the ions showed their special properties. For instance, under certain circumstances positive particles are thrown off and this is what radium and the X-ray is all the time doing—throwing off positive particles, these

positive particles depositing a positive charge, and being attracted by a negative pole, or other atoms that have a negative charge.

These particles, I say, are called "ions," and ionization is the process of causing these particles loaded with electricity to enter some part. For instance, if we want to have positive particles taken into the body, we put the ions upon the skin. For instance, in the case of iodine we desire to have iodine carried into the body. So we put iodine upon the skin, place a positive pole in contact with the skin, passing through a current of electricity, which carries the iodine in, entering along with the current. This process is known as ionization, and is identical with the use of radium. If radium is put upon the skin and then positive electricity applied, it carries the radium into the tissues so that they become saturated or impregnated with the particles of radium. This method has been found to be of great value in treating the most obstinate forms of rheumatism, neuralgia, and in certain forms of cancer wonderful cures having been effected that have resisted all other methods.

## RETURNED PATIENTS HOLD REUNION

(Continued from page five)

I have of this wonderful institution. I believe it is sane; it is philanthropic; it is scientific. I believe the physicians can carry out here everything they propose to undertake and do, for the central idea is back to Nature. But the old dorky, you know, said it was easier to exhort than to teach from the text, and so I shall only give you one or two of the ways in which I have been benefited.

"When I first came here with nervous prostration, all broken up and cast down, I found on my dresser these words:

'Sleep sweetly in this pleasant room,  
O thou, whoe'er thou art,  
And let no murmuring yesterdays  
Disturb thy sickful heart;  
Nor let tomorrow mar thy rest  
With dreams of coming ill.  
Thy Maker is thy dearest friend.  
His love surrounds thee still.

Forget thyself and all the world;  
Put out each feverish light,  
The stars are shining overhead.  
Sweet dreams! Good night! Good night!"

"There were consolation in those words to me, and you may know I learned them and have been repeating them ever since. When I came here from Louisville four years ago I found in Chicago that I had with me a beautiful box of cigars from Vera Cruz, second only to Havana cigars, which had been sent to me by a friend. I had been an inveterate smoker all these years, but the question came to me, 'Now it is against the rules in Battle Creek to smoke, but here is the habit of all these years, having smoked since I was a young fellow of seventeen years. Now which is the stronger with me, the habit of smoking or the obedience to authority?' As a law student I had been taught that I ought to be obedient to authority, but after my breakfast in Chicago, I smoked one of those delicious cigars and then debated the question all the way

to Battle Creek, whether or not I should glide away like the Arab and smoke on the outside or whether I should be obedient to authority. I discussed the question, I say all the way and when I came here I had made up my mind that instead of being a slave to the habit I would be obedient to authority. I stopped the smoking of cigars. In five or ten days I had cured myself of the habit and I think it was not three weeks until I had no longer the desire. Yes, my friends, one trouble with us when we come here is that many of us believe there is magic in Battle Creek; that all we have to do is to come here and get well, whether we make any effort or not. That is not the teaching of the institution. The Sanitarium teaches that the doctors can do you no good except to assist you in removing the obstacles, that God in nature might do his perfect work. That is the thought, the idea taught here. I sometimes think that with all the advantages around us in Battle Creek we are a good deal like the steamer that went out from New York bound for a South American port laden with human lives and other precious freight, victualled for a seven-day voyage. That steamer went out beautifully from New York; sailed majestically upon the water, a delightful sky overhead, until it had almost reached its port, when a storm came up. The boat was disabled; it was almost wrecked and became a derelict upon the waters. In this condition the water was gone and the victuals were exhausted and the people were dying from thirst, but at this juncture a vessel in the distance was spied and the cry went out, 'Send us water or we die!' And then the response came back in clarion notes, 'Throw down your buckets and drink to your fill. You are in the mouth of the Amazon!' Which, you know, thrusts its precious sweet waters fifty miles from its mouth. And so it is with us here. We are surrounded we are in the mouth of the Amazon with fresh water all around us and yet we are insensible to it and many of us do not take advantage of the occasion and the place."

The meeting was now thrown open to the audience, and several availed themselves of the opportunity to say a word of appreciation for the principles that underlie the work of the Sanitarium. First was Mrs. D. S. Walton, who made her first visit to Battle Creek two years ago, in a very much run-down condition. "Since that time I have been steadily gaining, and now I am most enthusiastic over Battle Creek ideas."

Mrs. F. Alexander, of New York City, though, as she avowed, she had never before spoken publicly, gave a splendid reason for her faith in the Battle Creek Sanitarium. "My first visit to Battle Creek," she said, "was in 1899. I derived a great deal of benefit then, and about four years ago, being quite ill and not getting my health back as I should, I came to Battle Creek and improved very much, so much so that I have been coming every year, and instead of growing older I feel younger every year as a result of living up to Battle Creek ideas."

Mr. W. D. Bishop, of Grand Rapids, a frequent guest at the Sanitarium, thought "it an evidence of our good



The lawn is a popular place these beautiful summer afternoons.

judgment, our sound sense, that we found out this great Battle Creek Sanitarium before, and a double evidence of sound judgment and good sense that we are here at this splendid reunion. It is a pleasure to me to state that I was wonderfully benefited by an eight months' stay here last year. In fact, I came almost to feel myself one of the family, and I continued my stay for a considerable period after I had gained my health. It is a great pleasure to return here again today. There is about this magnificent institution, an unmistakable air of hospitality and homelikeness."

#### Has Been Back Twenty-five Times

Mr. Edward Nelson Bradford, globe trotter and famous philatelist, first came to the Sanitarium twenty-nine years ago, and has been back twenty-five times. "I have been here every year for the last ten years, and enjoy myself here more than anywhere else in Europe or the United States. I patronize the swimming pool more than any other department, and as soon as I have worn the water out, they change it, I believe. One point that has struck me in all these years about the Battle Creek Idea and the Battle Creek institution is the excellence of the table—and I think I can qualify as a judge. I go to the great hotels of Europe and this country, but I don't know of any place in the world that provides such an excellent table as does this institution—and I know of no other place at all where you can even get a glass of fresh apple juice. I also find that the butter is something that cannot be found in any hotel in America—really fresh unsalted butter."

"I have watched with a great deal of pleasure the success of the Sanitarium all these years, for I assure you I can remember very distinctly that it was not at all popular in the eighties and nineties, but now it is quite the fashion, and I trust its popularity will continue to increase. It is the most pleasant place I can find in America."

Doctor Garden was next introduced and stated that three years ago he came here with a complaint that was





The Sanitarium—as it was in the beginning.

troubling him very much, and of which he was cured. "There is one feature of this institution that I especially like to speak of," said the Doctor, "and that is this: every morning in various chapels God is recognized. The attendants and all connected with it recognize God and if I have rightly interpreted the purposes of Doctor Kellogg and his co-workers, it is to work in connection with God. The other day a lady was on an operating table and almost out into the beyond. Just before the Doctor ventured to operate he asked God's blessing to rest upon him that he might make no mistakes, that his mind might be clear, and that his hand might be steady. My friends, men that recognize God we can trust with our wives and our children and our mothers and our friends!"

"Six years ago," said Mr. M. A. Ortiz, the next speaker, "I had what the doctors called a nervous breakdown. I was so weak I was not able to walk. My left side was half paralyzed and my memory was so poor I would forget things from one day to another. In fact, I didn't know anything. My brother read of the Battle Creek Sanitarium, and he put me on the train and brought me up here. In three months' time I went home almost well

and I have continued to improve ever since until the present day."

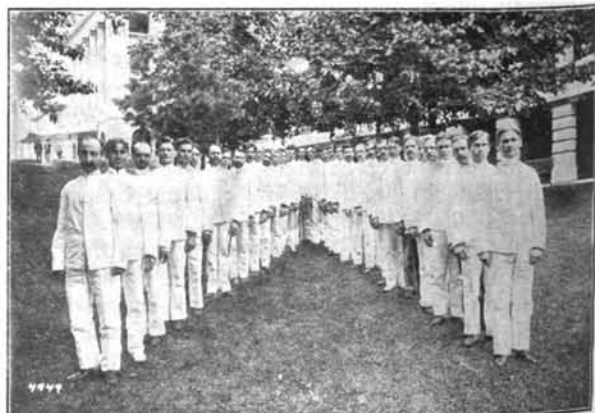
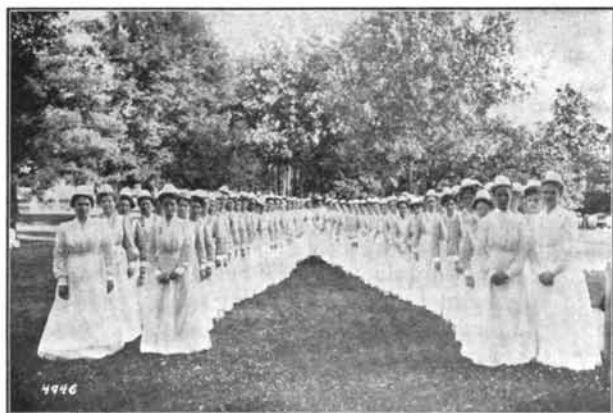
Mr. E. T. Moore, of Georgia, first came to the Sanitarium three years ago. "I was on the point of collapse when I got here. I asked the physician to whom I was assigned whether he could cure me. His answer was, 'You are seventy-two years old.' That is all he told me, but he put me on treatments and in seven weeks I was on my feet."

Said Mr. D. J. Leahy, "I also have been born again. I came to Battle Creek six years ago for the first time. I was indeed run down, very unhealthy and if it had not been for my experience in Battle Creek in coming here every year and sometimes twice a year since that time I am sure I would not be alive today."

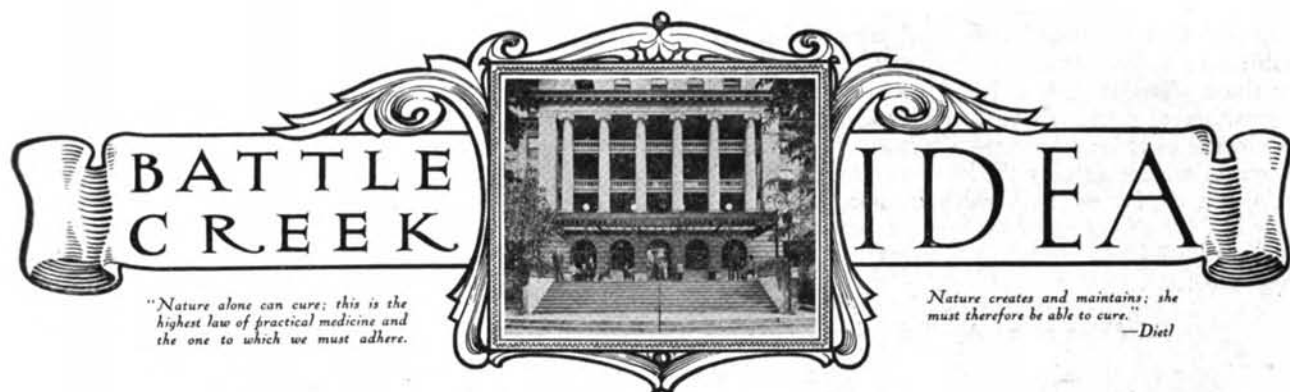
Lack of time made it impossible to give further testimony, but Doctor Kellogg suggested that those who desired to testify write out their appreciations and send in to him. Several patients have responded accordingly, among them the following:

"I came to the Sanitarium almost two years ago, bringing my daughter, who was ill," says Mrs. Clara M. Perry. "She was cured, and I am most happy to acknowledge my gratitude to the institution. During our stay of several months I met nothing but kindness in the various departments, and it is a great pleasure to be back here again."

"I first came to the Sanitarium in 1903," says Mrs. Chas. F. Graham, of Texas. "I came here for treatment after a severe spell of gastric fever. So bad was my condition that my people feared I should never return home. I remained here five weeks and under the care of a faithful nurse steadily improved. The nurse accompanied me home and kept up my treatments. I had gained about thirty pounds in weight. In 1904 I had several complications which resulted in acute Bright's disease, with hemorrhages. My physician, who had every confidence in the Sanitarium, conferred with Doctor Kellogg by telegraph as to what treatments and diet should be used, and as a result I was soon on my feet. I returned to Battle Creek in the early summer, and am now on my fourth visit."



A part of the large army of nurses to care for the patients today.



VOL. VI, No. 18

BATTLE CREEK, MICHIGAN, SEPTEMBER 15, 1913.

PRICE, 5 CENTS

# A LECTURE ON THE BATTLE CREEK SYSTEM

BY THE RIGHT HON. SIR HORACE PLUNKETT, K. C., V. O.

Late Minister of Agriculture for Ireland, Fellow of the Royal Society and of the King's Privy Council

(Reprinted by permission of the author from his pamphlet, "Some Tendencies of Modern Medicine," published by Eason & Son, Ltd., Dublin and Belfast)

(INTRODUCTORY NOTE: On March 12, 1913, I delivered a lecture in the Theatre of the Royal Society, under the title: "Some American Thoughts Upon Health." Many of those who were present and more who read the condensed reports of my remarks in the Press, have asked me for the full transcript, of which I had no copies. I have, therefore, reproduced the lecture—without the pictures, which might make it more attractive, but with some revisions and additions, which will, I trust, leave it less open to a misunderstanding of my purpose by the medical profession and the better educated lay public, of whom my audience was composed.)

A word on my purpose in the choice and treatment of my subject may be helpful to the reader. The national health demands above all things a widely-spread elementary knowledge of hygienic principles. If in the wealthier classes of society this knowledge is deficient, no efforts to bring it home to the poorer classes of the population will avail; for, absurd as it seems, fashion plays a part only second to science in medical practice. Hence my suggestions to patients and doctors in my own sphere of life have a wider application than might at first sight appear.

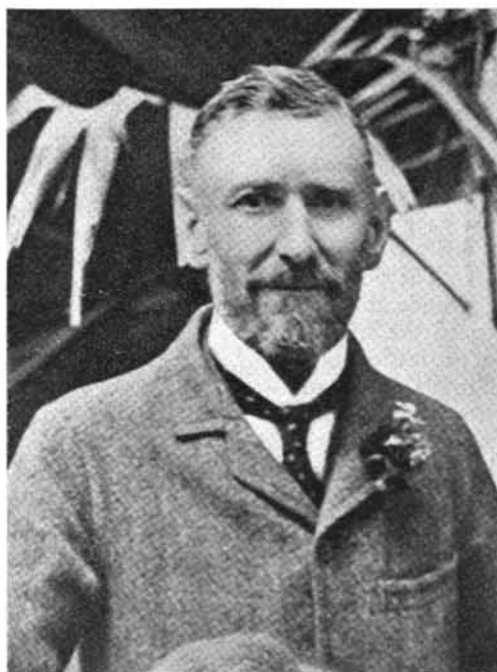
—HORACE PLUNKETT.)

Since I undertook, somewhat rashly, to take part in the series

of lectures which ends today, I have been haunted with the fear that I may owe my association with the distinguished company who have preceded me to the fact that, in common with several of them, I am a Fellow of the Royal Society. The others who carry that distinction had earned it by some contribution to knowledge in one or more of the physical sciences. The first I heard of my own election was a notice in the Press, which set me wondering which of the physical sciences the journalist

imagined I adorn. I did not know, under its ancient Charter, the Royal Society is empowered to elect as Fellows, once in every two years, "not more than two persons who either have rendered conspicuous service to the cause of science or are such that their election would be of benefit to the Society." My reflected glory was due to the circumstance that, during its first seven years, when I was chiefly responsible for the administration of the Department of Agriculture and Technical Instruction, its expert staff, and the Faculty of the Royal College of Science, with a zeal and devotion Ireland should remember, laid the foundation of an agricultural and industrial life enriched by the teachings of modern science.

I fully realize that this accidental and far from intimate acquaintance with science is but a poor equipment for a lecturer



Rt. Hon. Sir Horace Plunkett, K. C., V. O.

expected to treat scientifically, and yet popularly some subject of public interest and importance. Moreover, as those who attend these lectures know, in the popular exposition of a complicated subject—especially in the avoidance of technical terms—the man of science has an immense advantage over the layman. But there are certain aspects of my subject which are not only within the province of the layman, but can be best presented by him, provided he is fully conscious of the limitations of his knowledge.

### Medicine as an Applied Science

This epoch, it is safe to predict, will be memorable for the part played by science in the advancement of civilization. It will be remembered as days when the material progress and prosperity of a country increasingly depended upon the extent to which science was applied to its arts and industries—days, too, when the happiness of the people depended far more than was generally recognized upon the way in which science ministered to its health. The world is not governed by specialists, and possibly it is better so. But their knowledge has ever more and more to be applied to government; and, when we have passed into history, it will be noted how, with the rapid march of democracy, each fresh important application of science in a nation's life required more co-operation between the public and the professions. These reflections will, I hope, make my position clear, when standing, as it were, between the public and the scientist—this time in an unofficial capacity—I invite you to consider the most important of all the applications of science to our domestic and public lives.

### The Purpose and Scope of the Lecture Defined

Rightly or wrongly it is generally felt that the service which science renders in the cultivation and preservation of our health lags far behind its marvelous achievements in the region of the industries and arts. Whether as the cause or as the effect of this fact, I do not think it will be denied that the existing relationship between the public and the medical profession is not such as to engender that mutual confidence and cooperation which are essential if medical science is to be productive in our country of the greatest amount of good. As I see things, the chief responsibility in this matter lies with the public, who must first recognize the evil: we may then fairly call upon the medical profession to find the remedy. The purpose of this address will be to suggest a saner attitude on the part of the better educated lay public toward the science of medicine, and to appeal to the medical profession, mainly in the interests of the national health, to make their practice more educational. To present comprehensibly and intelligibly in the prescribed space of one hour so vast and complex a subject will only be possible if I impose certain restrictions upon its treatment, which I ask you to bear in mind. I shall be kept by my own limitations to such considerations as are well within the comprehension of educated laymen of average intelligence—a category in which I hope I may still be left after my lecture. This necessitates the exclusion of those pathological conditions—organic disease and obscure functional derangement—the understanding and treatment of which had best be

left, by the great majority of us at any rate, unreservedly to our medical advisers. I am concerned only with certain physiological conditions of which, in our own best interests and as good citizens, we cannot know too much. I have in mind those hygienic principles in regard to which that hotch-potch of half truths, proverbial wisdom, tells us every man should be his own doctor. Where I discuss medical practice it is, of course, the private practice, with the general conditions of which the laymen among my audience are familiar, to which I allude. My observations will, for the most part, be restricted to that large proportion of cases where the doctor is asked to prescribe for persistent or recurring ill-health, which may reasonably be attributed to the patient's ignorance of physiological laws. Lastly, to avoid misunderstanding let me say that if, in addressing this audience, I seem to keep within what might be considered the narrow limits of well-to-do practice, I do so because I believe that this practice has a dominating influence upon the relation of doctor and patient through every grade of society, and so upon the national health. This last consideration is my sole justification of what otherwise might look like the wanton folly of trespassing upon a domain where the bravest of angels might fear to tread.

### The Battle Creek Sanitarium—Its Origin, Early History and Subsequent Development

I MUST here confess that the thoughts upon health which are embodied in this address came to me, as have many of the thoughts I have inflicted on my fellow-countrymen, in America and from Americans. In the winter of 1910-11 a friend of mine, who works in the United States upon the same economic and social problems which happen to be my hobby, asked me to come and see him in an institution where he was resting from over-work, and, as he expressed it, was storing his batteries. It was the Battle Creek Sanitarium\* in the State of Michigan, about 160 miles on this side of Chicago. I had heard of the Institution, and had a strong prejudice against it. Its connection with a religious community, its extreme vegetarianism, the fortunes which had been made in the manufacture of health foods, the first of which had been invented in the Sanitarium, had made a bad impression on my mind. Then, again, all health resorts are apt to be depressing, but the concentration of invalids, perhaps of imaginary invalids, in an institution would, I had thought, induce melancholia. At the worst I might find my friend in a pseudo-scientific money-making institution, at best in a Mecca of faddists. I was destined to be agreeably surprised.

Before I relate my experiences in the institution I must say a word about its history and describe its leading features. In 1866 a little band of altruists purchased a small two-story farm-house in a grove on the edge of the then unknown village of Battle Creek, and opened a water-cure under the name of The Health Reform Institute. The founders were Seventh Day Adventists—their successors still, as the uninitiated would say, keep Sunday on Saturday; but otherwise the sect, whatever its views or practices, has no connection whatever with the administration or procedure of the Battle Creek Sanitarium.

\*Sanitarium was preferred to Sanatorium because the practice in several of these institutions was as indifferent as the Latin in their nomenclature.





THE MAIN BUILDING OF THE BATTLE CREEK SANITARIUM

This bird's eye view also shows East Hall, another of the large buildings in which patients are cared for, together with one of the eight greenhouses, power house, laundry and machine shop. At the left is shown one of the several buildings in which special foods are manufactured for the use of Sanitarium guests. Besides these buildings the Annex, shown on page 4, and twenty-five other buildings are required to accommodate the large family of Sanitarium guests.

[The institution was from the start a private enterprise and was never under the control of any denomination or sect, though for some years affiliated with the church and its founders. All such affiliation ceased years ago. The management have no connection with the religious organization referred to and no sympathy with the fanatical beliefs and practices which pertain to it. Neither has the Battle Creek Sanitarium any connection whatever with the numerous small religio-medico-sectarian institutions established by this sect in various parts of the world. The prestige of the Battle Creek Sanitarium System has suffered greatly because of the unauthorized claims of these church-controlled concerns. Hence this explanatory note.]

After ten years of inconsiderable achievement the institution was handed over, with a dozen patients, to the management of Dr. J. H. Kellogg, who has ever since devoted his remarkable gifts to its development.

Under the new management the empirical methods of the old-time water-cure were replaced by "rational hydrotherapy," and gradually there were added the facilities and equipment which in their latest development probably constitute the most complete health culture installation in the world. In 1876 the numbers who resorted to the original house (and to the scattered cottages which had been successively added for the reception of patients) justified the erection of a larger building. In 1901 the number of patients during the summer rose to 700. In February, 1902, the main buildings were consumed by fire, and the fireproof buildings as they exist today were erected and dedicated within a year.

#### The Philanthropic and Scientific Aims of the Sanitarium

To describe the scope and purpose of the institution I cannot do better than use the words of one of its publications, written at the request of physicians, but not, I think, too technical for general understanding:

"The generosity of the original founders of this institution in devoting all earnings to its equipment, operation and betterment, and the altruistic spirit which has always dominated its management, have rendered possible the building up of a scientific medical philanthropy in which the attempt is made:

"First—To put into actual, effective and systematic use every practical method which modern medical science has provided for the accurate determination of deviations from the normal standard of health in structure or function, and for the estimation of the amount of such variation, so far as possible expressing these variations by means of coefficients, so as to make exact comparisons possible.

"Second—To make available in the most approved form every rational curative means known to medical science, so that the same may be brought to bear in any individual case, giving special prominence to physical therapy or so-called physiologic therapeutics.

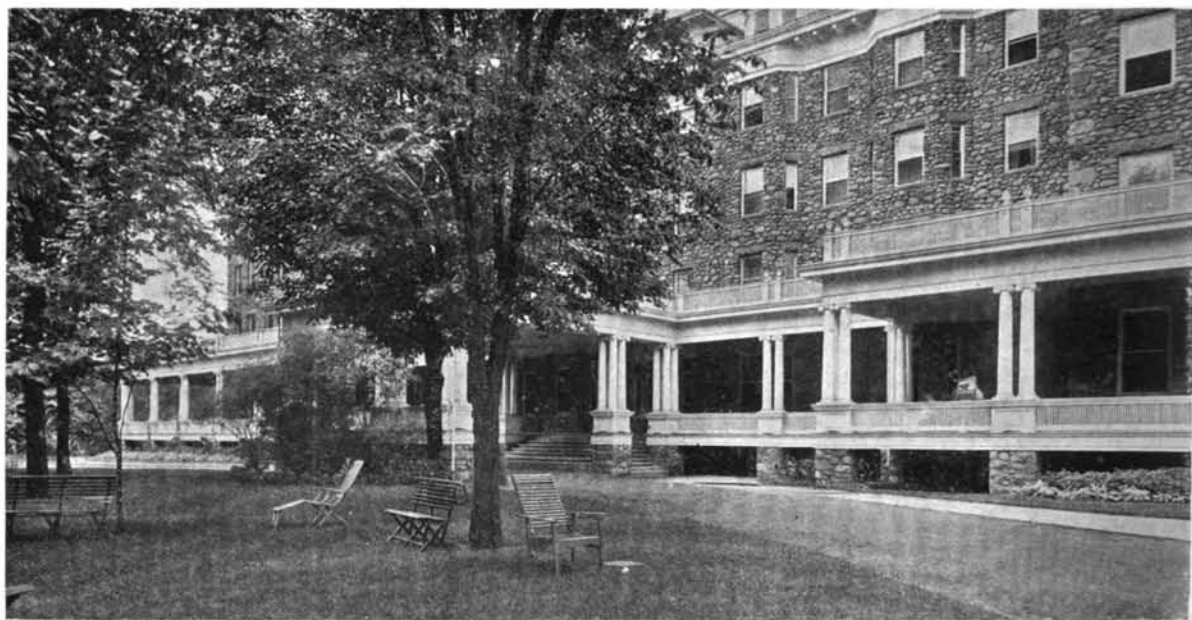
"Third—To combine with the special professional, technical and institutional advantages of the modern hotel, adding the genial atmosphere, security and freedom of the home, characteristics which constitute the genuine sanitarium.

"Fourth—To organize and carry forward various lines of research having for their purpose the improvement of the conditions of human life, especially in relation to diet and nutrition.

"Fifth—The organization and maintenance of various charities, especially hospitals and dispensaries for the treatment of the sick poor."

#### The Genuineness of the Philanthropy and of the Science

Now, the two essential questions which will be asked in regard to this statement are:—Is the institution really philanthropic and not commercial, and is it scientific? On both points I was satisfied absolutely. The test of the charity claim is a very simple one—namely, the exemption



A view of the "Annex".

from taxation, which benevolent institutions enjoy. In addition to the proofs I received on this point, I have been greatly impressed by the character and work of the staff, with many members of which I have become intimately acquainted. I have never met a more disinterested body of public servants in my life. It is beyond dispute that the institution is not commercial, but philanthropic in the largest sense. Many of those who work in it could do far better for themselves financially in general practice, and it is quite certain that none of them are by any means overpaid. The whole spirit of the place is a missionary spirit. Those who pass through it are expected to spread its knowledge abroad for the good of humanity.

The chief form the charitable work takes is the maintenance of a hospital department, where those who cannot afford to pay get free treatment. The same applies to treatment in the Sanitarium. Several minor benevolent institutions are maintained and a large number of useful activities are undertaken. Medical missionaries, working chiefly in India and China—extraordinarily interesting men, for whom I learned to entertain a profound respect—held their annual conference while I was there. The hospitality given to these people is one of the characteristic public services the Sanitarium renders. The financial plan is simple. The ordinary patients are charged what their board and treatment costs *plus* a percentage for the benevolent work.

Upon the claim of the institution to be truly scientific I am, of course, incompetent to form more than a superficial judgment, but I have consulted the opinion of two medical men of world-wide reputation who happen to know its work, and their judgment is entirely favorable. The governing body keeps men constantly traveling abroad studying the latest developments in the leading clinics, and no sooner is any new method or appliance of therapeutic value announced than it is made available at the earliest date in the Sanitarium or hospital. Another convincing proof of the sincerity of the administration in their search for truth is the total absence of

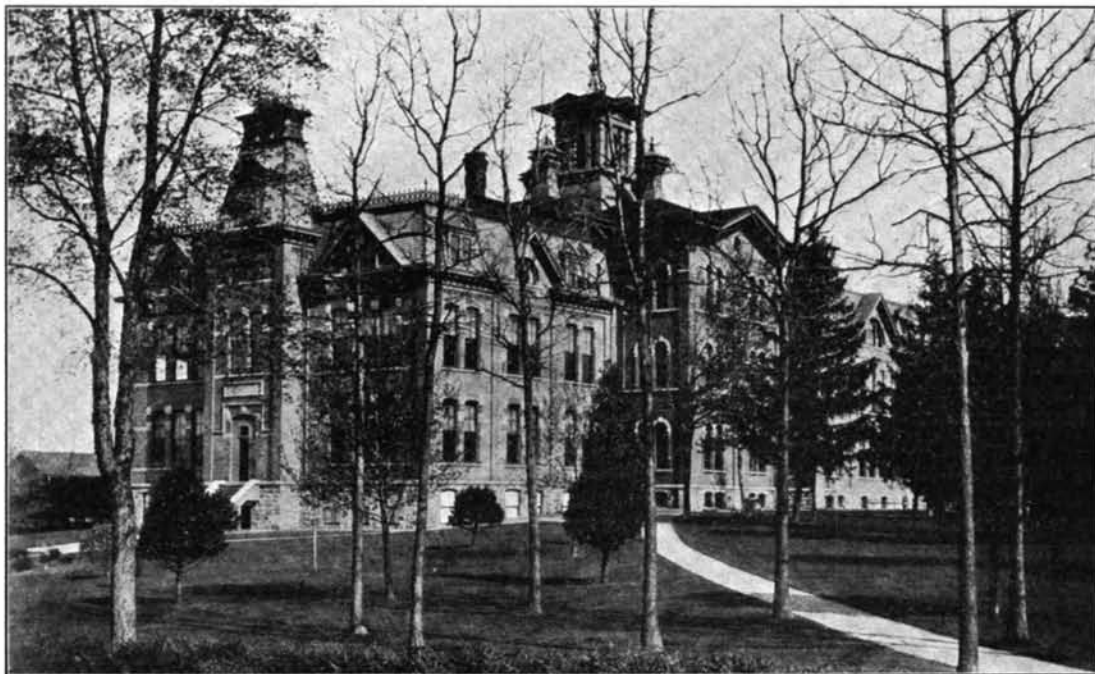
secrecy or professional jealousy; any duly qualified medical man can see the system at work and hear all about it from the staff, who seem quite as much interested in disseminating knowledge abroad as in developing their own institution.\* A number of medical men are always found among the guests, some of them patients, others accompanying patients of their own, who come to the institution by their advice, and others who come to study the place and its methods.

I must now go back to my own first experiences when I was, as I have explained, merely a chance visitor, balancing in my mind the advantages of a week with a very dear friend and fellow-worker against what I imagined would be, in other respects, the most unexhilarating surroundings.

#### A Health Resort with a Stimulating Atmosphere

In the first days of the Sanitarium my apprehensions were intensified. My fellow guests—for they do not call themselves patients—seemed too fond of discussing their own and each other's symptoms, and were quite ready to take an interest in mine. I noticed, however, that they had far more medical knowledge than our doctors usually consider it prudent to impart. But I soon found that the doctors were thoroughly justified by this part, to my mind the most important part, of their procedure—the education of the patient, so as to secure his intelligent cooperation. Of this I shall speak presently, but I must say here

\* I do not expect medical men to accept any outsider's opinion as to the standing of such an institution; but I have learned that the Sanitarium has the same recognition by the Edinburgh Examining Board as any other American hospital. It is listed with the American Medical Association among hospitals which receive internes. For fifteen years a medical college was conducted by the Management of the institution, though as a separate corporation—the American Medical Missionary College. The graduates of this college were received by medical examining boards in America and in Europe on the same basis as graduates from Johns Hopkins University, or any other American hospital. Their doctors are all members of leading medical societies. Doctor Kellogg's assistant in the surgical department, Doctor Harris, is a Fellow of the Royal College of Surgeons, Edinburgh. Both Doctor Kellogg and Doctor Case (the Röntgenologist) are Fellows of the Royal Society of Medicine of Great Britain. The Sanitarium has always a dozen or more doctors as patients, and two or three times as many doctors' wives or other members of doctors' families. In all, over 2,000 physicians have been patients there, and it is estimated that half the patients are sent there by physicians.



Laboratories and Administrative Offices.

that, so far from inducing morbid introspection and chronic hypochondriasis, the system seemed to be productive of a most salutary optimism. The moral atmosphere of the institution was wholly healthy, and calculated to engender a fine outlook to life. All the guests with whom I struck up an acquaintance exhibited the same attitude—a characteristically American attitude I may add—towards the treatment they were receiving. Among them were business men with large responsibilities, ministers of religion, university professors, judges, journalists and others engaged in literary work, doctors, and professional men of various occupations. Many of both sexes were engaged in social service. Every one of this miscellaneous company of health-seekers talked as if he had been given his first real chance to understand himself and to increase his efficiency. They were all convinced that they had entered upon a new epoch in their lives, which opened with a promise of better things for themselves and greater usefulness to others. Faddists, indeed! I wish there were more like them.

You will not be surprised that I became intensely interested in the institution. I determined to study it in what seemed to me the only really satisfactory way, by submitting myself to the general physical examination which precedes treatment. My engagements did not permit of a lengthened stay, but I decided to start a course so as to have a general understanding of the system of therapeutics which seemed to be producing such excellent results upon the bodies, and still more upon the minds of my fellow guests.

#### The Health-Seeker Referred to Nature

The first step was to go to the receiving physician, who, after asking me a few routine questions—one of them, the name and address of my nearest relative, so that they might not have my remains left on their hands, supplying a little grim humour—proceeded to explain to me the general character of the treatment I was to receive.

"You understand, of course," he said in effect, "we do not pretend to cure people. Nature does that. If they are not well, unless some infection or accidental injury is the cause, they have offended against the laws of Nature. What we propose to do for you is to determine, by every means known to medical science, the character and degree of your departure from the normal. We will explain to you everything that we find out about your case. We shall have no regard whatever for your feelings. We shall assume that you wish to know the absolute truth, and will do our best to make you understand it. It will be up to you to follow the road back to the normal, which we think we will be able to point out." I was then assigned to the physician who was to watch over me while I was at the Sanitarium. Doctor Kellogg, himself, was kind enough to undertake my case, an arrangement which, as my object was rather one of inquiry into the system than a course of treatment, was wholly agreeable to me.

#### The Diagnostic Procedure

To describe the diagnosis in detail is wholly unnecessary, but an indication of its thoroughness may be given. I was asked to tell everything I could remember about my family and personal history, my past ailments, treatments and so forth. I was then examined externally from head to foot, note being taken of the reflex actions which indicate nervous conditions. Everything capable of chemical or bacteriological analysis was analysed by the proper specialists in the several laboratories. My blood-pressure was taken. Innutrition being obvious, the test meal—a kind of forcible unfeeding—was resorted to.\* A skiagram

\*A few months previously a London physician had diagnosed in my case, by a process of reasoning from external evidence beyond the lay comprehension, a deficiency of hydrochloric acid. He prescribed 5 drops of the drug (which I carried in my pocket with much fear that it might break and burn me badly) in a tumbler of water at each meal. But, I suppose by a double dose of original sin, the medicine rather aggravated my complaint. At Battle Creek they demonstrated to me that I suffered from an excess of natural hydrochloric acid, and I was put upon their hyper-hydrochloria diet with excellent results.



of my stomach and the entire intestinal tract is serving anonymously for popular instruction—or perhaps as a warning—in the Sanitarium lecture lantern. A careful observation of the actual working of my internal economy at intervals during some forty-eight hours was also carried out in the X-ray department, which I am told by competent medical authority has earned a considerable reputation in European as well as American clinics. The strength of each principal muscle group in the body was recorded. In the pigeon-holes of the record office of the Sanitarium is filed away every material fact about my vile body, from such simple facts as my weight and strength, which I could find out myself, to my opsonic index and blood count, which only excite my curiosity. I got them to give me a copy of my complete diagnosis. I do not understand a tenth part of it—I suppose any doctor would understand it all—but what strikes me chiefly about it is that every determination of a condition or fact—and of these there are some hundreds—by the numerous specialists who are engaged in the several departments of the institution, is committed to writing, and capable of verification by any outside adviser I choose to consult. Such is my personal feeling about the Battle Creek procedure in arriving at an understanding of a case that, if I were in need of medical advice, and out of reach of my own professional adviser, I would far rather consult a fresh physician by post, enclosing my Battle Creek documents, than present myself for diagnosis and treatment in the conventional way.

#### **A General Description of the Treatment of the Health-Seeker. An Unconventional Prescription**

I must now give a very brief general description of the treatment which I experienced for a few days and returned to on a later occasion for a more thorough trial. I was not an invalid, but simply a tired man seeking to restore his working efficiency. My treatment consisted roughly in using my leisure from work to live as natural a life as is consistent with a physical condition induced by too civilized an existence. I have before me my first prescription, in which you will notice a strange contrast with the usual form of these documents. It is headed "Daily Program." I miss the mysterious hieroglyphic, which most people imagine means "recipe," but is really, I am told, an invocation of a deity, Zeus, I believe. Plain English takes the place of dog Latin throughout. No drugs were prescribed—they hardly ever are—but the diet was strictly regulated, not in detail, but in principle. The patient has an infinite variety to choose from, but he must learn to make his dietary conform generally to the physiological requirements, as to which, as will be seen presently, he gets a good deal of education.

Returning to the prescription, the first ingredient is "6 A. M. morning bath." This consisted of a hot spray, followed by a cold spray. Then a quick walk, followed at 7 o'clock by chest gymnastics. At 7:40 came breakfast, and thereafter an hour's rest. Then Swedish gymnastics, another walk, some form of bath treatment with massage, and at noon sleep. At 1 o'clock came dinner, followed by an hour's rest. All these rests must be in the open air. The afternoon was divided between out-of-door exercise (including lawn tennis, golf and other amusements, which I did not enjoy, as the country was under snow during my visit) and Swedish movements. Supper at 6 o'clock, and gentle gymnastics thereafter

ended the physical treatment of the day. \* At 8 o'clock there was either some entertainment provided or a lecture upon health by Doctor Kellogg or one of his assistants.

#### **The Education of the Health-Seeker in "The Battle Creek Idea"**

I come now to the distinctive feature of the Battle Creek system—its educational work. I have already sketched the beginning of the patient's education in the office of the receiving physician. He sees daily the physician in charge of his case, whose advice is designedly and systematically educational, with the constant aim of enabling the patient to minister intelligently to himself. The evening lectures by Doctor Kellogg or some other physician are intensely interesting and illuminating. They are, of course, of a popular nature, and they consist of a simple explanation of the causes of chronic disease, particularly the causes of such diseases as constipation, arteriosclerosis, Bright's disease, neurasthenia, and other chronic maladies which are the result of wrong habits of life. Lectures are also given on the simple life, the out-door life, exercise, breathing, digestion, the functions of the liver, brain, and nerves, and other physiologic subjects. Lectures of this sort are given three times a week. On two or three afternoons a school of health is held. In this definite instruction is given about the properties and values of different foods and making bills of fare. A cooking school is held for the benefit of the ladies, many of whom avail themselves of the opportunity of getting instruction in rational cookery.

The purpose of all this education appears to be twofold—firstly, to cultivate a healthy and avoid a morbid interest in personal hygiene; secondly, to give the widest



Corridor in Men's Bathroom.

possible understanding and publicity to a system of rational therapeutics, lovingly and compendiously called by its devotees the Battle Creek Idea. There are, of course, cases—a very small percentage—where the receiving physician thinks it wiser to be reticent upon the pa-

\* The prescription is, of course, subject to endless modification, as the case, which is closely watched especially at first, requires.



A part of the Main Dining Room.

tient's condition and simply to prescribe. But the vast majority of the health-seekers like the frankness of which my interview is a good illustration. I know the result in my case was to make me treat my own machinery almost as rationally as I treat that of my motor car. The opinion of the Battle Creek physicians is that, while it is quite true that young people living active and largely open-air lives, and enjoying the best of all evidences of health—a full working efficiency—need give little thought or care to their health, those of us who are getting on in life, or are engaged in sedentary occupations, if we wish to get the best work out of ourselves and be good citizens, must substitute for our atavistic superstition in the miracles of the bottle a sound elementary knowledge of physiological law.

#### **The Preservation of Health in Sedentary Work and in Advanced Years**

One thing they protest against at Battle Creek is the common assumption that ill-health is incidental to a sedentary life. I remember reading many years ago, and I looked up the other day, a passage in a sermon of that famous preacher, Robertson, of Brighton, upon life's compensations. After telling us that we must not expect to win any of the good things of life without paying the price—its price, not some other price—he goes on:—"You cannot have the store of information possessed by the student, and enjoy robust health; pay his price and you have his reward. His price is an emaciated frame, a debilitated constitution, a transparent hand, and the rose taken out of the sunken cheek. To expect these opposite things . . . the student's prize and rude health, would be to mock God, to reap what has not been sown." This was said half a century ago, and is still, I doubt not,

generally true. At Battle Creek I came to the conclusion that in the great majority of cases where the brain-worker's health breaks down it is not from over-work, but from wrong living—more particularly wrong feeding.

#### **The Battle Creek View on Diet Versus Drugs**

And this brings me to what I regard as by far the most important feature of the Battle Creek Idea—namely, that which relates to diet. This is the respect in which the ordinary medical practice seems to me to compare most unfavorably with the institutional method which I am describing. It is here too that the education of the patient is the only hopeful—indeed the only rational—therapeutic method. Let us do a little thinking on this question of our food.

We often hear it said by doctors that more people die of over-eating than of over-drinking, which is no doubt true. But for one Abernethy who will tell Dives to "live on 6d. a day (the equivalent, I suppose, of over 1s. now), and earn it," there are hundreds of practitioners who will stimulate our languid stomachs with drugs or supplement our digestive juices with those of swine. I think we might fairly ask our medical advisers two plain questions upon this issue. Are not the quantity and the quality of the food we take fundamentally important in relation to the cultivation and preservation of health? And is it not a first principle of dietetics that our food should be proportioned to the physical exercise we take, and the temperature of the air in which we spend our days? I observe that where our business or our amusements are concerned, we eagerly resort to the teachings of science, and at any necessary cost follow its dictates. A draft horse, a race horse, or prize fighter are scientifically fed. The quantity



A group of Lady Nurses.

and quality of their food is calculated, as is the fuel of locomotives or automobiles. In the feeding of the sedentary worker, including, I am afraid, too often the doctor himself, the cook and confectioner are much more our guides than the dietitian. The very word "gastronomy," which I believe means the science of the stomach, has come to mean the art of the palate. The culinary artist has defeated Nature's benevolent design in giving us an appetite to regulate our meals.

#### The Battle Creek Argument for a "Low-Protein" Dietary

What I suppose is the A-B-C of dietetics, although I had never given the matter any consideration, and was wholly ignorant of it, is explained at Battle Creek roughly thus: The body requires for its up-keep a nitrogenous element (called shortly protein), fats and carbohydrates. The protein is needed to replace the tissue which is consumed in small amounts by the mere act of living, and in larger amounts according to the energy exerted. To supply the fuel which the exercise of energy consumes, and to keep our bodies up to the necessary temperature—an average, I suppose, in those latitudes of from thirty to forty degrees Fahr. above the surrounding air—we must eat, in addition to the protein, fats and carbohydrates. A rational dietary consists of a certain proportion between these three elements of food.\* But the essentially important thing is not to take an excess of protein when living a sedentary life or after middle age. The reason for this seems to be that you can store up, like a bear hibernating, or get rid of an excess of the other two elements; but excess of protein beyond the requirements of the used tissue favors the multiplication of putrefactive bacteria in the lower intestines. These pests, it seems, produce the toxins which cause nearly all the common symptoms of the ill-health we are considering. While we are young and vigorous—or up to an advanced age, if we live outdoor lives—the marvellous anti-toxic machinery of certain organs eliminates the poison. But when this machinery weakens, the excess of protein, especially when

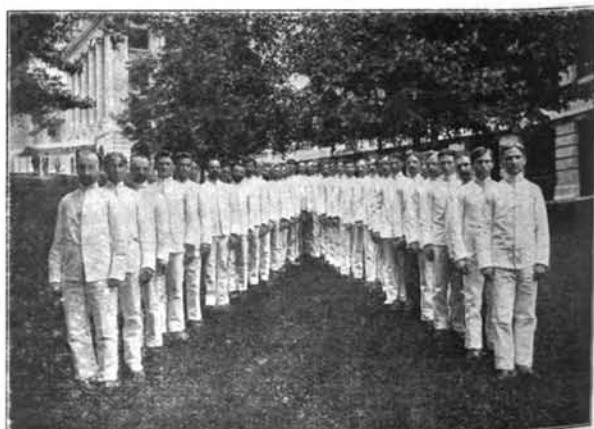
\* In the Sanitarium bills of fare, against each dish is set out in parallel columns the total number of calories (i. e., units of heat or energy) which it contains. Further, the proportion of protein, fat and carbohydrate, respectively, is given. The patient is told the amount of each of these elements he should consume in the day. He is invited to mark the dishes he selects and show the bill of fare to his physician. He is thus given an education both as to the amount of food he requires and as to the meaning of a balanced ration. I think this practice, which of course cannot be continued in ordinary life, cultivates a more rational dietetic habit than is likely to be engendered by the appetite.

derived from the flesh of animals, leads to an accumulation of poisons in the system. A condition called auto-intoxication, which, let me explain, does not imply that one "has drink taken," ensues. This, if continued, is bound to undermine the constitution and to harden the arteries, a process which Metchnikoff\* has told us is the *causa causans* of the undue shortening of our lives.

#### Sidelights on the Battle Creek Dietetic Principles

Some years ago, when I was—very perfunctorily, I confess—studying dietaries in order to form my own judgment upon certain aspects of our Department's domestic science teaching, my profound ignorance of the most important of all physiological laws governing health was brought home to me by an experience which I think worth relating. I visited in the United States the physician who, with financial assistance from the Federal Department of Agriculture, was doing some now famous research work in determining food values. I got him to explain to me, as far as a layman could understand it, the workings of the Respiration Calorimeter. Any medical man here will know all about this wonderful apparatus and the useful part it has played in increasing the knowledge of alimentation. At the end of my visit, when the astounding accuracy of this new appliance in determining the relation of every kind of diet to the repair of body waste and production of heat or energy had been explained to me, I asked the doctor in charge what in all his researches, which had been then extended over nine years, interested him most. He said at once it was the remarkably small amount of tissue which seemed to be consumed during the hardest mental exercise over and above what was necessary simply to keep the heart going and to maintain life. Some figures he showed me seemed to leave so little physical basis for intellectual effort that I remember the reflection crossed my mind that the scientist might almost claim to have demonstrated a soul. But what I

\* The mention of Metchnikoff recalls a significant instance of the part which fashion plays in medicine. A few years ago most of my friends were taking sour milk, supposed to be the breeding-ground of billions upon billions of lactic acid forming bacteria. Everybody seemed to be benefitting by the treatment, and it was pretty generally recommended by physicians. Then a prominent actress had a pain in the region where the fight between the unfriendly and the friendly germs is waged, and her physician attributed the trouble to a bad selection of bacteria. Sour milk went out of fashion. At Battle Creek they give sour milk regularly, but they teach people to prefer a non-toxic dietary to feeding the unfriendly and then ousting these with the friendly germs. Their treatment seems to be an advance upon the Metchnikoff plan, as was asepsis upon antiseptis in surgery. We have to teach farmers in cooperative creameries the elements of bacteriology if we want them to compete successfully in the first class butter market. It ought not to be harder to teach us the bacteriology of our colonies.

Gentlemen Nurses.  
Original from





A Swimming Meet in the Outdoor Pool.

said to him was: "Then I suppose that the man who says 'I have not taken any physical exercise today, but I have had hours of hard work at my desk, I must eat a good meal,' is guilty of a profound physiological blunder." To this he assented most emphatically, and here I believe we have the answer to Robertson's *dictum*, that hard study is inconsistent with health. If in the nitrogenous element of their dietaries—consisting chiefly of meat, which is rigidly excluded from the Sanitarium dietary—the ploughman and the librarian were scientifically fed, the former might do more work and the latter would, I am convinced, enjoy longer days.

### The Case of Vegetarianism

At Battle Creek it is hard to resist the arguments in favor of, at any rate, a modified vegetarianism. All physiologists, they tell you, are agreed that the vegetable world offers an abundance of nutrient material for sustaining man in perfect condition. Every traveler in the East is aware of the marvellous feats of endurance, such as running long distances carrying a considerable weight on the head, which can be performed on the sparsest of vegetable diets. Heredity and long habit may, no doubt, make a purely vegetarian dietary impracticable for many of us, and certainly cooks in this country make it impossible for me. I was talking to Doctor Kellogg at the time that the negro Johnson had defeated the world champion heavyweight boxer in Australia, and I remarked that if he could train a "bruiser" on his diet to knock out the negro, he would probably do more to spread the Battle Creek Idea than by any amount of education and publicity. He seemed to admit that the tiger ferocity needed for the particular ordeal might require a tiger's dietary; but for endurance in ordinary tasks and for longevity, I think the evidence in favor of a low-protein dietary holds the field.

An interesting light is thrown on the (to me rather doubtful) contention that man is carnivorous by some experiments tried by Dr. Kellogg some years ago. He gathered together the leading carnivorous animals of Michigan. All these animals, which included hawks and a bald-headed eagle, a bear and a wolf from another State, were easily converted to the non-flesh dietary. They all

thrived on it with the exception of the bald-headed eagle. The bird was very old and peevish, and would not at his time of life take an interest in Dr. Kellogg's researches, but went on a hunger strike.

Meat is less consumed in the United States than formerly, probably because of two reasons: First, the education of the people as to the non-necessity of meat-eating, and, second, the high price of meat. The people of the United States are learning to appreciate more and more the value of fresh vegetables and fruits, and as the consumption of fruit and fresh vegetables increases, the consumption of meat will naturally decrease. The work of Chittenden and others has doubtless contributed very largely to the less consumption of meat among the more intelligent classes. During the beef strike some three years ago, 100,000 laboring people and their families abstained entirely from the use of meat for several weeks. Much interest was taken in the movement; not a single case was reported in which the health of the abstainer suffered.

When all is said, men and women of mature age must decide this question of diet for themselves. My own conclusion is that the eating of dead animals, even cooked, is unnecessary; and that if we give ourselves the benefit of the doubt with eggs, milk, and milk products (which are included in the Sanitarium bills of fare) we might well avoid unnaturally increasing the ills that flesh is heir to by the addition of those of which flesh is the cause. To me the fine physique of the large staff of doctors, nurses and assistants, male and female, at the Battle Creek Sanitarium, and the marked difference in the health of the incoming and outgoing stream of patients, were in themselves impressive arguments.

### Some General Criticisms of Doctors and Patients

The time at my disposal forbids any further description of the Battle Creek idea and its practical working. The chief impression it created in my mind was the immense advantage of the institutional over the private practice method in the diagnosis, treatment and prevention of disease, and in the education of the patient in rational

self-management. Before I went to Battle Creek I had formed some opinions about modern medicine which I discreetly kept to myself. These opinions resulted from memories of half a century of a busy life interrupted by frequent periods of ill-health which brought me into contact with many doctors. My views have now been broadened and I feel more charitably towards them, for I see how both their science and their practice have been and are handicapped by the prejudices and superstitions of even the better half and better educated members of society.

I suggested at the outset that, tested by its application to the needs and conditions of modern life—a matter which depends as much upon the public as upon the profession—medical science is not in line with the progress of the age; nor do I think it has been in the past. Its history, in comparatively modern times, is not cheerful reading. I am speaking, I admit at once, only from the most general impression. I have read but one medical work in my life. It was written, at the time that the Royal Society was founded, by the Court Physician of Charles II., and is therefore a little out of date. Having an abiding faith in *vis naturæ medicatrix*, I can understand how people could get very ill in those days and get quite well. But when I put down that book, which I read from cover to cover with absorbing interest, I was left wondering how anyone who ever called in a physician rose from his sick bed. The diagnosis, which was commonly concerned to determine whether the patient was suffering from a rheum or a vapor, took into account the constellation under which he was born and his social position. A clown and a duke exhibiting the same symptoms would receive wholly different treatment, though that bestowed upon the aristocrat would endanger the life of a modern horse. And it is not the quantity or potency of the drugs administered which most shocks the reader; the ingredients were often unmentionably disgusting. The schoolboy who translated Horace's *Delicia majorum immeritus lues* "The crimes of our ancestors were unmitigated filth," might have been a medical student who had read the prescriptions of not so long ago.

The unsavory tastes of our ancestors were not altogether out of date in the medical practice of times I can myself remember. When I was a child medicine was considered by our parents to be effective in proportion as it was nauseous. We did not agree with them. My father, a sailor, left over half a century ago with seven children, treated us according to the lights of his day to a spring and autumn cleaning. When the black days in the calendar came round every one of us was disturbed in our innocent sleep and given heavy doses of calomel concealed in raspberry jam. This was followed next morning by one or more of the sovereign remedies of that time—black draft, castor oil, Glauber salts, or Gregory's powder. In a book published in London in 1907 with the unforgivable title of "Healthology," the author, who is, I believe, a qualified physician, tells us that less than twenty years ago calomel was in constant use as a sovereign remedy for every kind of indisposition. He adds: "This destructive delusion was not discarded until it had filled the world with hopeless, boneless and toothless wrecks."

### The Drug Superstition and Unreasonable Patients

Now, it were unreasonable to blame the medical profession of past generations for doing things which the doctor of today, with the assistance of X-rays, bacteriology and numerous other discoveries—which came from the researches in other branches of science—often in response to a commercial demand which does not exist in the case of medicine—is in a position to condemn. But I am told by my medical friends that much of the medicine which they have now to prescribe—I should say seventy-five per cent of it—is rendered necessary by the insistence of the public upon having a bottle which is so much easier to take than advice. If the belief in the bottle survived the nauseous days it will, no doubt, be hard to kill, when it is generally pleasing to the taste, and contains a nice little fillip in the shape of some diffusible stimulant. Nevertheless, I think there is a growing feeling that the time has come when this mischievous subordination of physiology to psychology, which has shattered so many of our constitutions, should be ended.

Far be it for me to belittle—from my own personal observation I would rather say it would be hard to exaggerate—the therapeutic value of mental suggestion. But two considerations I would submit, with all due diffidence, to the medical profession. In the treatment of their better-off and better-educated patients, is not the scientific (which need not therefore be the unintelligible) inculcation of faith in Nature's healing process a safer and surer road to health than psycho-therapy, with the vista of illusion and the opportunity for unprofessional charlatanism it opens up? The kind of education the health-seeker gets at Battle Creek is not likely to make him undervalue medical advice, but is certain to cure his belief in patent medicines, which take as much practice from the physician as they bring to the surgeon. The other consideration I urge with full conviction. No concession ought to be made to the prejudices of maternal psychology in the treatment of babies, to whom bottles (with the one exception) are about as much use as a good bed-side manner to a sick cow.

I recognize that the position of a doctor doing a general practice among, let us say, this audience, is rendered extremely difficult by the unreasonableness of the attitude of most of us—of myself I frankly confess until quite recently—towards the profession. We equally expect a prescription whether we have a ridiculous faith or an utter disbelief in its efficacy. Even when we are highly intelligent in other things we are not always rational on these occasions. Here is an extract from Carlyle's *Reminiscences*:

" . . . I had ridden to Edinburgh, there to consult a doctor, having at least reduced my complexities to a single question. Is this disease curable by medicine, or is it chronic, incurable except by regimen, if even so? This question I earnestly put; got response, 'It is all tobacco, Sir, give up tobacco.' Gave it instantly and strictly up. Found, after long months, that I might as well have ridden sixty miles in the opposite direction, and poured my sorrows into the long, hairy ear of the first jackass I came upon, as into this select medical man's, whose name I will not mention."

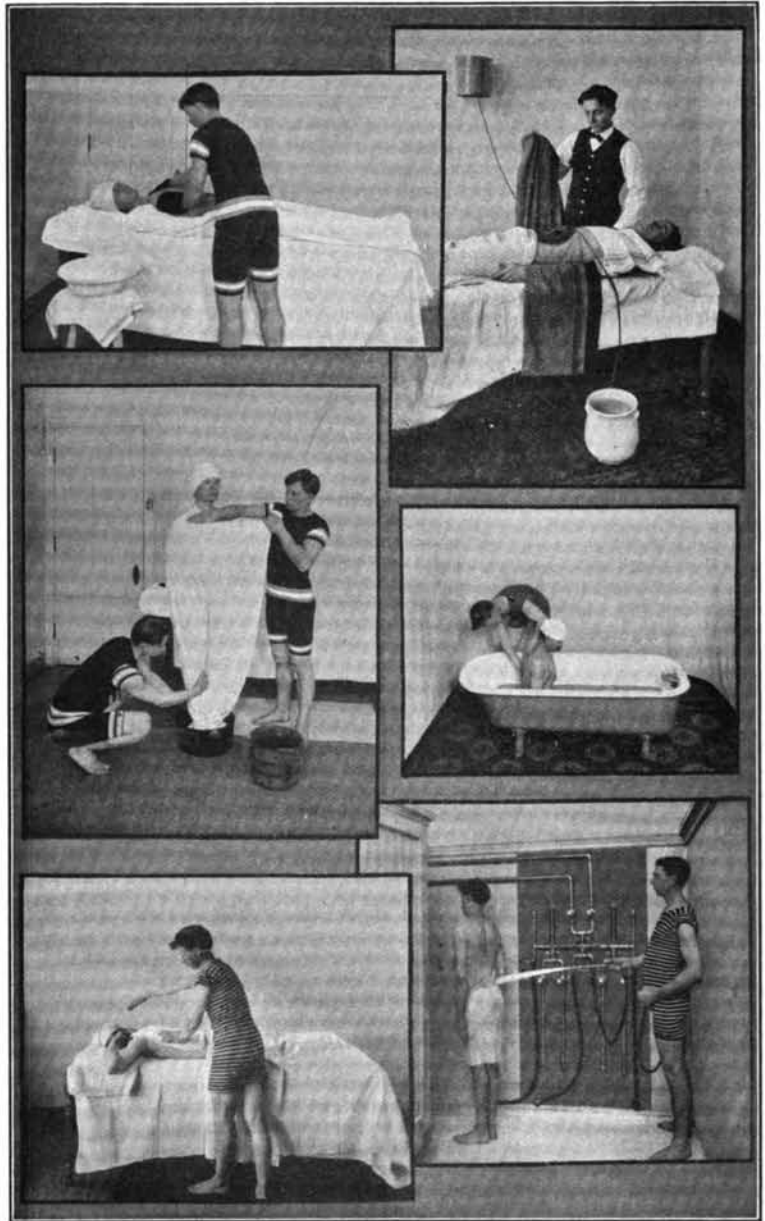
The writer of this severe judgment lived to a ripe old age, and probably would have been less scornful if he had

been given a bottle and much more angry if he had been told to restrict his dietary to the physical requirements of a philosopher. I have thought it well to quote the words of so great a thinker because they illustrate, better than any others I could find, a mental attitude towards the medical profession which we should all do our best to change. Let me now summarize the argument by which I have sought to suggest the general character of the change I feel to be needed in the relations between doctors and patients.

#### Summary and Conclusion

In the foregoing I have restricted myself to the cases where the patient consults the doctor in private practice about the condition of his health. I have contrasted the general procedure, in the matter of diagnosis and treatment, at a remarkable American institution, with that which I myself in common, I have no doubt, with many others in this audience, have experienced at the hands of the general practitioner. Making all due allowance for the necessary difference between institutional and individual treatment, I have suggested that the whole attitude of this particular institution towards health is physiologically and psychologically worthy of consideration. In two aspects—the education of the patient and the insistence upon a rational dietary—I have claimed a fundamental superiority for the Battle Creek system over any other medical practice I happen to know. From the facts and opinions above set forth I draw some general conclusions. The public and the medical profession in our own country should agree that the function of the physician as an adviser in the maintenance of health and prevention of disease should be recognized far more than it is at present. At any rate, within the scope of the private practice we are considering, doctors should teach, and we should learn from them, how to adjust our lives to our work—for I am not talking to or about idlers—so as to develop and sustain the maximum of efficiency and cheerfulness for the good of ourselves and others. I think we should go to our medical advisers in the spirit in which, I have told you, people went to Battle Creek—to learn from those who know how we may best obey Nature's laws, and how, when we have learned that lesson, we may help the medical profession to bring it home to the masses of the rural and urban population in our country.

Before finishing this address there is one point which I feel bound to make clear. It may be that some members of the medical profession will feel that my criticism, by its very limitations, is unfair to them. By restricting myself to the prevention, and omitting the cure, of disease, I recognize that I have passed over their greatest service to humanity. Let me say then that I personally would rank the doctor higher than the statesman or the soldier,



A few of the Water Treatments.

because his devotion and sacrifice are as great as theirs and his reward is less. But, within the narrow limits I have adopted, there is scope for legitimate lay criticism of medical practice. If the doctors reply that the public are to blame—and prove it to the hilt—they will strengthen my case for the cultivation among the better-off patients, and their doctors of an attitude towards health, which would, I am convinced, result in an inestimable service to the poorer classes in the nation at large.

"WHAT do you think?" one little boy asked a playmate. "The doctor's brought a baby to our house. Isn't it horrid?"

"Can't you get him to take it back?"

"No; it's too late. We've used it four days."—*Strand Magazine.*





Graduates of the Normal School of Physical Education.

## Normal School of Physical Education Holds Third Annual Commencement

THE evening of August 25th the Normal School of Physical Education graduated its third class, the exercises being held in the gymnasium.

The commencement address was delivered by Dr. R. Tait McKenzie, Physical Director of the University of Pennsylvania, whom Doctor Kellogg, chairman of the occasion, described as "one who has gained international reputation in three distinct spheres of activity, as sculptor, as gymnast and instructor of gymnastics, and as a physician."

The subject of Doctor McKenzie's very able address was "Ideals In Physical Education." The speaker described those qualities which one must possess in order to be efficient and successful as a physical educationalist, as also the characteristics of an adequate physical education. "There must be a wide concept in the meaning given to a physical education," said Doctor McKenzie. "The physical director must possess versatility; it is important to have some knowledge of almost every form of exercise, and also practical experience in each. The period of training, however, affords opportunity for only a partial acquaintance; hence it is necessary to be a continual student." Doctor McKenzie emphasized, too, the moral aspect of the physical teacher's work. "On the athletic field and the gymnasium is being formed the future character of the nation. The hero worship accorded the successful teacher by his students must be used by the instructor to promote higher ideals, else his power will be demoralizing."

In his charge to the class, Dr. W. W. Hastings, Dean of the School, laid emphasis upon the value of loyalty—loyalty to himself, loyalty to high ideals, and loyalty to his profession. "Loyalty is the bread of life itself," he said. "It is one's capacity for faithfulness to a purpose. The loyal man clings to his ideals eternally. He is free, warm, open-hearted. Love without loyalty is lacking. The life of a physical director is a life of sacrifice for others, and no one comes so close to the life of a boy as the physical director. Believe in your work with all there is in you." In presenting the class to Doctor Kellogg as President of the School, Doctor Hastings gave a remarkable report which shows the high standing that the school has been able to achieve in the world of physical education, almost without exception the graduates having been offered responsible positions as instructors in various parts of the country.

The room was tastefully decorated with the class colors, green and white, while a large class emblem of electric lights adorned the platform. The musical program of the evening consisted of numbers rendered by the Sanitarium orchestra, assisted by Mrs. Claxton. The final exhibition of the summer school of the Normal School of Physical Education was held the following evening, when a program of gymnasium athletic events was carried out with a high degree of efficiency, forming a fitting climax to the summer's work.

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A group of Kansans.

## Sanitarium State Clubs Hold Lawn Fete

A UNIQUE gathering was held on the northeast lawn the evening of September third, when the State Clubs formed at the Sanitarium this summer held a lawn fete. More than a thousand people, wearing pennants of forty States, together with representatives of foreign countries were present and enjoyed the excellent program which had been provided. First came two moving picture films made at the Sanitarium the past few weeks by the Sanitarium photograph department—"Sanitarium Day at the Battle Creek Chautauqua," and an "Ideal Vacation," the latter being a story of a happy and profitable holiday spent by 170 employees of the National Cash Register Company as Sanitarium guests at Lake Gogouac. A series of stereopticon slides also proved of great interest, made from photographs of the State Clubs which had been

organized. Two Italian dialect poems, "Mia Carlotta" and "The Queen Who Loves" were read with effect by Rev. T. A. Kilbourne, of Auburn, New York. Mr. J. E. Gilligan of New York City, who has entertained several Sanitarium audiences this summer with his delightful singing, rendered the following selections in his usual pleasing manner: "The Wanderer," Schubert; "Infelice," an aria from "Ernani," Verdi; "Absence," Metcalf; the Toreador song from Carmen, "Star of the East," Wagner; "Queen of the Earth," Pinsuti. Mr. Gilligan was accompanied at the piano by Mr. Grover T. Davis, a physician of note from Cincinnati. The Sanitarium orchestra also contributed to the musical program several very pleasing selections, the meeting closing with a few well chosen and happy remarks by Doctor Kellogg.

### DAYTON HEALTH OFFICIALS STUDY SANITARIUM SYSTEM

THE Battle Creek Sanitarium may have an important bearing upon the rebuilding of Dayton and that city's sanitary management. Mr. J. H. Patterson, President of the National Cash Register Company, a recent guest at the Sanitarium, invited while here a number of Dayton's citizens to investigate the methods of the institution. The party, consisted of Dr. D. B. Conklin, President of the Dayton Board of Health; Dr. H. H. Herman, one of the city's leading physicians, and an authority on sanitation; Mr. Patterson's two private secretaries, Mr. J. H. Barringer, and Mr. Arthur Dilks, with their wives, and Dr. F. G. Barr.

"Sanitarium methods have impressed Mr. Patterson so strongly," said Doctor Conklin while here, that he

wants us to determine if Dayton as a municipality cannot profit by adopting some of the principles of the institution. Sanitation, playgrounds and wading pools for the children, and swimming pools for them and the older people will receive our special attention. We do not know just what will be done in Dayton about the results of our investigation. This is a personal matter with Mr. Patterson. He has invited us here on his own responsibility to find out just how Dayton can be improved."

SAID the gentleman who had been reading birth and death statistics: "Do you know, Jimmy, that every time I breathe a man dies?"

"Then," said Jimmy, "why don't you chew cloves?"

## The Battle Creek Idea

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VOL. VI SEPTEMBER 15, 1913 No. 18

### GREAT LONDON JOURNALS REVIEW PAPER BY SIR HORACE PLUNKETT

THE *London Spectator* (London, May 17, 1913) republishes with the following favorable comment a portion of Sir Horace Plunkett's lecture before the Royal Society, reproduced in the present issue of the *IDEA*:

"Sir Horace Plunkett, who is famous for his faculty of translating principles into practice, deserves our consideration when he appeals for a more ordered fashion among educated people of attending to their bodily machinery and of conducting their relations with the professors of medical science. In *Some Tendencies of Modern Medicine* (Dublin: Eason and Son. 6d) he writes frankly as a layman who has read but one technical book on medicine in his life. The prejudice of the medical profession against lay dabblers is strong, but that prejudice cannot, or at least ought not to, touch an argument such as Sir Horace Plunkett offers. "How it strikes a layman" is always a valuable contribution to the true professional who may often need the intellectual assent of his thinking patients. The substance of Sir Horace Plunkett's pamphlet was delivered as a lecture in the theater of the Royal Dublin Society last March. "The national health," he says in an introductory note, "demands above all things a widely-spread knowledge of hygienic principles. If in the wealthier classes of society this knowledge is deficient no efforts to bring it home to the poorer classes of the population will avail; for, absurd as it seems, fashion plays a part only second to science in medical practice." We think it was Sir T. S. Clouston who coined the good phrase a "health conscience" to describe the sense which people ought to cultivate of the national importance of hygiene. We fear that a good example in the elementary regimen of health will descend through the strata of society much more slowly than fashions in clothes. The figure of the mother at the inquest who says with pathetic pride when asked what her dead baby used to be fed on, "It always 'ad what we 'ad," or words to that effect, is unfortunately too familiar. Sir Horace Plunkett is always definite, and he proposes that a method, of which he had personal experience in the United States, of exceptionally careful and thorough examination of the human body before a treatment is suggested, or even before any treatment may be required, should be more readily available in the United Kingdom. He admits that all the methods of diagnosis with which he became acquainted in the United States are known and practiced at home, but nowhere at home,

he believes, are all the necessary equipments and specialists assembled in one institution. The human machinery, in other words, cannot get a perfectly skilled and complete overhaul except at the cost of visits to various specialists in various places.

But we must come without delay to the account of the experience in America which is the basis of Sir Horace Plunkett's thoughts. What we have said already has implied that what he wants to see established is a better cooperation between the patient and the doctor. He appeals for a "saner attitude on the part of the better-educated lay public towards the science of medicine" and for a "more educational" practice on the part of doctors. The patient is not to be discouraged from thinking about himself but to be taught to do so. Sir Horace Plunkett found the principles he has since learned to admire at work at the Battle Creek Sanitarium (as it is called), in Michigan. He had heard of this institution some time before, and of its connection with a religious sect and its excessive vegetarianism, and he had been strongly prejudiced against it. He found, however, that the institution was genuinely philanthropic, and that the staff made sacrifice of worldly prosperity in a missionary spirit. But that is by the way.

We need not go into the routine to which Sir Horace Plunkett submitted himself. Any man, woman, or child who lived by such regular rules as Sir Horace Plunkett accepted for the time being would be bound to profit by them, whether at Battle Creek or in his own home. Alas! most of us drink what we know is not very good for us because it is agreeable or because it is a key to companionship; we smoke for the same reasons; we eat dinner late in the evening because unless we could instantly reform the habits of society we should be cut off from society by refusing to fall in with its customs."

### FROM A LAY POINT OF VIEW

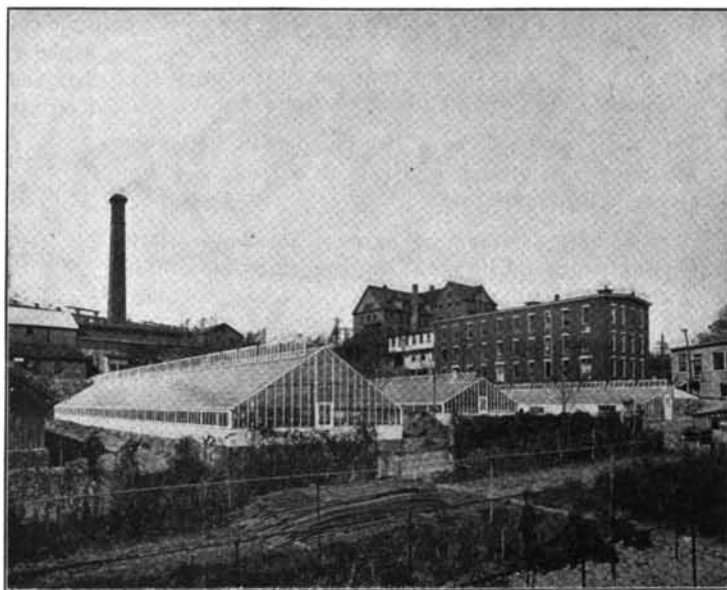
(From the *Lancet*, London, May 24, 1913.)

It is food for us all on occasion to see ourselves through the eyes of others, and when the intermediary is a distinguished man of affairs with a record of administrative capacity that can only be characterized as splendid, we are bound to read his opinion on medical practice with attention and respect. Sir Horace Plunkett has given his experiences and impressions of the Battle Creek Sanitarium in a lecture recently delivered before the Royal Dublin Society and now published, which deserves attentive consideration. This sanitarium—we follow the spelling adopted by its founders—is probably known by name to most of our readers. It was started in a small farmhouse in Michigan in 1866, much enlarged ten years later, rebuilt after a fire in 1902, and now carries on a very extensive work, partly philanthropic and partly scientific and educational. The health-seeker undergoes (or perhaps it were better to say "enjoys") a course of treatment chiefly dietetic and gymnastic, least of all medicinal, the main purpose being two-fold; first, to cultivate a healthy and avoid a morbid interest in personal hygiene, and secondly, to give the widest possible opportunity to the "Battle Creek Idea," which appears to be the comprehension of simple physiology. The result was, in Sir



Horace Plunkett's case, and in his own words, "To make me treat my own machinery almost as rationally as I treat that of my motor-car." The common idea that ill-health is incidental to a sedentary life is combated, vegetarianism advocated, and a low-protein diet insisted on. A natural open-air life is led, and the results are, as might be expected, most satisfactory. Two considerations Sir Horace Plunkett submits to the medical profession. First, alluding to the "drug superstition," he says: "Is not the scientific (which need not, therefore, be the unintelligible) inculcation of faith in Nature's healing process a safer and surer road to health than psychotherapy, with the vista of illusion and the opportunity for unprofessional charlatanism it opens up?" Secondly, he says, "no concession ought to be made to the prejudices of maternal psychology in the treatment of babies, to whom bottles (with the one exception) are about as much use as a good bedside manner to a sick cow." No doubt that much of the medicine that is now prescribed is rendered necessary by the insistence of the public upon having a bottle, which is so much easier to take than advice, but such belief in physic is steadily, perhaps rapidly, declining, at any rate on this side of the Atlantic.

Sir Horace Plunkett has some constructive suggestions, which are opportune when grave danger of a general lowering of standards in medical practice arises in connection with the working of the National Insurance Act. He advocates that the medical profession should teach, that the public might learn, how to adjust our lives to our work so as to develop and sustain the maximum of efficiency and cheerfulness. The public, as it grows enlightened, should then help to bring home this knowledge to the masses of the population in town and country. He is convinced that in medical practice a more thorough diagnosis is needed to give a fuller confidence in medical science, and to obtain this he suggests that an institute should be established similar to that at Battle Creek. Existing laboratories and clinical institutions are not, he considers, sufficiently unified to meet the public needs, and there is no doubt that he could make out a good case for this view. In conclusion, the benefits of medical inspection of school children are alluded to, and the immense saving of suffering, and even of life, is insisted upon which would result if poor people were taught not to postpone the obtaining of medical advice until driven to do so by acute pain. In the two matters of education of the patient and the insistence upon a rational dietary Sir Horace Plunkett eulogizes the Battle Creek Sanitarium, while he urges on the public and the medical profession that the function of the physician as an adviser in the maintenance of health and prevention of disease should be recognized far more than it is at present, tentatively suggesting that steps be taken to give to the private practitioner the advantage in diagnosis to be derived from such an institute as that which he describes. A general physical examination would in this way be provided for the health-seeker who can afford it. It will be seen that the point of view of the layman, when the layman is an experienced man of



Three of the eight large greenhouses that supply the Sanitarium with flowers and vegetables.

affairs like Sir Horace Plunkett, is one which the medical profession can fully appreciate. That prevention is better than cure we shall all agree, that a general knowledge of physiology would be valuable to the community we all must feel, and we would fain hope that the practice of periodical clinical examination, without waiting for actual illness, is already growing more usual in this country. We admit also that a fully equipped institute such as that described in Sir Horace Plunkett's address would be an advance in some circumstances, though certain provisions would have to be made against charlatanism. The one moral of Sir Horace Plunkett's pamphlet is that a medical practitioner should be rewarded for keeping his patients in good health rather than for healing them in sickness; but obviously the patient must, on this principle, cooperate *ex animo* with his physician. The hygienic discipline that in a retreat such as Battle Creek is willingly submitted to would too often be found impossible under the ordinary conditions of civilized town life at present existing. A wise and witty tract seems to have overlooked this great difficulty.

#### A KENTUCKY EDUCATOR ENDORSES THE BATTLE CREEK IDEA

PROF. T. A. EDWARDS, Dean of the Foundation School Departments of Berea College, Kentucky, was a recent guest of the Sanitarium. Berea College is doing a rather unique work in its unusual provision for enabling its students to meet their expenses. All the students work, whole or part time, and so can cover the whole cost of their education. A number of the Berea students come to the Sanitarium as workers each year during the summer months, and a tribute is paid to the College in the satisfactory character of the work done by them while here. During his stay, Professor Edwards inspected the Sanitarium, and was much interested in what he saw. Speaking concerning the institution, he said: "I heartily endorse the 'Battle Creek Idea.' A wonderful work is being done here."

## LOBBY NOTES

DR. J. F. PRITCHARD, a prominent physician of Ottawa, Canada, is a guest at the Sanitarium.

MRS. CHARLES SCOTT, of Nelson, British Columbia is a guest at the Sanitarium. Mr. Scott is land agent for the Great Northern Railway.

P. D. O'BRIEN, captain in charge of the South Clark Street police station, Chicago, accompanied by his son, is taking treatment at the Sanitarium.

MISS ALICE FYOCK, of Sundai, Japan, has arrived at the Sanitarium for treatments. Miss Fyock is a missionary of the Protestant Episcopal Church of America.

DR. WM. MCCARROLL, of Pontiac, Michigan, has returned to the Sanitarium for treatment. A prominent Arkansas physician, Dr. Erner Jones, of Harrell, is also a recent arrival.

THE Sanitarium has as its guest this week Mr. J. F. Spencer, of Point Pleasant, West Virginia, President of the Point Pleasant Trust Co. Mr. Spencer is accompanied to the Sanitarium by Mrs. Spencer.

TWO former members of the Illinois State Legislature, Ex-Senator J. D. Leahy and Ex-Senator Jos. P. Mahoney, both of Chicago, are guests at the Sanitarium. The latter is accompanied by Mrs. Mahoney.

MRS. SARA WARD CONLEY, of Nashville, Tennessee, a decorator of international reputation has returned to the Sanitarium for treatment. The decorative work in the main lobby and parlors of the Sanitarium were the work of Mrs. Conley. Further decorations are to be added by Mrs. Conley in the form of panels.

OTHER physicians who have registered the past week are Dr. I. D. Parsons, of Faulkton, South Dakota; Dr. H. W. Sager, Marion, Ohio; Dr. C. S. Williams, Columbus, Ohio; Dr. A. Bonthius, Winchester, Indiana, accompanied by Mrs. Bonthius; Dr. J. B. Williams, Chicago, Illinois.

THE Sanitarium has the pleasure of entertaining as guests two prominent railroad men, Mr. A. W. Lefebvre, Muskogee, Oklahoma, and Mr. T. A. Bonebrake, of Pittsburg. Mr. Lefebvre is General Manager of the Middle Valley Railway, and Mr. Bonebrake, Superintendent of the Pennsylvania Lines west of Pittsburg.

A WEDDING of considerable interest to the Sanitarium family took place at Saginaw, Michigan, on Wednesday, September 10th, when Mr. Lorne A. Summers was united in marriage to Miss Maude Shepherd of that city. Mr. Summers is assistant physical director at the Sanitarium, and has by his fine qualities won many friends. Mrs. Summers, who was for a short time employed in the Sanitarium Correspondence department, is a lady of refinement and culture, and of marked charm of personality.

SEVERAL hundred music lovers were present in the Sanitarium gymnasium on Tuesday evening, September 10th, on the occasion of a recital by Miss Constance Frisbie, assisted by Mr. F. Harry Strong, whistler. Miss Frisbie possesses a clear voice of pleasing quality, which found its most characteristic expression in the passages

requiring light and delicate treatment. Mr. Strong is an artist with an unusual talent, and his splendid work was received with enthusiasm. The accompaniments by Mrs. Clarissa Dickie-Stewart for Miss Frisbie, and by Mr. Ward French, who has acted as accompanist for Mr. Strong on all his tours, added materially to the pleasure of the evening.

## INDIANA PHYSICIAN ESCAPES OPERATION

DR. M. RAVDIN, a well-known eye, ear, nose and throat specialist, of Evansville, Indiana, hands us the following interesting account of a recent experience: "I was on my way to Europe, to attend the International Congress of Medicine," when, at New York, I was taken with sudden illness. I consulted one of the prominent physicians of that city, and he finally diagnosed my case as appendicitis. His recommendation was that I should go to one of the New York hospitals, as my condition would probably require an operation. On learning this, I inquired whether he thought I might make the journey to Battle Creek with safety, telling him that I preferred being treated at the Battle Creek Sanitarium. His reply was in the affirmative, and I was at once placed on the train, and came on here, travelling the whole distance to Detroit in the sleeping berth. On arrival at the Sanitarium, I was placed under treatment, and this proved so effective that the idea of an operation was abandoned for the present at least." Doctor Ravdin stated that this was the third visit of both himself and his wife to the institution, adding, "I have sent many patients here."

## Similia Similibus Curentur

ATTENDANT (at baths)—"These patients want to know what kind of baths to take. What shall I tell this man?"

Director—"What's his occupation?"

Attendant—"He's a speculator."

Director—"Tell him to take a plunge."

Attendant—"And this woman who is a seamstress."

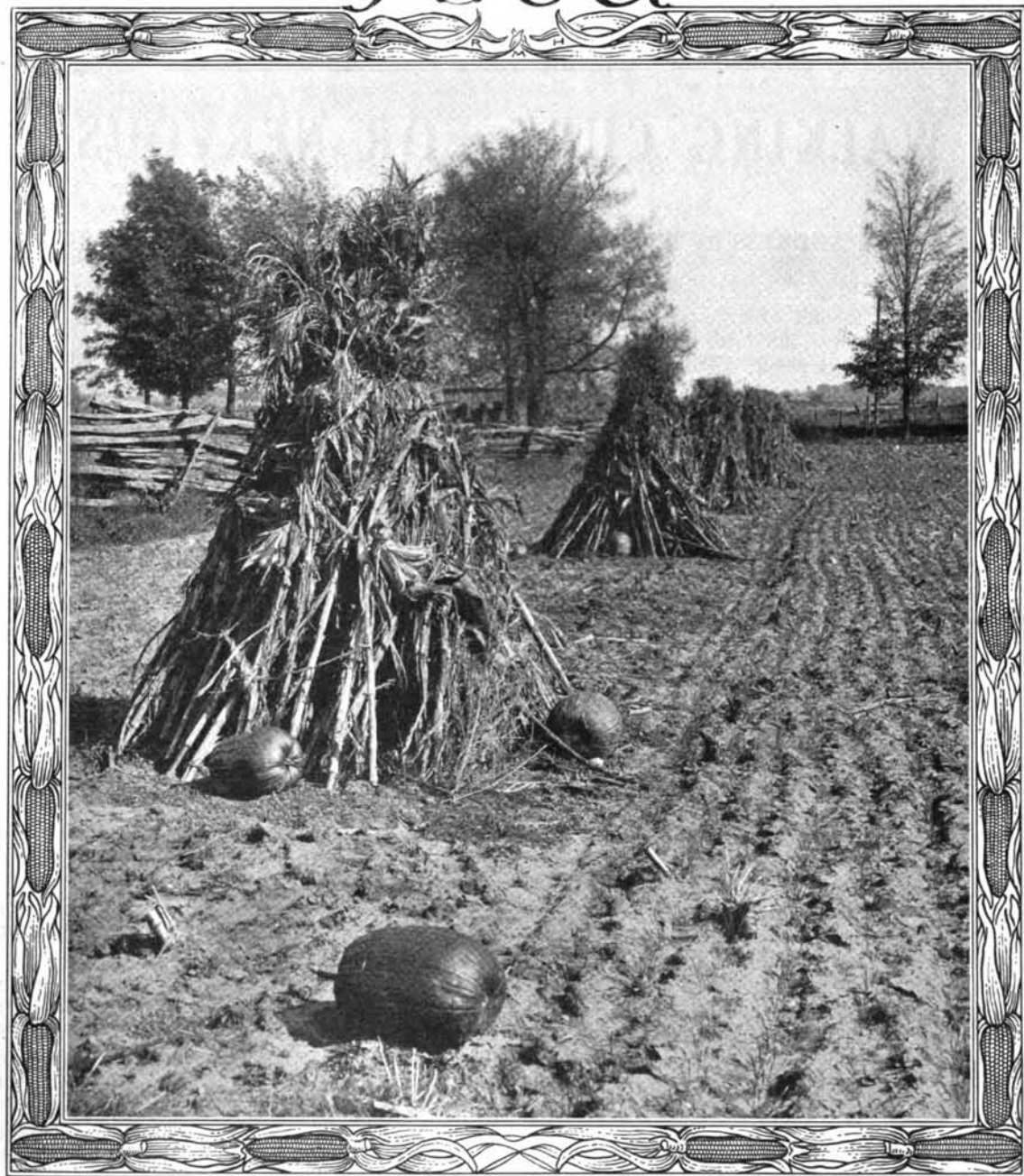
Director—"Show her to the needle baths."—*Baltimore American*.



One of the Sanitarium Laboratories.  
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UNIVERSITY OF MICHIGAN

# *The Battle Creek* *October Idea 1, 1913*







VOL. VI, No. 19

BATTLE CREEK, MICHIGAN, OCTOBER 1, 1913

PRICE, 5 CENTS

# THE WALKING CURE FOR NERVOUSNESS

FROM AN ADDRESS IN THE SANITARIUM PARLOR BY DR. J. H. KELLOGG

NERVOUS FOLKS, though often weak and languid, need exercise, and of the various forms of bodily activity, the best for this class of sick people is walking. Walking, however, in order to be effective must be properly done. In the first place, it is important to carry the chest high. Many people complain that walking tires them quickly, but this is not surprising when one observes their posture—head drooped, shoulders stooped, and no attempt made to keep the chest expanded and filled with fresh air.

Now to get the most good out of walking, one must stand as tall as possible, and to walk erect, one must take pains to think about it. One must constantly say to himself, "Stand straight," or "Straighten up, stand straight, fill up the chest and draw the chin in." The reason one sees so many people going about with chins hanging down with a pusillanimous sort of appearance is that they lack sufficient self-respect to care about their appearance. The Bible says that God made man upright, and it is sad to see people humped over in all kinds of misshapes, hideous deformities, caricatures of what the Creator originally made us.

How few people there are who know how to walk correctly is well shown by the fact that few people can walk across a large room, in which there are many people observing them, without feeling embarrassed. Many public speakers appear well upon the platform so long as they stand still, but become ridiculous as soon as they attempt walking about before their audiences.

A good walker has an easy, graceful, natural stride, in which there is a harmonious action of nearly every muscle in the body. A good walker walks all over; not with a swing and a swagger, as though each bone of the body hung from a separate attachment, but easily and gracefully. Not only the muscles of the lower limbs, but those of the trunk, even of the neck, as well as those of the arm, are all brought into action in proper walking—a fact which makes walking such a splendid exercise for nervousness.

The following suggestions may be of assistance in acquiring a correct posture:

In the first place, have the head erect, hips well back, chest forward and chin drawn in. Nothing can look more awkward and more unprepossessing than a person who walks with the head thrown back and nose and chin elevated.

Again, keep the step light, elastic, avoiding a "teetering" gait. With a firm, light gait, one will walk much further without weariness than with the ordinary shambling. A measured step or rhythm in the walk also adds to the ease of walking, although an occasional change in the gait is often of advantage.

Moreover, in walking one should not attempt to keep any part of the body rigid, leaving all parts free to adapt themselves to the varying circumstances which the constant change of position demands. The arms should swing gently, but not stiffly.

The nervous person should also, in setting out to walk, go twice as fast as he ordinarily walks. If his usual gait is slow, in walking for the best exercise he should double the pace, otherwise the exertion will do his nerves little good. Ordinary walking is only a constant falling forward and catching one's self before one drops; there is little work about it. But if one walks twice as fast, it becomes exercise of the best kind, not only for the muscles, but also for the nerves.

Another suggestion is to occupy the mind, not with a theme connected with one's work, but with new thoughts entirely. Walking a crack or chalk line is, on this account, of real value, as also, where there is no danger from trains, walking a rail on a railway right of way. This is not only an excellent drill in balancing and equilibrium, but it also compels the brain and nerve centers to do ten times as much work as they do under ordinary circumstances.

A final precaution is this, not to walk to the point of extreme fatigue. It does the neurasthenic no harm to



## Illinois and Michigan Patients Hold Banquet

THE Michigan and Illinois guests at the Sanitarium were tendered a banquet last Wednesday in the State Banqueting Room at the Sanitarium. State patriotism ran high, commonwealth fealty being equalled only by loyalty expressed by the guests to Sanitarium principles. The Hon. D. J. Leahy, of Chicago, a publicist of national reputation, and a frequent visitor at the Sanitarium, was the first after-dinner speaker. "I always take pleasure in talking about Battle Creek and recommending the Sanitarium, not only at home, but wherever I may be," he said. "I remember when I first came here sick with stomach and nervous trouble," he went on to say. "I inquired of everybody I knew as to what was best for me to do. One day in coming from New York to Chicago, I met a gentleman who told me he was going to Battle Creek. I was immediately interested and asked him to write me how he liked it, and he did so. 'I like Battle Creek very much,' he said; 'I would advise you to go up there.' I decided it was the place for me to go, and so I came, staying seven weeks. I really think, and I speak most truthfully, that if I had not come then and continued to come every year, I would not be alive today. When I returned home from my first visit, my friends, who had thought my purpose to come to the Sanitarium a sign of insanity, still thought me foolish, but I told them I was going to be wise, like the owl, and not like the ostrich, which covers its head and thinks itself free from danger. I determined to continue my visits to Battle Creek and thus preserve my health. How well I judged is shown by the fact that I have since helped to bury five or six of those people who formerly scoffed at my enthusiasm. But the greatest of all benefits that the Sanitarium confers is this, that it teaches us how to live. It shows us that we cannot go on eating like the animals, and hope to live a healthful, normal life."

get his muscles tired, although he should not exercise to the point where his brain and nerves are exhausted. Up to this point, however, walking is, as I have already stated, of the utmost benefit in these cases. The muscular exercise is conducive to sleep, and lack of sleep is one of the symptoms of nervousness.

Dr. A. Bonthius, of Chicago, for several years engaged in medical missionary work in China, was the next speaker. "I had never heard of Battle Creek," said the Doctor, "until a few years ago, when I went to China. There I met two young men who had graduated from here, and thus came to know the institution very well. Finally I was ordered home for my health on a leave of absence. I came to Battle Creek and have remained here a month, being well now and going home tomorrow. The system of diagnosis here is almost perfect. The system of hydrotherapy is also good, as is also the system of diet. This has particularly interested me because I come from China, and have been attracted by the fact that the Chinese seldom if ever eat meat. Their main diet is rice through the larger part of the country, and in the poorer parts of the country sweet potato. On special occasions, they have great dinners, in which meats of all descriptions enter very largely, and they not infrequently, after these occasions, came to me for treatment of symptoms derived from the enormous quantities of meat they ate at these huge meals."

Mrs. Rich, of Peoria, Illinois, before coming to Battle Creek had prescribed for stomach difficulties milk and eggs, which gave no relief. "Finally I came to the Sanitarium and discovered here that milk and eggs were the very things that were making me ill. I was put on a proper diet and feel very much better—Battle Creek has done very much, in fact, for both my daughter and myself."

Miss Anderson, also of Peoria, stated that she came to the Sanitarium merely for rest. "Apparently I do nothing whatever to give me rest," she said. "I go in for all the gymnastics—swimming, gymnasium drills, and all the other work, but I actually find that I am resting. Formerly I was troubled with insomnia, but I now find that I am free from insomnia. Formerly I had no appetite, but now I am always ready for my meals. I have enjoyed my stay at the Sanitarium, and when I go home I shall always speak highly of the institution."

Doctor Kellogg followed Miss Anderson's remarks by some interesting reminiscences. "When we first began assembling Battle Creek Ideas about forty years ago

(Battle Creek Ideas, you know, were not born here, but only assembled; we have always been trying to find out the good things) the question I saw at once to be how I could pass along the good ideas that we were discovering, for from the first we were impressed by the appalling extent of unnecessary sickness and death. Why, do you know, one million, five hundred people die every year in this country, nine-tenths of whom might be saved. The length of the average life is only forty-five years, and it ought to be one hundred and twenty years, and I sometimes think one hundred and fifty.

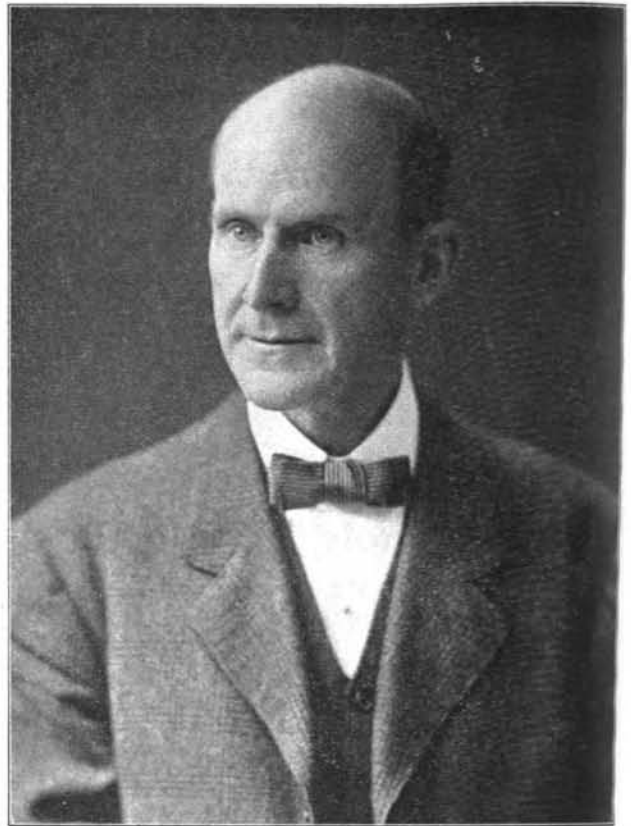
"Apparently the average length of life is increasing, but the increase is gained merely by keeping weakened babies and defectives alive who formerly perished at an early age. When we take this into account we find that longevity is really decreasing. There are fewer people today who are dying from old age than ever before, dying of diseases of various kinds before they reach old age.

"These facts long ago set us at work trying to solve the problem here of how we could teach people to live, and I believe we have proved some things, and one of our proofs is the very fact that you are here and getting better, that you came here on the recommendation of some one who had been here and been made better. It is not our purpose to make people well, or to get them here, so much as to tell others what we ourselves have learned. The purpose of this institution is to serve as a lighthouse, to warn people off the coast and rocks of hardening of the arteries, hardening of the liver and other maladies that people are suffering from.

"And just as we are passing along the good work, so also we wish those who are here to spread in turn the good news of health. I remember a banker a few years ago, who brought his wife here for nervousness; he complained that she was so nervous that he could not live with her. She had been here three weeks when one day she insisted on going home. She said, 'I am going home, where I can get something good to eat.' She went, but in less than two weeks her husband brought her back again, still saying he could not live with her. She stayed three months, this time, and then went home well. One day I happened to be in their town, and was obliged to wait for a train a few hours. I called to see how our former guest was getting on, and found her in a cherry tree, picking cherries, her cheeks rosy, the very picture of health, and a wonderful contrast to what she had been when she first came here. I said, 'Mrs. ———, you are glad to get home and get something good to eat?' She said, 'Do you know, the very first thing I did when I got home was to have all the pepper, horseradish, mustard and everything of that kind taken from the house.' I said, 'What did your husband do?' She said, 'I brought him to it!'

"Another lady brought her family to a non-salt diet after returning home from the Sanitarium. She cooked a meal one day containing so much salt none had to be added at the table; then gradually and very slowly she decreased the amount of salt in her food until ultimately she was using none at all, and the family were none the wiser. It meant years added to the lives of her family, for though this instance occurred thirty years ago, to this day not one member of the family has been lost through death.

"These incidents illustrate the point that I wish to make, that we must all be missionaries of health."



Eugene V. Debs.

#### MR. EUGENE V. DEBS VISITS SANITARIUM

AMONG the interesting people at the Sanitarium recently was Mr. Eugene V. Debs, perhaps the most widely known of Socialist leaders in this country, and the most eloquent exponent of scientific socialism now before the public. Mr. Debs, who came as the guest of Mr. Channing Sweet, a guest at the Sanitarium, at the close of his visit spoke freely of his interest in what he had seen in Battle Creek.

"This institution is doing a great work in teaching people how to take care of themselves in matters relating to health," he said. "It shows them how to work in harmony with Nature. The question of food, for instance, is one of vast importance and far-reaching effect, not only physically, but also mentally and morally. A rightly nourished body will, under normal conditions, produce a normal individual. Malnutrition, from whatever cause, will often produce a man dwarfed and deformed morally and intellectually as well as physically. Sometime instruction in these things will form a regular part of the education of our children, recognized as being of as much importance as anything else in the world. Socialists are seeking to bring about a state of affairs in which every child will have the advantage of the best knowledge upon this and kindred subjects; in which, indeed, such knowledge shall be made available for the benefit of all."

"We pay heavy penalties for our neglect of our social obligations," Mr. Debs went on to say. "For example, the undernourished child brought up amid evil surroundings becomes a menace to society. The poorhouse, the





"The most useful man in New York."

### JACOB RIIS RETURNS TO SANITARIUM FOR REST

JACOB RIIS, author of the epoch-making book, "How the Other Half Lives," and declared by Theodore Roosevelt to be "the most useful man in New York," accompanied by Mrs. Riis has returned to Battle Creek for a few months' much-needed rest, and offers a few lines of greeting to the readers of the BATTLE CREEK

house of correction and further along the penitentiary and the asylum, are among the fruits of this neglect. The Socialism I am advocating is a philosophy that teaches men and women how to live a civilized life. This involves social cooperation. In early times, each man was able, by his own efforts and of himself, to provide his own living, and that of those dependent upon him. This is now impossible. Every man is dependent upon the cooperation of others. Society is not composed of a number of isolated individuals, but is a family. Consequently, instead of each member living with concern for himself alone, he ought to seek to work with others for the good of all."

Mr. Debs was the center of a great deal of interest on the occasion of his visit here, and made many friends by the kindness of his manner and his charm of personality.

IDEA, all of whom must be deeply interested in the great work for slum humanity that he has been the means of accomplishing:

"Yes, I am back to rest. I don't know a better place; do you? Whether it is the place, the doctors, the crowd of cheery people, or all of them together—I don't know. I only know that I can rest here. I have been ill for many weeks, and the blue devils began to get me. Here they won't get me. My work? That is the trouble. I haven't had any for many months—for that matter the last half dozen years have been given to preaching it, rather than practising it; preaching it abroad in the great cities of our land that were growing their slums as we did in New York. Anyway—I didn't begin it. It was in the air. I was there with my reporter's pencil when it broke out—that was all.

"What has it accomplished? That is a long story—too long to tell. But cast your eye down the line and see the change. Who now holds a baby-murdering tenement, with windowless rooms, without sunlight or air? There were four hundred thousand such rooms in New York in those days, and they were all bed rooms. The people slept there. There are less than a hundred thousand left, and in five years the last will be gone. Never another will come. The shacks of my city were pigsties, and the pigs—the rent drawers. They are clean now—even washed.

"The ramshackle old school buildings held more rats than children. We have built the most beautiful and the best schools in the world since—not enough, but will we ever have enough in our growing crowds? There was one kindergarten in my recollection. Here there were nine hundred in the public schools last year, and there will be twice as many. There was not a social settlement—where now there are sixty. You can not find a ragmuffin in a dozen blocks—where you fell over a score at every step, and the death-rate has come down from twenty-eight in a thousand of the living every year, to fourteen in 1912. Has anything been accomplished? God's children have been set in a cleansed environment where they will be able to make out their kinship better.

"That is what it all means. That is what it all aims at, and is it not worth it?"

### DISTINGUISHED CANADIAN PHYSICIAN STUDIES WORK OF INSTITUTIONS

DR. CHARLES DE BLOIS, Proprietor and Superintendent of the Three Rivers Sanatorium, Three Rivers, Quebec, recently paid a visit to the Sanitarium for the purpose of inspecting the institution. Speaking of the impressions gained by his observations, he said, "I have been impressed with the following features of the Sanitarium: First, it is carried on along scientific lines; in the next place, the importance of diagnosis is recognized, and there is everything here necessary to make the most complete examination, and to ensure correctness in diagnosing; further, the institution has a combination of the best methods of treatment—hydrotherapy, electricity, etc. Also, a most important characteristic is the personal care of the patient—the daily visit to the physician, individual direction in diet, etc. A great educational work,



## Ohio, Indiana and Iowa State Clubs Banqueted

ONE of the most delightful banquets given since the series of State banquets have been a phase of Sanitarium life was held September 18th, guests from Ohio, Indiana and Iowa being entertained. About sixty-six names were enrolled in the club book—not that this is the entire number of people represented at the Sanitarium from these three States, but for various reasons all could not attend. The banquets have been a pronounced success from the very start—but this one was voted the best to date by all present.

The toastmaster, Mr. E. K. Piper, in a very happy manner contributed much to the success of the occasion by making the guests feel at home. Doctor Johnson of Indiana, and Doctor McCloud, of Ohio, told what they thought of the Sanitarium from the doctor's standpoint. Miss Eva Vallrath, of Ohio, gave a business woman's idea—and gave the guests her opinions of a vegetarian diet and what it had done for her. Mr. N. E. Beeson and Mr. H. E. Kinney, of Indiana, told how hard it has been in their travels to get food cooked, just as it should be cooked—now that they know the Sanitarium way. Miss Margaret Rummel, also of Indiana, told what the

physical culture department had done for her—and how she had interested her girl friends in sleeping out of doors. Mr. Morse, of Ohio, followed with a few pleasing words.



Mr. and Mrs. E. C. Herrick.

too, is being carried on, and those who study and live the principles taught should prolong their lives."

Doctor de Blois has won high recognition as a physician. He is the inventor of a special form of ozone treatment that has been successfully employed in cases of anaemia, asthma, and other diseases. He is an "Officier d'Academie"—a decoration bestowed by the French government; Honorary Member of the Therapeutic Society of Paris; Corresponding Member of the French Society of Hygiene, and of the Society of Medicine of Paris. He has also served as general secretary of the Association of French-Speaking Physicians of North America, a body composed of about six hundred members.

and then volunteers were called for. So great was the interest at this moment that each guest seemed ready to respond, but Major Parsons, of Ohio, was the first to his

feet and held the banqueters charmed by his sparkling wit and humor. Mrs. Mary White Slater, of Ohio, then entertained the audience by the charming manner in which she rendered her own production, "Illuminations of Real Children."

The numerous guests had wondered as to the wedding march, played as they entered the banquet hall, and their curiosity was now to be satisfied. Mr. and Mrs. E. C. Herrick, of Ohio, were presented with a bouquet of asters, and congratulated upon the fortieth anniversary of their wedding by Dr. J. H. Kellogg. Mr. Herrick rose to the occasion and gave his thanks in a most touching way, as follows:

### AN APPRECIATION

LADIES and Gentlemen, and friends of the Sanitarium:

The good woman in silver hair who sits beside me, and myself wish to thank you most sincerely for the gift of this beautiful bouquet of asters presented to us in token of the fortieth anniversary of our marriage. These forty years have been years of peace, prosperity and happiness. It is our sincere wish that all those younger than ourselves may live to enjoy the same happiness and celebrate their fortieth wedding anniversary under as pleasant circumstances. We certainly appreciate this token of your friendly feelings and will ever cherish this occasion as one of the brightest spots in the roadway of life, notwithstanding all present are strangers to us.

We were here seven years ago and then learned, among other things, that there is as much pleasure in life without tea or coffee as with, and less trouble in the way of bodily aches and discomforts; and since then tea and coffee have been *personae non gratae* with me.

There have been many changes and improvements in those seven years. The facilities for looking after patients are much more extended now than then. The acquisition of the Annex, and increased attendance are notable changes. But so far as we have observed, and are able to judge, the fundamental principles on which the institution is based are the same now as then.

Doctor Kellogg then stated the object of the gathering together of the congenial people around the banquet board, and how he wished the ideas and ways of the Sanitarium to be carried into each of their homes.

## EMINENT ECCLESIASTIC ENTER-TAINED AT THE SANITARIUM

LAST week the Michigan Methodist Episcopal Church held its seventy-eighth Conference in Battle Creek, and the Sanitarium had the pleasure of entertaining more than thirty of the delegates. Among these were Bishop William Burt, M. A., LL. D., presiding officer of the Conference, Bishop A. L. Cranston, Senior Bishop of the Methodist Episcopal Church; Bishop W. S. Oldham, of New York, secretary of the church, besides Bishop Superintendents of the various districts forming the Michigan conference—Revs. E. A. Armstrong, J. C.



Bishop William Burt, M. A., LL. D.

Floyd, W. P. French, W. M. Puffer, N. L. Fox, W. R. Cogshall and W. F. Kendrick, who comprised Bishop Burt's "Cabinet."

The session was opened by an important gathering in the Sanitarium gymnasium, at which Bishop Burt delivered an interesting address on "Modern Italy," the speaker having spent a long residence in that remarkable country. The Bishop, indeed, has had an unusual career. Born in Padstow, England, in 1852, he was graduated from Wesleyan University in 1879, and from the Drew Theological Seminary, Madison, New Jersey, in 1881. For five years he was pastor of a congregation in Brooklyn, and in 1886, was transferred to the field where he has done such conspicuous work—Italy. Among the remarkable results of his work in that country was the establishment in Florence of a theological school. Removing to Rome in 1890, he erected the well-known Italian and American Churches, a boys' college, theological school, publishing house and apartments for missionaries and the preacher. Bishop Burt also was responsible for the erection of several churches and schools in other parts of Italy. In 1904, he was elected Resident Bishop of Europe, an appointment which was renewed four years later. Since 1912 he has been stationed at Buffalo.

Among other honors which have come to Bishop Burt was a Knighthood bestowed by King Victor Emmanuel III, of Italy, receiving the order of Cavaliere di S. S. Maurizio e Lazzaro. He has been received in private audience by two kings of Italy, and by the kings of Denmark, Norway, and Sweden, and also by the Queen of Italy.





Doctor and Mrs. Henry S. Colby.

### DR. HENRY S. COLBY RETURNS HOME AFTER ELEVEN MONTHS AT THE SANITARIUM

THE Rev. Henry S. Colby, D. D., and Mrs. Colby, of Dayton, Ohio, left for their home September 9th, after a stay at the Sanitarium of over eleven months. During this time Doctor and Mrs. Colby have greatly endeared themselves both to the Sanitarium guests and to the staff of the institution, all of whom wish Doctor Colby a long continuance of the improvement which he has made while here. Just before his departure the Doctor discussed with an IDEA representative his impressions of the Sanitarium and its methods. "I was quite ill when I came here," he said, "my condition necessitating two operations and continuous treatment since. These have accomplished great results, and I am very much better. I am pleased with the Sanitarium, and think it a wonderful place. I have been especially impressed by three things: the painstaking diagnosis by the physicians, the splendid nursing, and the fine spirit which pervades the institution." Doctor Colby was for thirty-five years Pastor of the First Baptist Church of Dayton.

### YOUR AILMENTS

A POEM BY DR. COLBY

Don't talk of all your ailments,  
To folks you chance to meet,  
Conversing in the parlor,  
Or strolling on the street.

Don't think the various troubles,  
That oft annoy you so,  
Will interest the people,  
Wherever you may go.

They too all have their trials,  
Of body or of mind,  
Behind e'en pleasant faces,  
Much sorrow we could find.

Don't give them woes to think of,  
But tell some cheery thing!

### IMPRESSIONS OF BATTLE CREEK BY A PROMINENT NEW ENGLAND PHYSICIAN

DR. T. D. CROTHERS, Superintendent of the Walnut Lodge Hospital, Hartford, Connecticut, after a recent visit to the Battle Creek Sanitarium, contributed the following article to the *Hartford Post*, a leading eastern daily:

#### Battle Creek Health Work

"At the little town of Rochester, Minnesota, there are two brothers, doing the most scientific work in surgery, probably in the world. Their fame has brought thousands of men to their daily clinic from all over the world, and without any pretention or claims, they have gone on from week to week, until their hospital has become the greatest surgical mecca of this country. Surgeons go to Rochester for a few weeks to see these masters and return greatly benefited and inspired. All the Hartford surgeons have visited this place time and again. The exact surgery of the world is largely determined by these two unassuming men and their associates, who go on without noise or boasting.

"In much the same way a great center for restoration and recovery has been growing up in Battle Creek, and so popular has this place become that an average of 1,000 patients are there constantly for care and treatment. They are not the incurables, the paralyzed or the demented ones, but men and women who are over-worked and exhausted, who go there to learn how to live, how to take care of themselves, how to diet, and after a few weeks return, with practical knowledge, which if applied will lengthen out their lives. This institution is philanthropic and has a combination of means and methods for building up the body and mind that is on a larger scale, and more exactly administered than probably any other in the country.

"The work represents an outlay of two million and a quarter dollars, is officered by twenty physicians, male and female, and is literally one of the greatest hotel-hospitals in the world. There are no fads, no quackish doctrines and no assumption of superiority, except in a combination of means and measures known to the regular profession.

"The institution is equipped with a most elaborate bath system, administered in the most scientific way, swimming pools and salt baths, together with electricity in all its varied forms. Besides there are radium, gymnastic exercises, open air treatment and everything that will contribute towards restoration and health. Diet is made a special object of

Of flowers that bloom in fragrance,  
Of birds that sweetly sing.

Some tale of trust and triumph,  
Some song of love and hope,  
Some clue of light and gladness,  
For those that blindly grope.

Some help from your experience,  
It may be in a word;  
Some text from holy scripture,  
Some promise of the Lord.

If thus to speak you cannot,  
Bestow at least a smile,  
'Twill help a soul that's fainting,  
To bear up a little while!

study and each one is examined and confined to a diet which is found to be the most beneficial and strengthening. Mental treatment comprises a part of the work. Lectures, concerts, rides and walks, and exact directions as what to do to strengthen body and mind are enforced.

"Like the surgical center at Rochester, it attracts large numbers of physicians and their families, who are constant patrons and students of the methods and means used. The popularity of the methods used here have brought into prominence a number of manufacturers, who make the foods and beverages that originated here, and while not connected with the institution, they have profited immensely by the popularity which this mecca and grand center of public health has created.

"The institution has built up a tremendous following, and created a work that gives a new conception of preventive medicine and means for restoration and cure. Like the Mayo brothers at Rochester, there is no pretention or assumption of great superiority. It is simply the use of exact means and measures which are recognized by all sensible medical men and women.

"The great spas of Europe that attract invalids from all over the world have a new competitor in Battle Creek. This is purely American on a broader and more liberal scale than those of Europe.

"The buildings, appointments and management are most generous, liberal and wise for the interests of their patients, and the army of patients is steadily increasing. During the summer months from 1,200 to 1,500 persons are constantly under treatment, going and coming, and each one is made the subject of special study, special care and attention.

"In reality, this is a great ideal, practical school of training in how to recover health and how to keep well; hence it appeals to the armies of wornout and exhausted men and women, apparent everywhere. Physicians learn here the great lesson of preventive medicine, and see it practically demonstrated; lessons that are not taught in the schools.



President Ashley S. Johnson of Kimberlin Heights College

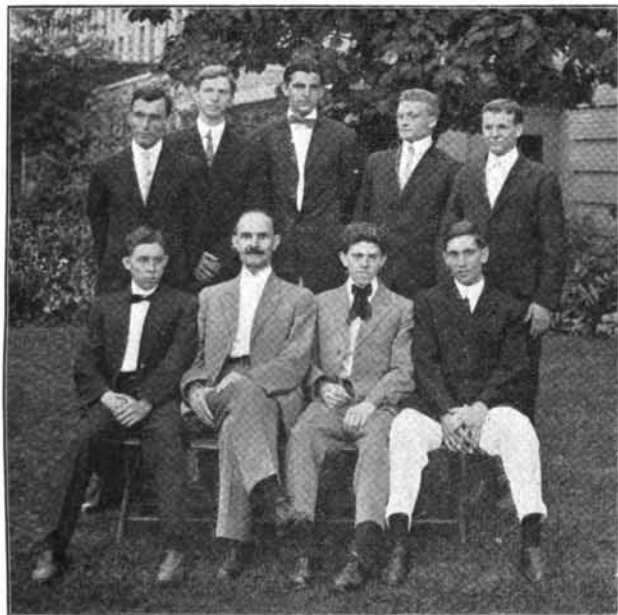
#### STUDENTS OF TENNESSEE SCHOOL GIVEN BANQUET

AMONG the Sanitarium attendants whose courtesy and efficiency have contributed greatly to the benefit and enjoyment of its guests, are a number of students from the Johnson Bible College, Kimberlin Heights, Tenn. This school is doing an excellent work in training men for the ministry of the Christian Church. A band of the students have spent their summer vacation at the Sanitarium for the past four years. Their work has given satisfaction, and they have been important factors in the promotion of a standard of service in the bathrooms which constantly wins appreciative expressions from the institution's guests.

On Monday evening, September 9th, the students present at the Sanitarium this summer, together with Dr. Ashley S. Johnson, President of the school, were given a reception by Mr. C. S. Quail, head of the Gentleman's Nursing Department of the Sanitarium.

#### THE BATTLE CREEK IDEA VISITS THE BULGARIAN ARMY

THE IDEA has just received the following very interesting postcard from Doctor Potchincov, attached as a surgeon with the forty-ninth Regiment of the Bulgarian Army: "Even on the battlefield, I am receiving regularly your paper, that serves me as a fine refreshment in the present and reminds me of the best part of my life, spent at the Sanitarium. I want to inform my teachers and friends that so far I am all right and doing my best in the forefront of our army." Doctor Pitchincov was for several years connected with the staff of the Sanitarium and received his medical training here.



Kimberlin Heights Students.

# The Battle Creek Idea

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## EVERYBODY HAPPY

IN one of his Thursday night lectures recently, Doctor Kellogg asked an audience numbering ten to twelve hundred people how many of them felt quite satisfied with the Sanitarium bill of fare, or experienced a longing for chops, or some other form of meat. Only six people in the large audience ventured to raise their hands. The question was then asked how many felt themselves entirely satisfied and contented with the fleshless fare as furnished at the Sanitarium tables. Apparently everybody present in the large audience raised his hand.

Then the question was asked how many intended on returning home to establish a Sanitarium régime in their homes and to exclude meat, tea and coffee and harmful drinks and to do their very best to convert their neighbors to the principles of right living. Half to two-thirds of those present raised their hands.

The good effects of simple living become so quickly apparent in the experience of Sanitarium guests that no argument is needed to convince them of the advantages of a return to a natural manner of living.

## LOBBY NOTES

AN informal reception is announced for the parlor every Tuesday night in order that the new guests may have an opportunity to meet the old guests.

DR. A. J. MURPHY, of Pittsburg, a noted specialist in genito-urinary diseases, has been visiting the Sanitarium, the guest of Dr. W. F. Martin.

THE Sanitarium has as a guest a distinguished jurist, in the person of Judge H. M. Furman, of Oklahoma City, Oklahoma, a member of the State Supreme Court.

MR. JOHN STAFFORD, proprietor of the St. James' Hotel, one of the largest and most important hostleries of Philadelphia, is a guest at the Sanitarium.

DR. AND MRS. ALEXANDER IRVINE, of McDowell, West Virginia, are numbered among the Sanitarium guests.

MR. J. WHIT. POTTER, President of the American Bank and Trust Company of Bowling Green, Kentucky, accompanied Mrs. Potter to the Sanitarium last week, remaining over Sunday.

MR. S. B. VAN HORN, of the advertising department of the National Cash Register Company, has returned to Dayton after a period of rest and treatment at the Sanitarium.

DR. Z. TAYLOR EMERY, of New York City, medical adviser to the Manhattan Life Insurance Company, is taking treatment at the Sanitarium. A well known Ohio physician, Dr. J. J. McCloud, of Marysville, Ohio, is also a guest at the Sanitarium, coming for rest and treatment.

CAPT. P. D. O'BRIEN, of the South Side Street Police Station, Chicago, was a recent guest at the Sanitarium, coming for the purpose of having an examination. In addition to being examined, he did some examining for himself, arriving at this opinion concerning the Sanitarium: "I have been very much impressed with the institution," he said. "I had no idea that in a place so large, such close attention to the patient could be given."

THE Social Hour on Thursday, September 19th, was of unusual interest to the guests of the Sanitarium. Mr. W. L. Wolcott, a Columbus, Ohio, musician of note, gave a number of delightfully rendered selections. Mr. Wolcott has been greatly praised by critics wherever he has sung, and it is hoped that his rich baritone voice may be heard again at the Sanitarium. Miss May Delle Campbell, daughter of ex-Governor Campbell, of Texas, who has been a guest on several occasions, delighted the audience by several beautiful selections. Readings by Miss Margaret J. Quilliard brought to a close one of the most successful Social Hours of the season.

## ECHOES FROM THE REUNION OF OLD PATIENTS

MANY of those present at the reunion of old patients a fortnight ago were not able to bear their testimony on account of the lateness of the hour, so an opportunity has been given them to express in writing their views with reference to the Battle Creek Idea of healthful living. From a large number of interesting letters which has been received within the past few days we take the following brief extracts:

A Montana school teacher says that as a result of her two visits at the Sanitarium "I spend more time in the open air, eat less candy and sweet foods, bathe oftener and am more regular in exercise. I have not had rheumatism since I have discarded tea, coffee and meat,—which I still eat sparingly; though formerly where I ate meat three times a day, I now eat it not oftener than twice a week and then in small quantities."

Says a Southern patient who has been at the Sanitarium three times, "Flesh foods (including fish and fowl), tea, coffee and condiments (mustard, pepper, etc.), wines, I have permanently discarded. I come to Battle Creek because I believe the Sanitarium to be the greatest promoter of right living in the world. They help at this institution when all else fails."

A lady patient whose husband is a world-known St. Louis physician says that in addition to benefit received



by herself her husband also has been helped by visits to the Sanitarium: "My husband had suffered from indigestion and hyperacidity for years, but was cured at the Sanitarium three weeks and has remained cured by living the 'Battle Creek Life.' As to myself," the writer goes on to say, "I feel the knowledge gained at Battle Creek will enable me to do more and better work and to live my best self in the years to come. I only wish I had absorbed the 'Battle Creek Idea' when my family were little. However, I intend by Battle Creek diet and principles to make them avoid all pitfalls in their way through life. I am a 'Battle Creekian' through and through."

An Evanston, Indiana, friend writes that "in August, 1912, I was persuaded by friends and relatives to go to Battle Creek. At first I hesitated, as I thought the Battle Creek Ideas were based largely on fads, but since my first visit there my mind has been changed. I like the air of friendliness that prevails among patients and attaches, and I hope to spend at least six weeks at Battle Creek every year for the rest of my life. As a summer resort I think it superior."

An Iowa friend who has been to the Sanitarium on two separate occasions is a good missionary: "I have told dozens of people of the special benefit received from the institution," he says, "and many are adopting the diet. Those troubled with constipation are adopting it freely and with good success. The use of wheat bran, para-lax and colax is of great benefit to many, as also the use of laxative biscuit."

A gentleman who first came to the Sanitarium in 1906, and has returned each succeeding year, except one, has also the missionary zeal; "I have induced about fifteen people to come to the Sanitarium, and most of them are, in turn, 'repeaters.' Following the system has been beneficial, disregard of it the reverse."

A Michigan friend who has made three visits to Battle Creek expresses himself, not as a missionary, but as a warrior for right living: "For about one year I have been battling for the Battle Creek Idea. A number of people I know have been influenced, and a few, perhaps half a dozen, have given up meat, tea, coffee, etc., absolutely."

A missionary, again, is a St. Louis traveling man, who, as the result of following the "Battle Creek Idea" has "no more indigestion, no more headaches, sleeps six to seven hours. I estimate the number of acquaintances to whom I have spoken of the Battle Creek Sanitarium at fifty, about one-half of whom have already come to Battle Creek." This gentleman first came to the Sanitarium in 1911 and has repeated in 1912 and 1913.

"A greater enjoyment of the outdoor life, the simple life, closer to Nature and Nature's God—this has been the effect of my coming to the Battle Creek Sanitarium, for the past six years," writes a Texas friend. "I regard this institution as the greatest of its kind on earth."

A Missouri friend who has visited the Sanitarium twice, writes that "the greatest benefit I have derived is from the diet and sleeping in the open air. In 1911, when I first visited the Sanitarium, my blood test was



Some of the Burbank Gladioli.

### THE BURBANK GARDENS

THE Burbank Garden at the Sanitarium has proved of great popular interest to patients at the Sanitarium the past summer, particularly the famous collection of Burbank gladioli, the choicest of which are in a small square bed at the north end of the gardens. Only thirty dozen of these gladioli were placed on the market this year—at the price of \$50.00 a dozen, the Sanitarium securing twenty-four of the bulbs. The plants bore flowers of unusual size and beauty. In addition to these specimens of gladioli, Mr. Burbank presented the Sanitarium with samples of other new varieties, which, though under development and observation, have not yet been named. Some of these are of very great beauty. In nearby beds are several hundred gladioli from other growers, so that the gardens boasts of a particularly fine display of this splendid flower.

The evening primrose has also aroused much interest. As night comes on the primrose opens into a frost-white flower of a size unusual for so small a plant. In the morning the flowers fold together their petals, the last of them about ten or eleven o'clock.

In other beds are giant crimson morning glories of the Burbank strain, whose habits are just opposite to those of the evening primrose, for just as the primroses are tucking themselves up for a daylight nap the morning glories are opening up their flowers.

very low, but when I returned in April, this year, the test was almost normal, which I attribute to the adoption of Sanitarium diet. I have influenced five persons to adopt

the diet and other habits in the home, as I learned it at the Sanitarium. Others have adopted cold morning baths and breathing exercises."

An Alabama friend who has paid seven visits to the Sanitarium, and who also is an active worker for Sanitarium principles, says that "by adopting the 'Battle Creek Idea' of right living, I have been very greatly relieved of rheumatism and cured of stomach trouble."

An eminent Indianapolis lawyer who, since 1910, has made semi-annual visits of about ten days each to the Sanitarium writes: "I attribute my improvement in health almost entirely to the adoption of the principles taught at Battle Creek, and find that I promote my ef-

iciency and good health by spending my vacations at Battle Creek and expect in the future to make regular trips to the Sanitarium. I have become a hearty advocate of most of the things advocated there. My family and myself eat meat very sparingly and do not drink tea nor coffee at all, and make no use of tobacco or condiments. I also sleep in the open air in the summer time and use the systematic muscular exercises learned at the Sanitarium. I also take a cool bath in the morning, and believe in the free drinking of water. I also endeavor to chew my food as fine as possible. I have endeavored to advocate the Battle Creek system to my friends and believe that many of them have used meat more sparingly through my efforts."

A Chicago friend who first came to the Sanitarium in 1898 has since returned twelve times—"two of these visits were for special treatments, and the other ten for rest, recreation and the study of health." As a result, "I have learned to sit and stand better than previously: have adopted the low protein diet, do not eat except when hungry, eat large quantities of fresh fruits and fruit juices, drink yogurt buttermilk daily, and breathe deeply, especially in cool weather. I have also learned from the Sanitarium menus the comparative value of various food-stuffs, to me a marvelous thing. This summer one of the physicians at the Sanitarium, speaking in the parlor said, 'Fifteen years ago a man came to the Sanitarium, pale, wrinkled and feeble-looking, bearing the marks of premature old age. This morning the same man came into my office, feeling stronger and looking younger by many years than fifteen years ago.' It was my case that the Doctor referred to."

The same letter brings the following words from this gentleman's wife, who first came in 1901 and has made nine subsequent visits: "I have kept in close touch with the Sanitarium dietitians and my home table provides almost an ideal Sanitarium menu. I have received untold physical benefit from the use of fruit and bulky foods combined with a low-protein diet."

A Texas guest, who first came in 1908 and again in 1912 and again the present year, writes that "last summer when I spent nearly three months at the Sanitarium, I gained twenty-two pounds, which I have kept. I have also learned a great deal about health, for which I am truly very thankful. I always have a good word to say for the Sanitarium and try to have my sick friends come here."

A friend who first came to the Sanitarium in 1911, returning each subsequent year, and who has induced ten people to adopt health habits through her influence sends this message: "You are doing the finest work in all the great round world."

"It seems to me that health-building is the greatest of all the arts," writes a Massachusetts friend. It certainly resembles the art of painting or of music in its slow and steady building-up process; and it is so interesting, so natural and simple that one understands what is being done! I think the system of treatment at the Sanitarium is wonderful, and I cannot see how one can help being benefited by it. It is a great satisfaction to know what is being done for one's self and why.

## NERVOUSNESS

**A New volume by Dr. J. H. Kellogg  
on this vital subject.**

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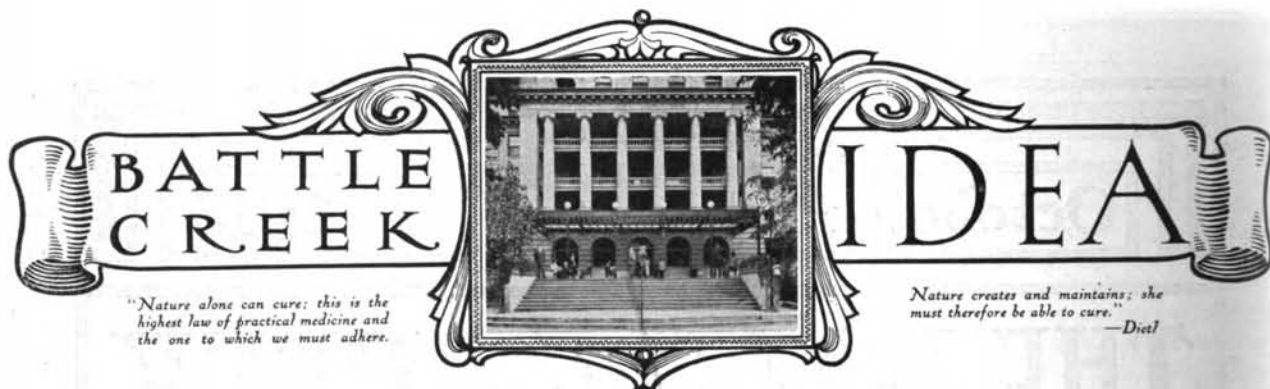
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# THE BATTLE CREEK IDEA







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## SOME EVERY-DAY REASONS WHY PEOPLE GROW OLD

### EMINENT JOURNALIST REPORTS THAT EXCESSIVE PROTEIN FEEDING IS VERY LARGELY RESPONSIBLE FOR THE PREMATURE HARDENING OF THE ARTERIES

So completely does it confirm the experience of forty years at the Battle Creek Sanitarium, and so fully does it justify the principles upon which Battle Creek methods are based that we reproduce the following paragraphs from an article by Dr. Stoddard Goodhue in the *Cosmopolitan Magazine* for September, a study into the causes of old age and the symptoms which manifest themselves in middle life:

#### How Old Are You?

"Do you know how old you are? The question sounds absurd, but is not. Of course, you know when you were born; but are you sure you know how fast you have lived? Age is not measured solely by birthdays. It is far more surely measured by the state of your arteries. You may in reality be thirty-five or forty years old, while your neighbor is properly to be spoken of as seventy or seventy-five years young. The difference is that your neighbor has learned the secret of right living, whereas you, if old at forty, are probably poisoning yourself daily with the food that you eat.

#### Poisonousness of Some Common Foods

"Perhaps you are not even aware that common foods become poisonous to you under certain conditions. If you eat too much nitrogenous food, the bad effects will make themselves felt on your arteries, and you will age in reality by two or three years with each successive birthday. Protein (meat) poisoning makes brittle arteries; and a man with brittle arteries has the sword of Damocles hanging perpetually over his head. Hundreds of thousands of people are thus menaced, as the death-rolls from apoplexy, heart-failure, paralysis and sundry diseases of liver and kidneys prove day by day. Do you know whether you are thus menaced? If not, it is worth your while to find out.

#### Staying the Hardening of the Arteries

"The alarming prevalence of this condition of arterial degeneration gives peculiar importance to a report read

at a meeting of the Paris Academy of Medicine, last May, by Professor Letulle. The report concerns the remarkable work done there in recent months by Doctor Moutier in the way of treatment of diseases of the arterial system with the high-frequency electric current. It was reported that Doctor Moutier has succeeded, in a large number of cases, in restoring diseased arteries to a normal condition, thus giving a normal blood supply to the tissues.

#### Increase in Diseases of Circulatory System

"It is highly interesting to add that almost simultaneously the report comes from Berlin that Doctor Saubermann has accomplished similar results by treating diseased arteries with radium. These discoveries deal with a subject of profound importance. In 1910, more than 100,000 persons died in the United States from disease of the circulatory apparatus—almost twice as many deaths as were due to an entire coterie of much-dreaded contagious diseases. Tuberculosis causes the death of only 160 persons per 100,000 of the population, and cancer and other malignant tumors claim only 76, as against 185 who fall victims to diseases of the circulatory system.

#### Degeneration Due Largely to Errors in Diet

"Moreover, there are many degenerative maladies affecting other vital organs that are inaugurated by, or dependent upon, disturbances of the blood supply; and these degenerative diseases affecting the heart, blood-vessels, kidneys, and other vital organs are very actively on the increase. It is computed that the death-rate from this class of diseases per 100,000 of the population was 190 in 1880, that it advanced to 243 in 1890 to 314 in 1900, and to 387 in 1908; thus more than doubling in the course of a single generation.

"And the alarming change is closely connected with errors of diet which lead to degenerative changes of the arteries; changes which have hitherto been considered



## New York, Pennsylvania and New England Meet in Banquet

LOYAL sons and daughters of New York, Pennsylvania and New England met in banquet at the Sanitarium banqueting room Wednesday before last, some fifty-seven strong. In the course of the after-dinner program, some one was bound to refer to a certain Eastern State as the "Empire State;" but it so happened that the next speaker was an eminent and witty judge from the Keystone State, who admitted that New York was the mightiest State in the Union, but who at the same time re-

incurable, but which, according to the reports from Paris and Berlin, may now be brought within the scope of remedial treatment.

"But while great interest and importance thus attach to the possible restoration to the normal of arteries that have become diseased, it should go without saying, in this age of preventive medicine, that a still greater importance attaches to the question: How can we prevent the arteries from becoming diseased? Here, as elsewhere, prevention is far better than cure. And it fortunately happens that these maladies are preeminently preventable. In the main, they are brought on by habits of life that might readily be changed.

### Injurious Habits of Eating

"One of the most striking conclusions to which recent investigators have come is that a very large proportion of people who have reached middle life have acquired habits  
(Continued on page ten)

joiced that he hailed from a State that was not in the habit of being bunched together with a lot of others and called the "New England States." Here was a pretty situation, but it so happened that the next speaker hailed from Vermont—he it was who accepted the challenge and came back with this triumphant message from a former governor of the Green Mountain State: "Vermont excels the world in four respects: first in its horses and second in its men. The first and second are mighty and fleet; the third and fourth are sweet—its women and maple syrup."

And so the banquet passed—with good natured banter and pleasantry inspired by State loyalty and pride, and with words of appreciation of the system of diet that makes possible a successful banqueting menu without what the chairman termed "dead animals."

### High Y. M. C. A. Official Impressed with Cosmopolitan Appeal of Sanitarium

The banqueters were favored by having with them Mr. Clayton Cooper, of New York, International Secretary of the Y. M. C. A. Mr. Cooper is possessed of a magnetic personality and of a pleasing manner that impresses his audiences with his tremendous earnestness and energy. His work has taken him about the world a great deal, and his experience, in other countries have impressed him, he said, with the cosmopolitan nature of the Sanitarium. "In Tokyo a few years ago I was stopped on the street by an American. I did not know him, but he said, 'Why, don't you recall me? I met you in Battle Creek.'



Mrs. E. L. Brewer, wife of Governor Brewer of Mississippi.

### DISTINGUISHED MISSISSIPPI GUEST ADDRESSES BANQUETERS

At the Alabama-Mississippi Club banquet held at the Sanitarium a few weeks ago, one of the most charming of the after-dinner addresses was delivered by Mrs. Brewer, wife of Governor Brewer, of Mississippi. Mrs. Brewer has been kind enough to allow us to publish her paper in the IDEA. As she said in the course of her address, this is not her first visit to the Sanitarium; she is

And I did recall having met him on one of my former visits. He assured me that when he came back to America, he was going to come to Battle Creek. In Northern Africa I met a medical missionary, and in the course of our conversation he informed me that he had received part of his training at Battle Creek.

"Again, I am impressed on all my visits here with the spirit of good cheer which prevails throughout the institution. I am reminded of a Hindu who told me a few years ago that I was not a Christian. He said that Christ told his followers to put their faith in him, and called my attention to the lines in my face, lines that indicated worry and care for the things of my work. His idea of God was some one who removes worry and care from his believers, and so it is here—I have come to find that free-

a returned guest and is always welcomed by the host of friends whom she had made at the institution. The address follows:

Doctor Kellogg, Ladies and Gentlemen of the two great sister States of Alabama and Mississippi: It is a pleasure for me to be here today, and to see so many of my Mississippi friends coming to this great institution and taking up the Battle Creek diet and treatment. In 1908 was my first visit here. I came with my husband. His health at that time was greatly impaired from a very strenuous campaign that he made for governor. He was here for several weeks and took treatments, and returned home a well man, for which we feel very thankful to the Sanitarium methods. He kept up his daily exercise and diet, until two years ago he was elected Governor of Mississippi. Since then he has not had time to eat or sleep, and for me so strenuous is the life of a Governor's wife that I have come here to take rest, diet and treatments.

This is a great institution, and has helped many to health and happiness.

dom from worry plays an important part in relieving the body of its physical ills. I feel also that I have been helped by the diet."

#### Jacob Riis Writes Regrets

A feature of the program was the reading of a message from Jacob Riis, who was not able to be at the banquet, though, as he explained, he would have been able to represent not only New York, but New England as well. "The toastmaster will have told you that I cannot attend the banquet because the Doctor forbids," Mr. Riis went on to say in his letter. "That is one reason. Another and the real one is that I am raising three steers on my farm in Massachusetts to increase the meat supply and that they are trampling on my conscience since I have been here. That's what comes of being a citizen of New York and a captain of industry in New England, and away from both trying to be good in Michigan, all at once.

"But if I cannot speak of Massachusetts because of my own wickedness, nor for New York because my governor is under impeachment while all we good citizens are away, I can say a word for Battle Creek. This is the third time I have been here under the care of Doctor Kellogg and his associates, and I am prepared to agree unreservedly with another absentee from this table, Father O'Donnell, of Straton, Pennsylvania, who said yesterday to me: 'I have been here four weeks and I wouldn't give the best thousand dollars that were ever coined for the experience.' Like the man who to save time and effort had the Lord's prayer put on the footboard of his bed and thumped it every night when he turned in, I say emphatically, 'Them's my sentiments, and I don't care who knows it.'"

#### Concerted Spirit of Sanitarium Admirable

Mr. Haddon Jenkins, Manager of the Promotion Department of the McManus Advertising Agency, of Detroit, Michigan, gave a very pleasing address. "I think a great deal of the Sanitarium and its work," he said. "I have visited the Sanitarium several times, and the one thing that has struck me as being remarkable is the won-





## Virginia, West Virginia, Kentucky and Ohio in Banquet

REPRESENTATIVES of Virginia, her daughters States, Kentucky and West Virginia, and their neighbor, Ohio, gathered in the Sanitarium banquet hall Wednesday for a reunion and to partake of a repast which Mr. E. K. Piper, toastmaster, spoke of as a "safety appliance." "This is an age of safety devices," said Mr. Piper. "We men shave with safety razors, and in every factory and on all the railroads we see a multiplicity of safety appliances. Today we have invited you to a safety banquet—one

that you may eat without fear of the consequences which often follow indulgence of conventional feasting."

### Cleveland Attorney Says Sanitarium is Memorial to Health Movement

Mr. P. J. Brady, one of Cleveland's ablest attorneys, and a speaker of force and eloquence, alluded to a magnificent statue "at Fifth Avenue and Fifty-ninth Street, New York, to that famous son of Ohio, General William Tecumseh Sherman, author of the well known saying, 'War is Hell.' It was General Sherman's duty to cause destitution, suffering and death, and thus to exemplify the truth of those terrible words with which his name is linked. If we thus do honor with bronze and granite to a man of such deeds, what monument ought we to erect to men who, like those we find here at the Sanitarium, have devoted their lives to relieve sorrow, assuage pain and suffering and to give us health and life? However, if we can not put up a statue to these men and women, a monument has already been erected for them in this magnificent temple of health—the Battle Creek Sanitarium."

### Significance of Sanitarium Program

Mr. C. C. Cooper, a native of Kentucky, but now head of Kingsley House, a social settlement of Pittsburg, Mrs. Bebane, of West Virginia, and Mr. E. T. Moore, of West Virginia, also spoke briefly. Doctor Kellogg, in speaking of the purpose of the banquet said, "We have asked you here today not merely to eat but to study the

derful spirit that one finds here. I think there is no one here this afternoon who has not been disillusioned as to the meaning of the word 'Sanitarium.' You probably associated, as I did, the word Sanitarium with morbid conditions. To me it seemed to suggest drugs and hospitals and everything that was uncomfortable. At least this is what I expected to find, but instead of that I find quite the most wonderful concerted bit of spirit I have ever seen in my life. The force seems like a great team, everybody pulling for the same object. And this spirit, too, is, I think, the spirit that we want to carry away with us, for it is our duty, our very pleasant duty, to take away what we ourselves are getting, and show the other fellow what he has missed."

### A Unique Experience

Mr. Louis Ling, Manager of the Publicity Department of the McManus Advertising Agency, also made a  
(Continued on page nine)



The home of the Sanitarium Chautauqua of Health.

## Mental Food at the Battle Creek Sanitarium

IN the system of treatment which has been developed at the Sanitarium, diet, as every one knows, plays an important part. Scarcely less important, however, is the part assigned mental diet, the education of the patient being regarded as of scarcely less value than his cure. Dealing with this phase of Sanitarium work is a very interesting article, written by T. W. Thoburn, in a recent number of the *Chautauquan*, the official organ of the great parent Chautauqua. The article, which appeared under the caption, "Mental Food at a Sanitarium," is as follows:

progress we are trying to make for race betterment. I have just returned from New York where I have been arranging for a conference on race betterment that we are going to have here in January. I am glad to say I have quite a list of distinguished men who are interested in this subject, and many are coming here to speak. We in this day have had to multiply to an alarming extent our hospitals and our institutions for the mentally deficient. One per cent of our population is feeble-minded, lunatic or idiotic. Just think of it—one person in a hundred! No savage tribe has such a record as this. These ailments are almost unknown among primitive races. If our civilization were lifting us up, as many believe, this would not be the case. If that were true, the savages would have the asylums for the insane, and we should be without them. Something is certainly the matter with our civilization. Here in Battle Creek we believe it is partly due to wrong living.

"Recently we had as a visitor here, Doctor Waller who has been for twenty-five years one of the leading physiologists of England. As I showed him through the place, he said repeatedly, 'This is physiology applied,' and finally he declared, 'I have never anywhere seen physiology applied as it is here.' It is true we have always built on physiology."

Say "Battle Creek" to one who has never been there and he sees at once car loads of peanut shucks and shavings which he has been assured go to make up the breakfast foods. Say it to one who knows and he will see the dear old "San," with its outdoor gym, reminiscent of sunburn and volley ball, its tennis courts, its schools, and entertainments. One who has been a patient or a helper at the Sanitarium, who has investigated all parts and departments—only he can understand. These tales of peanut shucks and corn husks are all right as conversation for those who have never been within 500 miles of Battle Creek, but the real thing is vastly different.

### Disillusionment

Chautauqua has suffered in the same way. I remember vividly how my early far-West dream of the parent Chautauqua was rudely shattered on my first visit there. I had expected a Ferris wheel, a roller coaster, a shoot-the-chutes, pop-corn, peanuts, and pink lemonade. I even wanted to get off at Celoron because I thought that it just fitted my idea of what Chautauqua would be, and when I landed at the real thing I looked in vain for the litter of peanuts and the jim-cracks that I always had associated with the name.

The Battle Creek Sanitarium has been in the same way much abused. I have actually been pitied for having to live a whole summer with a city of invalids, but I must assure you that I really enjoy such lively sick people. I know what the Sanitarium is and know to a nicety just how many peanut shucks do NOT go into the corn flakes; I have tasted the bromose and eaten the protose and still I am alive.

In many ways the atmosphere of the Sanitarium is similar to that of Chautauqua. The people are here to rest and learn and they go about it with a tremendous earnestness that makes you pause and take notice. The evening march, which to me is the most humorous event

at the Sanitarium, is appalling in its seriousness. Seeing old men, angular women, boys, fat women, scrawny men, society dames, ex-athletes, retired coal-heavers all entering into the exercise with the determination to do all they can to get back their health makes one think a little deeper.

Everything is planned. The patient's day is scheduled in hour lengths and he is expected to keep them. There is not much reading to be done, although a reading room and circulating library are well patronized. But the parlor and gymnasium lectures remind me very often of Chautauqua. In fact, I have heard several readings and illustrated lectures given here that I have reported at Chautauqua, and I greeted them as old friends. Just the other day Bishop Hoss was here, while Gifford Pinchot, Judge Ben Lindsey, W. J. Burns, Jacob Riis, Booker Washington, Horace Fletcher and many others come here frequently. The Sanitarium is always rich in guests from foreign lands, and is in fact a great missionary headquarters. Every Sunday afternoon and many Sunday evenings there are talks on foreign lands and sometimes illustrated lectures which rival those of Chautauqua. The other day I was talking to a man who had given a lecture at Chautauqua. About the first thing he said on greeting me was to tell how I had nearly caused him to break down in the reading he was giving a couple of years ago at the Assembly. And all I had done was merely to look at him from my seat at the reporters' table.

#### **Pictures, Moving and Otherwise, Also Important Feature**

But the mental diet is not all directly educative, although there is a great deal of that. The Sanitarium has its own picture plant and "movies" are turned out as desired. Track events of the School of Physical Education, swimming races, X-ray moving pictures, are all taken and finished by home talent.

Speaking of the moving X-ray pictures reminds me of an occurrence which happened last year. There was a lecture in the parlor on the "Functions of the Stomach," and during the course of the evening several pictures were graphically displayed showing the effects of ulcers in the stomach. It was queer, but after that hour I had a sore spot over my stomach. I was quite worried for awhile until I remembered that it was the place where a base ball had hit me the day before.

#### **No Knitting—All Learning**

But the Sanitarium is different from Chautauqua in this particular: The knitting women who, in my day, used to throng to the lectures in the Amphitheater are not in evidence here. Strange to say they do not do anything here but listen or go out. In the latter exercise, however, they closely rival Chautauqua audiences. Of course the evenings at the Sanitarium are the busiest as regards entertainment, and musical performances by the Sanitarium orchestra or band, or perhaps by some local talent, occupy one or two evenings a week. In the summer these are mainly held out of doors and are as popular as the band concerts at the Lake. The outdoor swimming pool is the scene of many water carnivals, and lawn fêtes are not infrequent. Sad to relate there is one spot in all this fairy tale that will not blend with the spirit of the true Chautauqua, and that is the Sunday newspaper. Alas that we

are so close to Chicago and Detroit! Still it provides a job for the clean-up man, who must stride across the lawn with a spear and gather in the rubbish.

So when you Chautauquans think of the Battle Creek Sanitarium again, leave out the peanut shucks. This is not a hospital but just one big family living together and having the best of times in the living. Efficiency? That big Chautauqua watchword stands out all over the institution; and what with the School for Nurses, the School of Physical Education, the Cooking School and the lectures of various kinds it is little wonder that Bishop Hartzell of the Methodist Church recently remarked, "Nothing, it seems to me, has been left undone to make this place a university of health."

### **LOBBY NOTES**

MRS. HABERMAN, of St. Louis, left for her home last Sunday.

MR. WALTER C. HATELY, proprietor of the Chicago Beach Hotel, spent the past week at the Sanitarium.

A PROMINENT Ohio physician, Dr. H. O. Kutchin, and Mrs. Kutchin have been recent guests at the Sanitarium.

MR. AND MR. W. L. GOETZ, of Buffalo, New York, are among the recently arrived guests at the Sanitarium.

MISS ALLYNN SMITH, of Martin, Tennessee, has returned to her home after a two months' stay at the Sanitarium.

DR. JAMES STUART PRITCHARD, formerly head of a sanitarium at Asheville, North Carolina, is taking much needed rest at the Sanitarium.

COL. J. C. JAMES, of New York City, who has been the guest at the Sanitarium of Mrs. Forbes and daughter, also of New York, has returned home.

MRS. OWERE, wife of Dr. Oscar Owere, a distinguished surgeon of Minneapolis, spent a few days last week at the Sanitarium as the guest of her father, Mr. Jacob Riis.

MRS. MARY WHITESIDES, of Louisville, Kentucky, has returned to her home after a pleasant stay at the Sanitarium, where she made many friends. Her brother, Mr. Schroeder is remaining on for a few weeks' rest.

AFTER a month's sojourn at the Sanitarium, Mr. Jacob Riis has returned to his home at Barre, Massachusetts. Mr. Riis came here for a much needed rest and returned home much improved.

ONE of the best known social settlement institutions in this country is Kingsley House, of Pittsburg, Pennsylvania. Mr. C. C. Cooper, who has charge of this splendid institution, is spending a few weeks at the Sanitarium taking a much needed rest.

MRS. JAMES S. NEWTON, of Boston, left for her home last week. Mrs. Newton has spent three months at the institution, and leaves behind her a host of friends she has made while here.



MR. W. W. S. BUTLER, of Stockton, California, President of the American River Electric Company, and of the Stockton Gas and Electric Corporation has just returned home from a several weeks' visit at the Sanitarium, and plans to return the first of November for the winter.

MR. JACOB A. RIIS, the noted social reformer, in the course of his stay at the Sanitarium, was importuned to speak at a number of occasions, but for medical reasons was compelled to decline the request. His physician, however, made an exception in the case of the Sanitarium School of Home Economics, and Mr. Riis was permitted to address the students for half an hour.

DR. J. T. CASE, head of the X-ray Department of the Sanitarium, has returned from Boston, where he went to attend the annual meeting of the American Roentgen-Ray Society. This organization consists of men who devote themselves wholly to this branch of medicine. Doctor Case, whose specialty is bismuth work, read a paper on his observations of the colon. Two of his fellow members, Doctor Soiland, of Los Angeles, and Doctor Stover, of Denver, Editor of the *Denver Medical Times*, accompanied him to Battle Creek and stopped over to inspect the Sanitarium and its methods.

### REV. CHARLES M. SHELDON VISITOR AT SANITARIUM LAST WEEK

OVER the last week-end the Sanitarium had the pleasure of entertaining one of the most useful men in American public life. We refer to Rev. Charles H. Sheldon, of Topeka, Kansas. Mr. Sheldon began writing books as far back as 1891, when his first work, "Richard Bruce," was published. This was followed by a large number of stories, but it was "In His Steps," an epoch-making book appearing in 1896, that made his name a household word throughout the civilized world, and that has done more than any other one factor, perhaps, to cause people to look at the work and teachings of Christ in terms of our everyday, humdrum, twentieth century life.

Mr. Sheldon spent an exceedingly busy time while at the Sanitarium, being called upon very frequently for addresses at a ministerial conference which was being held in Battle Creek and before groups of young people in the various schools of the city. "I have been too busy, in fact," he said to an IDEA representative, "to really get acquainted with the Sanitarium as I wish I might have done. But I have been very much interested in the diet, to the virtues of which I did not have to become converted. While on a very arduous speaking campaign in Great Britain a few years ago, I became acquainted with several eminent flesh-abstainers, among them Mr. Thomas Walsh, of Dundee. For years he and his family have abstained entirely from the use of meats, and a healthier family I never saw. At Bournemouth I stopped at a vegetarian boarding house. It is hard in this country to get this kind of fare while traveling about, but I find that an abstemious diet is of great importance under heavy work, and to the fact that I am careful not to overeat I attribute to a very great extent my health. You have a wonderful institution here," he said, "and I only wish I

could stay longer, but I certainly hope to come again at a later time."

### SANITARIUM ROENTGENOLOGY AT THE INTERNATIONAL CONGRESS OF MEDICINE

DR. JAMES T. CASE, Sanitarium Roentgenologist, attended the Seventeenth International Congress of Medicine, held in London August 6-12th. Doctor Case was on the program for a paper entitled "X-ray Observations on Colonic Peristalsis and Antiperistalsis, with Special Reference to the Function of the Ileocolic Valve," concerning which the *British Medical Journal* said, "An exhaustive paper was read by Dr. James T. Case, who as Roentgenologist at the Battle Creek Sanitarium in Michigan, has had large opportunities of studying the X-ray intestinal pictures. Indeed, one of his American colleagues said of him in the course of the discussion that he was accustomed to sit before the fluorescent screen for eight hours nearly every day examining bismuth cases. Doctor Case said that during the last thirteen months he had made a roentgen examination after a bismuth meal in some 1,500 individuals. Doctor Case's paper, and perhaps even more his lantern demonstration, brought out many interesting points in connection with colonic peristalsis and antiperistalsis. In the majority of cases in which he had observed antiperistalsis, the picture was that of successive waves originating in the transverse colon near the hepatic flexure; they had never been seen to proceed clearly to the tip of the cecum, but only to a point corresponding approximately with the ileocecal junction. He had seen at one time as many as five antiperistaltic waves between the cecum and the middle of the right half of the transverse colon. Perhaps the most interesting section of the paper was that which concerned the author's observations of incompetence of the ileocolic valve. He had found this to occur in a certain constant percentage. Out of a series of 1,500 gastrointestinal cases, 250 showed this incompetency by the barium clysm. In the light of existing knowledge of the functions of the ileocolic valve, he thought it reasonable to believe that those cases in which rectal alimentation had proved successful were the cases of ileocolic valve incompetency. Under ordinary conditions the valve acted as a sufficient barrier, so that any attempts to introduce fluid beyond it, either for diagnosis or treatment, were unsafe and unjustifiable. These conclusions with regard to the ileocolic valve were supported by Dr. Lewis G. Cole, of New York, who said that during the last four years he had recognized about 60 cases of ileocolic valve insufficiency."

Doctor Case took with him a very extensive X-ray exhibit, including over fifty roentgenograms of gall-stones in which the diagnosis had been confirmed by means of the X-ray, the stones being shown. This exhibit was a center of interest. Much interest was also manifested in the question of ileocecal valve incompetency, especially with reference to its bearing on the treatment of what is known as "Lane's kinks."

Following his visit to London, Doctor Case made a trip to the continent, visiting Dresden, Vienna, Berlin and Hamburg in the interests of Sanitarium X-ray work.

**THIRTY-EIGHT YEARS AGO**

As Mrs. H. E. Neal, of Detroit, Michigan, who has returned to the Sanitarium, says, thirty-eight years is a long time, but that length of time has passed, just the same, since Mrs. Neal's first visit to the Sanitarium. "I first came to the Sanitarium through a nurse whose father had been at the Sanitarium and been cured of a bad case of stomach trouble. I was so impressed by the cure that I decided to come, and so packed up, and in a few hours we were settled in the institution. A great change has taken place in the Sanitarium during that time, the facilities for treatment being much greater and a large number of new treatments added." Mrs. Neal continued in a reminiscent way, "The guest I remember most distinctly was a blind soldier, who had been captured by the enemy in one of Russia's wars and had his eyes put out. Two years later I returned, and even in that short time many changes had taken place. I missed the blind Russian and on inquiry learned that he had been married in the meantime, though later on I met him in Battle Creek." Mrs. Neal is very much impressed with the Sanitarium life of today, and the wide field covered by Sanitarium methods.

**NEW YORK, PENNSYLVANIA AND NEW ENGLAND  
HOLD BANQUET**

*(Continued from page five)*

pleasing, though short address. "Although I have lived in Michigan all my life," said Mr. Ling, "this is the first time I have ever had the opportunity of getting well acquainted with the Sanitarium. My experience has been unique, and is one that I shall long remember."

**Eminent Medical Man Discusses Work of Institution**

Dr. Z. Taylor Emery, of New York, informed the audience that he, too, was an old Michigan man. Doctor Emery, however, has so long been identified with New York, having been health officer for the Borough of Brooklyn, that he qualified in the strictest sense as a New Yorker. "I wish to join my congratulations with those of thousands of others to the Sanitarium in its great effort to establish here in the heart of Michigan such a noble institution as this," said he. "It is so far reaching in its influence—covering, as it does, not only Michigan, but the entire country, and for that matter the entire world—that its work must have the support of every one interested in the welfare of his fellowmen."

**A Privilege to Learn of Sanitarium System**

The experience of Judge Bierer has been quite opposite to that of Doctor Emery: "Instead of going from a western State to New York," he said, "I went from New York to a far western State—Utah." But Judge Bierer also easily qualified as a New Yorker in his enthusiasm for the State of his birth. Alluding to the work of the Sanitarium, he said, "It is a privilege to have seen the work that the Sanitarium is doing. I shall be on the operating table tomorrow, but I shall still feel that it is a delightful privilege to be anywhere here. I have enjoyed the privilege, too, of knowing here the men and women who make up the personnel of this great place."

**Moral Atmosphere Impressive**

Judge Frank M. Trexler, of Allentown, Pennsylvania, followed Judge Bierer in a most stimulating address, laying especial stress on the value of the high moral atmosphere which prevails at the Sanitarium. "The atmosphere here is the atmosphere of religion," he said. "It seems to me that this is one thing that makes the curative agents here so effective—the recognition that above all the skill of men is the fact that the Lord whom we serve healeth our diseases; that while we may not all be cured, the promise is given us that He will at least relieve us of our infirmities. And so I say, I think the wonderful results achieved by the Sanitarium are to not a little degree due to the results of faith on the part of the staff, and I cheerfully bear testimony to the efficiency of the institution and of the benefit of the work it is doing."

**Was Down and Out**

Mr. J. Eugene Browning, a retired New York business man, made a brief but witty speech, in the course of which he said he first came here two months ago. "As a result of New York life," he said, "I was thoroughly down and out, but I have already reached the happiest stage of the life here—I am through taking treatment, staying on for the diet. I have lived in restaurants and hotels. I left here a few days ago, but at the restaurants and hotels I visited I could get nothing to eat, it seemed to me, so I returned and was glad to get back again. I must say that I am very grateful that the Battle Creek Sanitarium exists. It has done me a world of good and I have nothing but praise for it."

**Why Should We Take Lives of Animals For Food?**

Rev. Carroll H. Corwin, of Porto Rico, was next introduced. Mr. Corwin represented the State of Vermont and delivered a most eloquent address, after saying a few words for his native State setting forth the mission situation in Porto Rico, and reporting the wonderful progress that is being made in that island by the efforts of the various mission organizations. About the Sanitarium, he said, "I want to endorse the statements that have already been made, and suggest that old adage, 'If at first you don't succeed' in a quest for health, we must be steadfast in our determination to find it. I have been especially glad to hear what has been said about meat. When we have such an abundance of fruits and vegetables and other natural foods from the hand of God, why should we take the life of animals for food?"

**The Missionary's Duty**

Mr. W. F. Butler, of New York, was the next speaker and gave a short but very interesting address. "I have been here but a short time," he said, "but so far I have enjoyed my stay very much. I was in Chicago after traveling through the East, and heard some fine things about the Battle Creek Sanitarium. I came and have been here a month, and I do not feel that too much can be said about the good the Sanitarium is doing. All I can say is in every way favorable to the institution, and it seems to me that when the Sanitarium has done so much for us it is now up to us who go away from here to talk about the place and to pass on the good word to those who would be benefited by coming here."

## The Battle Creek Idea

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### LEARNING HOW TO LIVE

UNDER the above head the Editor of the *Medical Herald*, Dr. C. W. Fassett, publishes in his journal the following appreciation of the Sanitarium, of which the past summer he was an honored guest:

"The writer recently spent a few weeks at the Battle Creek Sanitarium with a view to investigating the methods and routine of the institution, and is prepared to state that the 'system' is a most remarkable one.

"The patient upon entering the Sanitarium, is subjected to a most rigid examination, including blood-pressure and strength test; analyses of blood, urine and feces are made, and a line of treatment and diet mapped out for him. A corps of twenty-six physicians, including several specialists, prescribe for the 2,000 patients. An excellent system of hydrotherapy is practised, together with outdoor gymnastics and swimming. The patients are kept under close observation, and nearly all of them are required to report daily. The diet is exclusively one of fruits, nuts, cereals and vegetables.

"Diet, as a therapeutic agent, has been most woefully neglected by the medical profession; nor will it be fully appreciated until we study foodstuffs as specifically as we do drugs. We must know as well the shortcomings and peculiarities of the individual digestive canal for which the meals are prepared. Thus we are in a position to feed intelligently. As it is, most of our diet lists are pure guesses, mere makeshifts. In the future the dietitian will be a specialist of high standing in the community. He will be familiar with the chemistry of the body, the chemistry and therapeutic availability of foodstuffs and will be able to intelligently adapt one to the other. Such work is done today at Battle Creek Sanitarium, the pioneer in dietetic therapeutics. We are learning, and know vaguely as a profession, that the digestive canal is the gateway of nutrition, also of poison; but the beautiful equipoise between diet and health, and the baneful influence and far-reaching disasters of gastro-intestinal poisoning are problems which we are just beginning to appreciate."

### RED CROSS CHRISTMAS SEALS ALMOST READY

ORDERS for printing 100,000,000 Red Cross Christmas seals for use during the holiday season this year have already been placed and preparations for the sale are well under way, according to an announcement made from the New York campaign headquarters today.

Over 40,000,000 or \$400,000 worth of seals were sold in 1912, a gain of nearly 25 per cent over the previous year. Because of the deep interest in the anti-tuberculosis movement for which the seals are sold, the American Red Cross and The National Association for the Study and Prevention of Tuberculosis who conduct the sale, hope to reach the 50,000,000 mark this year, netting \$500,000 for the prevention of consumption.

A radical departure from previous seals in the shape and character of the design will be instituted this year. The seal will be rectangular in shape, 1½ inches wide and 1 inch deep. The center of the design will depict Santa Claus with his eight reindeer dashing across a field of snow, and the border will be a brilliant red and green decoration of poinsettias and holly, the Red Cross emblem appearing on either side.

Distribution of the seals will be started about September 1st and by December 1st it is expected that the entire 100,000,000 will be distributed. If more are needed, an additional supply will be printed. In addition to the seals themselves, advertising material to the amount of several million pieces is also being prepared. The campaign this year will be organized in almost every city and town of the United States, and no less than 100,000 agents will give their services to the work.

### HOW A TEACHER REGARDS THE SYSTEM OF SANITARIUM TREATMENTS

LONG acquaintance with the principles of hydrotherapy and the results of its employment have made Dr. J. H. Moseley, of Mancelona, Mich., a recent Sanitarium guest, a convinced believer in this method of treating disease. Doctor Moseley is about to join a friend in opening an institution in Wisconsin where the Battle Creek principles will be in use. It was in order to enlarge his acquaintance with these that he came here on the present occasion. Concerning his visit, he said: "I have been here a week, and have enjoyed my stay very much. Indeed, it has been one of the pleasantest weeks I have ever spent. It has provided many surprises, since I had no conception of the magnitude of the institution, and of the work being done here. This I can appreciate, because I have been doing educational work of a nature similar to that carried on here all my life."

### WHY PEOPLE GROW OLD

(Continued from page three)

of eating that are directly injurious, and that subject their systems to a slow poisoning that, in effect, hastens old age and ultimately brings death itself.

"There is nothing new in the statement that most people eat too much. But the new investigators go beyond this and point out the precise kinds of food that produce particular types of injury. They tell us that a greater number of persons who have passed middle life have accustomed themselves to a diet that includes an excess of proteins—that is to say, of foods that contain nitrogen, of which prominent examples are eggs and all kinds of meat.



### Deadly Effects of Excessive Protein

"'Protein,' says Dr. L. F. Bishop, of New York, 'is very important in building up the tissues, strengthening the muscles, and stimulating the activity of the brain and the emotions. It is the food that produces great leaders and brain-workers, but it is also a food that, in the present day, is terminating some of the best lives in the nation.'

"The specific explanation given by Doctor Bishop of this rather alarming statement is based on a long series of observations in which laboratory work has joined hands with clinical experience. This work has to do with a condition of the organism which the specialist terms 'anaphylaxis.' Stated untechnically, this means a curious susceptibility to a particular food or medicine. Such so-called idiosyncrasies have been known in a general way from the earliest times. It is traditional that 'what is one man's food is another's poison.' But the scientific investigation of the matter is altogether modern.

### Susceptibility to Protein Poisoning

"An individual may become susceptible to the poisonous properties of the protein of eggs or of fish, or of beef or mutton. The individual in whose system this undue sensitiveness has developed may be quite unconscious of his infirmity. Indeed, the food that particularly poisons him may be one of which he is particularly fond. So he continues to take it in large quantities, and is steadily and persistently poisoned. The effects are not immediately obvious in a marked degree, but the cumulative result is finally apparent in the degeneration of many tissues, leading ultimately to a marked disturbance of function of such all-essential organs as the heart and vascular system, the liver and the kidneys. Doctor Bishop believes that the typical malady of middle life known as arterio-sclerosis, or hardening of the arteries, is due to systematic poisoning from the habitual ingestion of foods to which the particular individual has become unduly sensitized.

"These facts should be known to and pondered by every individual who has reached middle life. But how, practically speaking, may you and I know whether we are poisoning ourselves?

### Blood-Vessels Must Be Elastic

"It is obviously essential for the proper working of such a wonderful heat engine as is the animal machine, that the blood-vessels should be elastic and resilient, responsive to the mandates of the nervous mechanism. Nor can we expect ideal conditions if the body is constantly called upon to consume a needless supply of fuel and to generate an undue quantity of heat. Under such conditions, the excretory channels become clogged with waste products, just as the carbonator and cylinder of a gasoline motor becomes clogged if too much gas is supplied or an improper admixture of gas and air.

"You perhaps suffer, now and again, from headaches or neuralgias. You may be rheumatic or gouty. You are subject to attacks of biliousness, are easily fatigued, lack energy and initiation of mind and body, find yourself short of breath on walking briskly or on going up-

stairs. At times your heart palpitates unduly. These are all symptoms that suggest disturbed assimilation.

### What Foods Poison You?

"The first question to ask yourself is this: Is there any food that I am accustomed to take habitually that is poisonous to me? It is quite possible, according to the newest theories above outlined, that your regular diet may include something that to you individually is toxic.

"The obvious way to test the matter, if you have any doubt at all on the subject, is to cut out one or more of these questionable foods from your dietary for a given period, and note the results. The proteins that are most under suspicion are those contained in the animal albumens—meats of all kinds, including fish and eggs—and in such leguminous vegetables as peas and beans; and the uric-acid-forming constituents of tea and coffee. In making a radical test, all these should be avoided.

"It is unquestionable, however, that you may be suffering from a slow poisoning due to deleterious food, without experiencing any symptoms that you associate directly with your diet. Your arteries may be gradually hardening, week by week, without producing any sensation that arouses your suspicion. About the only way to put the matter to a crucial test is to go to your physician and have him measure your blood-pressure. It is now recognized that increased blood-pressure is one of the earliest symptoms of protein poisoning. The physician is provided with several appliances by which the pressure may be tested, and is able to offer timely warning to many a middle-aged person who supposed himself to be in fairly good health, or who, as yet, has only vague premonitions of his malady.

"Altered blood-pressure may be due to the condition of the heart itself or to changed resiliency of the arteries and capillaries through which the blood courses. But recent studies strongly suggest that the initial condition in a great number of cases—perhaps in all cases—is a thickening of the blood itself.

### The Customary Breakfast

"This thickening, which thus disturbs the circulation and which is premonitory of disaster, may be due to the ingestion of unwholesome foods or merely to the ingestion of an excessive quantity of wholesome ones. Thousands of men and women of sedentary habits have accustomed themselves to a daily regimen including some such combination of proteins as the following: at breakfast, two eggs and a slice or two of bacon; at lunch, a cup of bouillon, mutton chops, or a slice of beef, green peas, and a portion of cheese; at dinner, a long series of proteins including oysters or clams, soup, fish, fowl and a red meat. Such a dietary is utterly abnormal and must inevitably lead to disaster.

### Foods That Athletes Shun

"No one but a laboring man or an athlete in full training could with impunity eat regularly even small portions of such a variety of proteins. And no wisely trained athlete would think of undertaking such a feat. The most powerful athletes that I have personally examined eat meat only once a day, and a good many of them habit-

ually take but two meals, breakfast comprising a roll and one egg, or at most two, and dinner having for its chief protein never more than a single kind of meat, and a moderate portion at that.

"If your habits are sedentary, you obviously require less food than the athlete in training. So it is more than likely that you eat not merely more protein, but a great deal more food of every kind than is good for you. Not unlikely you consume daily twice as much food as your bodily machine can advantageously manage."

The question which confronts the man or woman who would be young is this: "You must squarely face the question whether you will live to eat, pampering your appetite and risking the consequences, or whether you will eat to

live, making a rational selection of food and exercising a wise restraining as to the quantity ingested."

Intimately bound up with the subject of diet, however, is exercise, which encourages digestion and utilization by the body of the foodstuffs taken into the system. Or, as Mr. Goodhue points out: "Action of the muscles results in a more rapid metabolism of the tissues, accompanied by an increased burning of fuel. The contracting muscles directly promote the flow of the blood stream in the veins and in the capillaries, thus tending to lower the arterial pressure. With bettered circulation, the respiratory glands become active, and some of the products of combustion are eliminated by way of the skin. If your kidneys are not able to handle the waste products of the body with facility, this is highly important."

#### Strengthening the Abdominal Muscles

Particularly important is exercise that will strengthen the abdominal muscles, which, in the case of sedentary workers, owing to a lack of work "become a mere film of relaxed and ineffective tissues, padded with useless layers of fat. The all-important abdominal viscera not only lack normal support, but they are encroached upon and crowded out of place by masses of adipose tissue that subserve no useful function.

"The person of distended waist-line suffers from shortness of breath, not necessarily because his lungs or heart are affected, but because the adipose tissue crowds the liver and other viscera into the thorax, thus restricting the breathing-space. But the deposit of excessive quantities of fat is in itself evidence of defective circulation of the blood; and unless the condition is corrected, there is a tendency to weaken the heart, further interfering with the circulation and facilitating thus the degenerative changes which lead to arteriosclerosis with all its attendant evils.

"But you need not suffer from such degenerated abdominal muscles or from accumulation of fat in the region of the waist, if you have the strength of mind to follow a systematic line of exercises aimed to keep the abdominal wall in a state of healthful efficiency, assuming always that at the same time you will practise reasonable self-restraint in eating."

#### Never Too Late to Learn

Doctor Goodhue concludes his article by pointing out very properly that delay is dangerous, and that one who puts off too long the care of his body "may then be answered as was an American millionaire well known in the world of high finance, who, at the age of about sixty sought a medical specialist to ask the same question. After examining him the specialist said something like this:

"You say, Mr. X., that some one has advised you to exercise. That would have been admirable advice ten or twenty years ago. But you have lived so long without exercise, have permitted your tissues to get into such a state of disrepair and degeneration, that it is now too late to hope to restore them to activity. You can only conserve the small measure of physical strength that you have. Do not exercise. Take a taxi even if you have to go only a few blocks. Save your strength and keep the machine going at low speed as long as you can."

## NERVOUSNESS

**A New volume by Dr. J. H. Kellogg  
on this vital subject.**

Three articles which ran in **GOOD HEALTH MAGAZINE** for August, September and October proved to be the most popular series of articles we have ever printed. Orders soon exhausted our supply of **Magazines**, and to meet the continued demand for them we have published them as a volume of "Doctor Kellogg's Health Lectures."

At least three-fourths the practice of physicians is the direct, or indirect, result of "Nerves." Too often the blame is laid upon present-day conditions—our strife for gain—our love for the almighty dollar. But the causes are far more fundamental. Read what the Doctor has to say about it. The facts he lays bare are astounding. It is worth your while to learn how you can effectually ward off the "Great American Disease," Nervousness.

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AN AUTUMN VIEW  
OF THE SANITARIUM



When the bright Virgin gives the  
beauteous days,

• • • • •

*James Thomson, "The Seasons."*



## NEW COMERS GIVEN "FRESHMAN" BANQUET



*Get-Acquainted Dinner for  
New Arrivals Proves Success*

LAST Tuesday was "New Arrival Day," all guests who had come to the Sanitarium within the past ten days being given a "Get Acquainted Banquet" by the management of the institution. In opening the speaking program, Toastmaster Piper referred to the audience as the Freshman Class of the Sanitarium. A few sophomores and juniors and seniors, people who have been here before, but who have recently returned, were also present, but the purpose of the banquet, after all, was to bring guests from different parts of the country together and get them acquainted with one another.

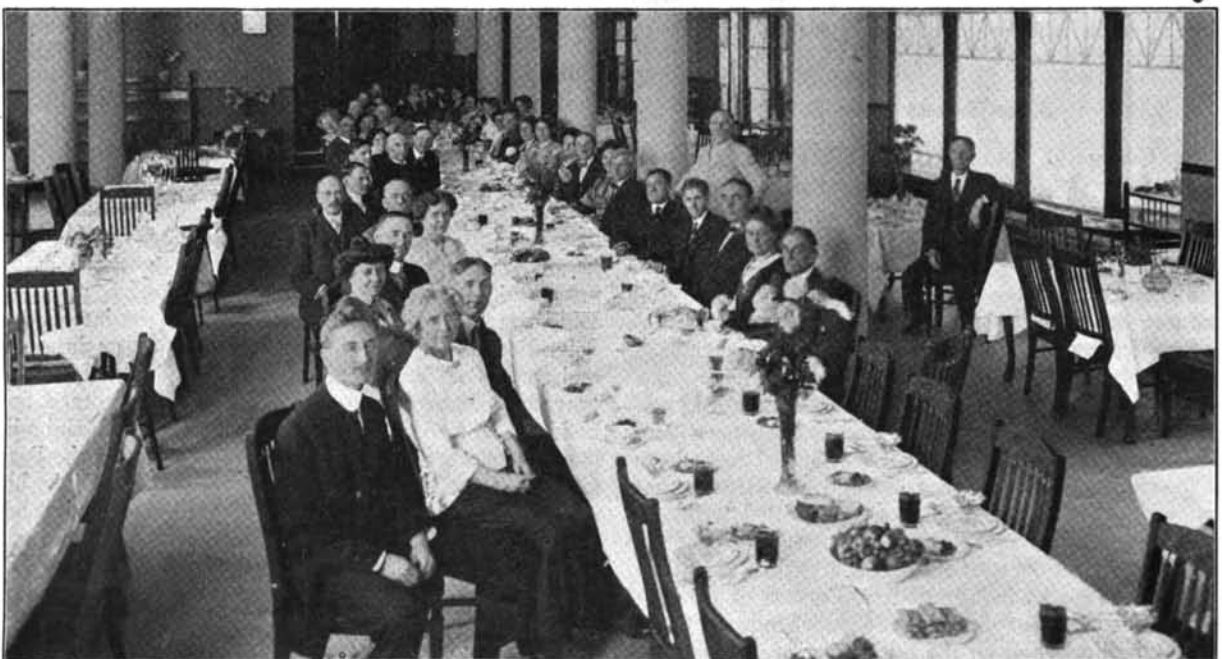
The Toastmaster first introduced Mr. Haddon Jenkins, of the McManus Advertising Agency, of Detroit, a successful publicity man and a speaker of power, who spoke on "What I Expected to Find at the Sanitarium, and What I Found."

### "What I Expected to Find at the Sanitarium"

"To most of us before we come to Battle Creek the word 'Sanitarium' connotes a hospital, a place where we find sick people, a place to which it is necessary to go in order to save life," said Mr. Jenkins. "This is what I expected to find, but instead of a dull, gloomy place, where one constantly meets sick people, I found a place where in every way it is desirable to come, a place filled

with bright, cheerful people, a place permeated by a truly remarkable spirit of earnestness.

"I have found, too, that there is no such thing as a lukewarm admirer of this institution. So far as their attitude toward the Sanitarium is concerned, there are only two classes of people. The first class are those who are wholly unable to appreciate a place of this character; people who cannot grasp the meaning of the thing. The other class is composed of people who are enthusiastic, almost fanatical, over the place, the kind who, when they go home, send other people here, and themselves return and bring friends and relatives with them. It is impossible, I find, to know the institution and the principles back of it and be lukewarm. People come here and get actual results—and yet these results are not the big thing. The big thing is this, that when one goes back restored, he finds himself so grateful that he sends others. You have been benefited, and almost unconsciously you find that you are telling your friends and neighbors about it; you may find that even though you do try to resist it, yet you cannot help talking about the Sanitarium. Too, you probably miss the diet you have had here, and try to put into practice the lessons you have learned here, and to keep these lessons fresh in your mind, you find yourselves coming back again and again for short visits."



The "Freshman" Banqueters.

### A Service of Love

Mrs. Herbert Roach, of Cleveland, Ohio, is a woman of magnetic personality, and a speaker of power and eloquence. "The first thing that struck me in coming to the Sanitarium," said Mrs. Roach, "was the atmosphere which prevails here. I was shown to my room by a charming person in white, who, when she had made me comfortable, asked me if there was anything more she could do for me. I said 'yes, I have a headache,' and immediately she set about relieving my headache. I find the same spirit of helpfulness everywhere throughout the institution. It is a work of love, and not of paid service."

### Being Put Through a Course of Sprouts

Dr. R. V. Phillips, of Yonkers, New York, a man of unusual ability and a physician of distinction, contributed the very interesting information that he and Doctor Kellogg, the superintendent of the Sanitarium, had been in college together. "I first came here last summer," said Doctor Phillips, "through the influence of a professional friend, to study the institution in the interests of my patients. One of the first things I learned on reaching the Sanitarium was that Doctor Kellogg and I had been in college together. We had an interesting visit, in the course of which I said to him, 'I want to learn all I can about the Sanitarium.' He said, 'The best thing to do is to get in line.' And so for one week I was 'put through a course of sprouts.' The first thing that impressed me here was the absolute thoroughness with which everything is done. I observed that nobody connected with the institution takes anything for granted. They go to the bottom of every question, to the limit of modern scientific knowledge, and that to me was the one thing that settled the question of the Sanitarium as a place to which to send my patients. I know of no place in the United States where a person will get so thoroughly shaken up as he will here, and consequently I continue to send my patients here."

### After Twenty Years

Mr. George D. Anderson, a well-known attorney of Beaumont, Texas, made an address that was listened to with rapt attention. "I have been here only a week," said Mr. Anderson, "but I have found already more than I expected to find, and far more. Some twenty years ago, a gentleman with whom I was associated came here and found new health and vigor. That gave me my first impression of the place, an impression that has never been changed in any way. Many of my friends have come here since and returned home cured, and I have told myself for many years that this was the place for me. And so I find myself here and feel already that I have been paid for coming. Moreover, I brought my wife, so that when we return our home life will be filled with the Battle Creek Idea."

Mrs. Lois G. Fobes, of Pasadena, California, made a pleasing address and expressed her pleasure at meeting her fellow members of the class of '13. Emily R. Comings, of Oberlin, Ohio, on the other hand, called herself a senior, for she had been here ten times—"and I brought this time the sixth patient I have sent here from my home

town. This gives you an idea of my opinion of the place. Whenever I have occasion to pass through Michigan, there is only one road for me to take, and that leads through Battle Creek."

Mr. M. M. Casser, a prominent merchant of Duluth, Minnesota, expressed hearty enthusiasm over the "new-arrival banquet" idea, as being quite in the wonderful spirit of friendliness which prevails at the Sanitarium.

Mr. W. J. Hill, of Toronto, gave a very interesting account of his first impressions of the Sanitarium. "Before coming to Battle Creek, I thought of a Sanitarium as a place where they feed you on sawdust. I wanted to come in the summer time, but my wife suggested instead an ocean trip. So I went to the old country, but I found there I still had the Battle Creek Idea in my head, and so we came here. I came because I wanted to get into first-class condition—and I just want you to watch me for the next two or three weeks, and see how I succeed. For they have the right idea here. It is the right of every individual to have vitality and vigor in this world, and I believe this is where we can get an ability to work, to get a full head of steam without danger of blowing up."

### What Hath God Wrought!

Judge Bierer, of Utah, was present and gave an address in his inimitable manner, although he is not exactly a freshman, so far as qualifying under the ten day rule is concerned, having been an honored guest at the Sanitarium for some weeks. "Of course, it is always a delight to be in Battle Creek," said the Judge, "for Battle Creek means the Sanitarium, and whenever I think of the Sanitarium, I think of Morse's first message over the telegraph wires, 'What hath God wrought!' He had a faint, but a very faint, conception of what he had done, and the same thing is true in this great institution. From a small beginning in a small farmhouse, it has grown to be a great institution without a peer in the world, a place of healing which the past summer was able to take care of one thousand and four hundred people. Think of the streams of health and healing that go out to all parts of this country, and even to other lands, from this great place, and of the results of the splendid work and enthusiasm of the great body of workers here."

Doctor Kellogg, who followed, showed in a brief manner how the missionary idea, upon which several speakers had laid emphasis, has really worked out in a practical way. "Mrs. J. B. Henderson, a prominent Washington society leader, and wife of the late Senator John B. Henderson, of Missouri, became an interested and enthusiastic advocate of the Battle Creek Idea some years ago," said Doctor Kellogg. "She wrote a book entitled 'The Aristocracy of Health,' which embodied the principles of the simple life as comprised in the Battle Creek system. Professor Irving Fisher, of Yale University, had made up his mind that he was only about fifty per cent efficient; that there must be some means by which he could double his efficiency. He read Mrs. Henderson's book and wrote me a long letter—some twelve or fifteen pages of questions. I spent a whole night writing a reply of some fifty pages. Professor Fisher came on and spent a week, but during that short time he worked hard and tried everything about the





A few of the Southern States guests at the Sanitarium.

## Sanitarium Guests Hold Southern States Banquet

GUESTS from the various Southern States were tendered a banquet by the Sanitarium on October 15th and enjoyed a most unusual treat in an address by Miss Victoria Booth-Clibborn, of London, grand-daughter of General William Booth, founder of the Salvation Army. Miss Booth-Clibborn is a slender young lady with a fresh, healthy beauty that is English, and a vivacity and charm that come from a long residence in France. Her girlish person and her personality altogether quite captured her audience. She has a wonderfully clear and beautiful voice and uses simple, natural gestures. In fact, her speaking manner displays a grace that would have won her fame on the stage or platform had she not followed the family traditions and become an evangelist. The dominant note

of her address was simplicity, earnestness and sincerity, and more than one of her hearers had moistened eyes as she told of the trials her mother had undergone.

### The Era of Physiologic Medicine

The first speaker on the program of toasts was Dr. T. E. Murray, of Atlanta, Georgia, who told of the peaches and cotton for which his State is justly famous. "It lacks, however, one thing," said the Doctor. "There ought to be in Atlanta a branch of the Battle Creek Sanitarium. I have been a physician for thirty years and I know that people suffering from any disease can derive benefit here at this place."

Doctor Kellogg, replying to the suggestion, said, "You

place. He carried out the ideas here and they did him so much good that next summer he came back again. He brought his family and their manner of living was entirely changed. Two or three years later he told me he had a friend in New York City who had been converted, Dr. Oscar H. Rogers, chief medical examiner of the New York Life Insurance Company, whom later on I met in New York. Doctor Rogers sent here a friend—to sample us, as it were. It happened that this friend whom he sent was troubled with high blood-pressure and correspondingly low spirits; after spending a short time with us his blood-pressure lowered and his spirits rose in proportion. He went home vastly improved, and later on Doctor Rogers himself came and was so much benefited that he has returned on several occasions and is sending many of his friends to us.

"We are glad to welcome you all to the Sanitarium. We are glad you are here to learn how to do right and how to be good. We have so much instruction, you know, about being good to other people, but we ought also to

learn about being good to ourselves. For it pays to be good to ourselves, because in doing this, in raising our efficiency to the highest possible level, so that we are always full of sunshine and vim, we are doing the best possible thing for our friends and neighbors. For the best thing we can give to others is ourselves, and if we are poor specimens, we are not giving much. I was delighted the other day to receive a letter from a lady who recently returned home from the Sanitarium. When she came she was nervous and in a run down condition. She asked me how long it would take to cure her. I replied, 'About as long as it takes to raise a crop of corn, perhaps.' She was faithful in following out the instructions of her physician and went home so vastly changed that even her little boy didn't know her. 'Why, this is not my mamma!' he said. In taking care of herself, in doing herself good, she had been doing the best possible thing for her family and friends.

"So again, I say, we are more than glad to welcome you here at the Sanitarium today."

are bound to have a Sanitarium like this in Atlanta, because the era of physiologic medicine has come. It is now recognized that the old fashioned remedies are incompetent to cope with disease. We must find the causes. In every large city a well equipped Sanitarium like this, with complete laboratory facilities. The science of medicine has expanded so much that one physician can no longer carry it in his pocket. It takes team work, and a large team at that. From six to ten men, working hard, are necessary to represent modern medicine in anything like a complete way.

"Diet alone has become an important science in recent years. Formerly it was covered by a few short chapters in a book; now its literature has grown to library dimensions.

#### The Future Physician to Keep People Well

"The family doctor of the future will have certain minor functions to perform, but his chief duty will be to keep people well. He will see that their diet is proper and that their houses are hygienic, and will warn them before they get sick.

"In Japan people pay their physician once a year, and the amount depends upon the skill the physician has shown in keeping the family well. With us this is reversed and the medical profession practically has a premium on keeping people sick."

#### General William Booth a Flesh Abstainer

Interesting in this connection was Miss Booth-Clibborn's story of "Why General Booth Became a Meat Abstainer." "All of General Booth's sons and daughters are engaged in redeeming souls," she said, "and they are all men and women of earnest purpose. And yet it is strange they have been able to accomplish so much because all the Booths have been invalids. They have succeeded because they were men and women of one thing.

"My grandfather came to the conclusion that meats were not essential, since God had given us so many beautiful fruits and vegetables and grains. His favorite supper was brown bread and milk and raw onions. Our family have, in the main, been flesh-abstainers for a long time.

"My mother's work has been outside the Salvation Army," Miss Booth-Clibborn went on to say. "For twenty-five or thirty years she has labored in various countries. She has been insulted, spat upon and imprisoned. No modern woman in modern life has suffered more for Christianity. A marvel is that with all, she has had time to bear ten children and to bring them up well. She saved us very many times from the doctors by her care, for she had the finest of all arts—the art of motherhood."

Of the Sanitarium Miss Booth said, "I want to say what a pleasure and a privilege it is to be here. This place is so wonderful I cannot get over the surprise of it. I learn a great deal every day from three examinations, and am amazed at the progress of medical science. I have learned more about my physical self in these days than I ever knew before."

## AMERICA'S GREATEST HEALTH HOTEL

[From an article by Miss M. H. Bohn, in the Hotel World.]

"He's getting back to nature after thirty years away; He's been busy chasin' dollars, while his health has gone astray.

He forgot about his stomach, till it went upon a strike. An' he's humped an' bendin' over, sort o' sour an' peevish like.

"He's got everything that's goin' that a moneyed man can buy,

But his step is slow an' heavy, there's no sparkle in his eye;

He can write a check for thousands, and they'll cash it, too, allright,

But there ain't no bank will cash it, when it's drawn on appetite.

"He's got dignities an' honors, an' he's stored a sight o' wealth;

He's got stocks an' bonds, an' titles an' most everything but health.

An' he found out when he lost it that he held it mighty cheap,—

For he'd give a thousand dollars for a night o' restful sleep."

Tarry but a few moons roundabout the generous reaches of verandas and lawn at the Battle Creek Sanitarium, and you will meet the original of Foley's composite photograph. Indeed, you will see shoals of him. A tidal wave of summer's heat or winter's cold drives them in, all following, afar, in the wake of the famed Ponce de Leon, seeking renewal of life. Modern de Leons should visit Michigan rather than Florida, for though here is no Eldorado, there is—Battle Creek!

The key to the clock of time seems hopelessly lost and the clock wound up in perpetuity. The "Battle Creek Idea" is not to reverse the hands on life's dial but rather to attune happily the human pulse beat to its fateful and faithful rhythm.

Wonder-working foods and miraculous cure-alls there are—stamped "B. C." Dr. J. H. Kellogg's hard-won success is traded upon unscrupulously by fakirs.

The Sanitarium is constantly in receipt of letters complaining that such and such "medicine" will not produce marvels; that some nostrum has not reduced fat, or produced it in an incredibly short time. One of these quacks does business under practically the same name. He lives in a nearby city but labels everything Battle Creek, implying in literature or through agents that his "dopes" have the sanction of the Sanitarium. Recently, a dupe of one of these "doctors" rushed into Doctor Kellogg's office; red-eyed and fuming he demanded the instant return of \$27.50. With great difficulty the Doctor convinced him that the man who deserved the trouncing he was burning to give was an entirely different Kellogg.

It is the very sarcasm of destiny which makes the honored name of Dr. J. H. Kellogg the sport of quackery. For nearly forty years he has discouraged the general use of medicines, denouncing them as poisons often more dangerous than the diseases they are meant to help. It



The "Health Hotel" Dining Room.

is for this reason, largely, that his name and institution were so many years labeled "taboo" by the regular practitioners.

He says: "Doctors cannot cure anyone, treatments cannot cure and medicine certainly cannot cure. All that any of these can do is to help nature to get a fair chance. The Power that created you alone can heal." The now well-worn slogan, "Back to Nature," was nailed above the portals of this institution 'way back in the sixties. Doctor Kellogg has never held the maudlin sentiment that illness is a Heaven-sent chastening, as taught by the old time pietists. Neither nature nor Heaven induces illness, except as the certain inexorable sequence of vital laws transgressed. Pain is but the kindly knocking upon your sensory nerves to warn you that an enemy lurks within.

You or your forbears have given this enemy birth;

to rout him, eat clean food, drink only pure water, breathe only fresh air and bathe in the sunshine as well as in the bathtub. "Eat clean food:" aye, there's the rub, for he holds that all meats are unclean.

Most of the Sanitarium's patients, like the tom-tit of the Mikado, seem to be suffering from "a very tough worm on their little insides," and the devils of indigestion goad them. Why, asks the doctor, should people deliberately spend millions to buy a food containing, at its best, a dangerous poison, uric acid? Why, when field and garden and forest prepare feasts fit for the gods on Parnassus, will *genus homo* go hunting about for "tough worms" and "devils" to devour? These words are the writer's, for the doctor speaks more literally. His dietary, and the reasons therefor, will be given in a later article, because it is a matter of especial interest to all who





The "Annex," the newest addition to the "Health Hotel."

provide food for mankind. Particularly since meat has become a luxury.

In quoting the doctor's prescription for good health one should write down in capitals, *Exercise*. Exercise the tongue and jaws while eating, and legs and arms before and after eating. Here no one is encouraged in a sweet-to-do-nothing life, except as he or she needs the "rest cure." At 5:30 A. M. the procession to the hot and cold morning spray begins; then a brief brisk walk till seven sharp, when all hands assemble upon lawns and pavements in front of the main entrance for gymnastics. It is an odd "class"—like no other. All ages, from six to sixty-nine, youth, fair and graceful; age, stiffened and withered; men and women who weigh nearly three hundred, puffing and blowing at the quick movements, and nearby others, mere skeletons, whose bones threaten to pierce the skin drawn tight over them. When men and women past sixty try a hand at gymnastics for the first time in forty years, the result is often ludicrous. The tragedy of lost health so plainly visible on many faces, however, makes one forget the humorous; there is, to the thoughtful, only admiration for the determined endeavor written on the countenances of these brave stragglers from the army of health.

As the ranks are dismissed some stroll over to say good morning to the flowers in Burbank garden on one end of the lawn, or into the parlor for a morning song and prayer. Breakfast at 7:40, and the whetted appetites meet the tempting viands more than half way.

The meal concluded there is a grand rush for the mails and a little later again gymnastics, followed by games and marching, this time in the enormous gymnasium, so perfect and up-to-date in all its appointments.

After this, treatments, which might be jocularly described as steaming, soaking and sweating, followed by mechanical punching and pounding; the devices for the latter are of the witches' own art. Lastly, patients are toasted in the sun in the outside gymnasiums, daily, till well browned on both sides.

The outdoor "gyms" are a favored place for the afternoon lounging, *en deshabille*. From three to five o'clock, exercises, folk dances and swimming are the pastimes; both men and women have each a large pool in their outdoor gyms.

The afternoons are varied by parlor concerts, hygienic talks, cooking classes, etc. If there is left a vacant half-hour, a most charming library, with an open veranda, easy chairs and the latest papers and magazines, lures the reader.

But the gayest hour of the day comes after the supper. Then the whole "family" gathers in the great gymnasium for the grand march. Those who do not take part watch the marchers' evolutions, which are varied with what the guests call "sterilized dancing." This and the playing of the tango by the orchestra at dinner are the nearest approaches to dancing permitted.

On many evenings Doctor Kellogg and many other distinguished men give illustrated lectures in the parlor. A recent one on the uses of the X-ray in medical examinations was an echo of the International Congress recently held in London on that subject. Doctor Case, of the Sanitarium, who gave the talk, took a prominent part in the London meeting, and his pictures and explanatory talk were thrillingly entertaining and enlightening.

Often, artists who are guests of the house, give a fine concert or dramatic entertainment in the great-galleried gymnasium. Numerous auditors in wheel chairs make these audiences unique.

Perhaps the very happiest hour of all those entered into by the great Sanitarium family is the Friday evening song service.

The seventh-day Sabbath here begins on Friday at 6 o'clock, and soon thereafter, every week, the great lobby of the hotel is packed with chairs. When these are filled and flanked by wheel chairs, each with a hospital patient, the audience overflows onto the stairs and into the hallways above. The cover of the grand piano is

thrown back, the leader of the orchestra takes his place at the piano, another leader directs the tunes, and then there is one mighty chorus of voices. Everybody sings, patients, guests, nurses and kitchen helpers. Perhaps it is this fervent hour which christens the thousand and more members of the Sanitarium family as a unit and creates that *esprit du corps* so apparent in the nurses and doctors, and which is reflected in the guests.

This summer has taxed both the original building, the great annex, and all the cottages to the limit, and scores were kept on the waiting lists.

Hotel resort managers are asking why a place established and maintained as a Sanitarium has become so popular as a fashionable resort for the well during the summer months.

The charm is not climate, for southern Michigan may be very fickle, and this summer, the record season for the Sanitarium, the weather has been one intolerable hot, dry, dusty scorch which turned green leaves brown in early August.

It is not environment, for though nature has done much for this locality, the locality has done little for itself. The two exceptions are the magnificent buildings and delightful grounds of the Sanitarium and the notable hotel, opera house and business buildings erected by public spirited men. Strange to say, within a few minutes' walk of the Sanitarium, in various directions, conditions are most unkempt. Pictured by the side of its neighbor, Kalamazoo, Battle Creek should certainly be labeled "Before taking" the draught of civic righteousness. To be sure, Kalamazoo is the home of that newest variety of reformer, the Rev. Caroline Bartlett Crane, whom the cities delight to honor with a hundred dollars a day for advising the city fathers how to do civic housekeeping. Battle Creek, then, lives not only a close neighbor to this scientific advocate of the City Sanitary, but has for many decades basked in the sunlight of this institution, which places cleanliness "on both sides of godliness," as its motto. When the civic awakening comes Battle Creek will change into a very dream of a city beautiful. Of course, it now has fine residence districts.

What then is the charm which fills to overflowing a strictly kept sanitarium, where even the common pleasures of dancing and smoking are denied? Is this not a natural query for hotel men? May an answer be ventured in another letter?

## PROMINENT MICHIGAN BUSINESS MAN RETURNS TO SANITARIUM

MR. J. H. HODGSON, a prominent broker of Houghton, Michigan, has just returned to the Sanitarium after a long stay in Europe. He left Battle Creek in June, 1912, and spent much of that summer in Scotland playing golf. He next journeyed to Paris and the south, passing the winter in Egypt and Algiers. Last summer he spent in Brittany, at the seashore, being called to New York on business but returning to Europe after a stay of three days. On landing in New York next time, however, he came straight to Battle Creek, for, he says, "In all my journeying, I have found no place that can compare with

the Sanitarium." Mr. Hodgson expects to return to Europe for the winter. In his previous visits he has taken an active part in the social life of the Sanitarium and receives a glad welcome from the many friends whom he has made here.

## EUGENICS PIONEER VISITS SANITARIUM

DR. J. M. HURTY, Secretary of the Indiana State Board of Health, who was responsible for the Indiana law providing for sterilization of mental defectives and of persons of criminal tendency, and father of other progressive eugenic measures which have made Indiana famous throughout the world, was a Sanitarium guest for a few hours last week, and plans to return in January to attend the World's Race Betterment Congress, which is to be held at the Sanitarium. Doctor Hurty expressed deep interest in the Conference and in the Institution which is making a gathering of this kind possible.

Concerning the Indiana sterilization bill and its result, Doctor Hurty had this to say, that "since we put the bill through in 1907, that is, only six years ago, 800 men have undergone the vasectomy operation. We do not want their kind in the State.

"This is the only way we can better the race—by keeping the insane, and those suffering from diseases which can be inherited from being fathers.

"I am not a reformer, but a conformer, and deem it only proper that we discover the laws of Almighty God and conform to them. The reason of all moral trouble and much of the illness in the world is on account of not conforming to these laws.

"We cannot make a mahogany table out of a piece of pine, and we cannot make a silk purse out of a sow's ear," he declared, "and we can not get a healthy child from unhealthy parents.

"The trouble at present is that our charity, pity and sympathy is only half way. It is like a half truth, which is worse than a whole lie, for the whole lie will die, while the half truth will struggle along. The charity we are practicing now is bad, because it is half way," he added, "and to accomplish anything we must do away with the production of the cases which are a burden to the rest of society.

"Recently it was discovered that the average life of the insane in Indiana has increased eight years—that means that with 5,000 insane people in the State, 20,000 years of caring for insane people has been added to the burden of the tax payers in our State. We also find that nearly all this could be prevented, for 25 per cent of the insanity in Indiana was caused by alcohol; 25 per cent by syphilis, 40 per cent by heredity and 10 per cent was accidental. That means that 90 per cent of those now in the insane asylums need not have been there if proper living were exercised, and those who were unfit had been prohibited from becoming fathers."

Doctor Hurty takes an active interest in the literary life of Indiana. At one time he was a member of the faculty of Purdue University, and now occupies a chair in Indiana University.

# The Battle Creek Idea

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## PUTTING SOCIAL HYGIENE ON A HIGHER PLANE

OPINIONS may differ as to the exact methods by which eugenics and social hygiene shall progress; conditions are never quite alike, and the personal equation of the worker must enter into the problem. But concerning the point of view, the standpoint from which we approach the subject, there should be no difference of opinion. Every one must accept the statement of Professor Irving Fisher, as expressed in an epoch-making article in the November *Good Health Magazine*, that the entire subject must be placed upon the high plane of patriotism and race loyalty.

In talking to young men on the subject of personal purity, says Professor Fisher, "I find that the best appeal to them is the eugenics appeal. It does not always work to tell a young man to refrain from immorality because of the danger to himself. He may take that as a 'dare.' Besides, it does not put the subject on a sufficiently high plane. It must be explained to him that it is wrong, and it must be explained to him why it is wrong. Now it is fundamentally wrong because he carries within his body the germ plasm of which he is the custodian for future generations. It does not belong to him. It is not for him to risk or to injure. It is something that he carries in trust; it is something he must guard as the most precious possession possible. He must be on the side of morality because that is being on the side of the human race.

"It is easy to get a young man interested in the white slave traffic and to get him interested to fight the white slave traffic. As soon as he is interested in that, he begins to see that he cannot be on both sides at once. If he wants to fight the underworld, he must not become a traitor to the side for which he is fighting, and patronizing the underworld in disloyalty of the rankest kind,—disloyalty to his own family, to his own home, as well as to the institution of family and a home. I say to young men, 'When you are married men, you expect to be faithful and true. You would not respect your father if he were not faithful to your mother. Carry this a step farther: When you are engaged, and even before you are engaged, you should hold it as a matter of honor and of true fidelity to be just as faithful as after you are married. Another step: Before you are engaged, you owe it to the girl you are going to get engaged to, to do for her what you would expect her to do for you, namely to bring to her a pure body. You may not know who she is, but she is now living somewhere and reserving herself for you.' It is easy to

get young men to see that the double standard is false, and that the true and old-fashioned tenth commandment only is right."

Eugenics, looked at in this light, will revolutionize our conception of ethics, thinks Professor Fisher. "Eugenics is a wonderful touchstone. I believe eugenics will be in the future the essential foundation of ethics. Today, ethics is purely empirical. We teach at the mother's knee that certain things are right and that certain things are wrong, and they generally are right and wrong respectively. And yet we cannot explain *Why* they are right and wrong. When the children ask us 'Why?' we usually put them off by saying, 'Because it is right,' or we put young men off by metaphysics and say 'Because of the categorical imperative,' as Kant expressed it. But this does not satisfy and the failure to satisfy accounts for a great deal of the immorality there is in the world. There is not yet an accepted scientific foundation for right and wrong. I verily believe that eugenics is going to supply such a foundation."

This statement of Professor Fisher's recalls what Professor Maurice A. Bigelow, of Teacher's College, Columbia University, has recently said, that "unless we can devise some way to counteract the prevailing, narrow, vulgar, disrespectful and irreverent attitude toward all aspects toward sex and reproduction; unless we can make people see sexual processes in all their normal aspects as noble, beautiful and splendid steps in the great plan of nature; unless we can substitute a philosophical and esthetic view of sex relationship for the time-worn interpretation of everything sexual as inherently vulgar, base, ignoble and demanding asceticism for those who would reach the highest spiritual development; unless we can begin to make these changes in the prevailing attitude toward sex and reproduction, we cannot make any decided advance in the attempt to help solve sex problems by special instruction."

## THE 1913 SESSION OF THE MEDICAL MISSIONARY CONFERENCE

PREPARATIONS are going forward for the sixth annual session of the Medical Missionary Conference which is appointed for December 30 to January 2. The Conference will be held under the auspices of the Medical Missionary Association and the Battle Creek Sanitarium. Word has been received from several prominent speakers stating their intention of being present. Among these we mention the following: Bishop E. R. Hendrix, of Kansas City; Bishop Joseph C. Hartzell, from Africa; Dr. Isaac T. Headland, Pekin; Dr. Joseph K. Greene, Constantinople; Bishop W. F. Oldham, Singapore; Dr. J. F. Goucher, of Baltimore. It is intended to specialize each of the evening meetings, giving the time to two or three prominent speakers, who will give intelligent and forceful representations of their special fields. The previous sessions of this Conference have been marked with great success, and it is confidently expected that the on-coming one will well sustain the previous record. All Christian missionaries without denominational distinctions are earnestly invited to attend. The Sanitarium gives free entertainment to all who do so.



## ECHOES FROM THE REUNION OF OLD PATIENTS

MANY of those present at the reunion of old patients a few weeks ago were not able to bear their testimony on account of the lateness of the hour, so an opportunity was given them to express in writing their views with reference to the Battle Creek Idea of healthful living. From the large number of interesting letters which were received we take the following brief extracts:

A Chicago lady, who first became a patient in 1906 and has returned twice, sometimes three times a year ever since, feels "convinced that I owe my life to what I have learned at Battle Creek. One brother died two years ago with tuberculosis, and my other brother lives in Colorado, suffering from the same disease. I have built up my resistance along all lines, by knowing how to live, from ideas learned at the Battle Creek Sanitarium. Personally I feel that I can not say too much in praise of the institution—what it has done for me, for my brother and many of my friends who have visited there, of whom I have sent not less than twenty-five people since I first came in 1906. All of those have, in some measure, adopted Battle Creek Ideas."

"I knew nothing about diet when I first came to the Sanitarium, but on my several visits here, I have learned to alter my entire mode of living, to my lasting benefit, I believe," says a friend who has made annual visits to the Sanitarium since 1910.

Another friend writes that "my health has been better the past year after spending nine weeks at the Sanitarium, and undergoing a minor operation, than it has been for many years. Because of my improvement there are four persons at the Sanitarium at the present time."

An Ohio friend: "I have been a true friend of the Battle Creek Idea ever since I first came four years ago, and never regret having lived up to the principles of the institution since. I have given subscriptions to the *Good Health Magazine* to several of my friends and have influenced three of my nephews to give up using tobacco, as well as some of my Sunday School class of boys. I came to the Sanitarium with high blood-pressure and a general tired feeling. My blood-pressure is now considerably lower than when I first came."

Another Chicago friend sends us the following very interesting letter: "This place has a warm spot in my heart, and it gives me great pleasure to be one of the select number who were present at the reunion last evening. I am glad to have an opportunity to thank the Battle Creek Sanitarium for its share in giving me three of the greatest blessings of my life: perfectly renewed health, a daughter, and a son. For more than ten years before I came to Battle Creek I had been a great sufferer. I first came here twenty-four years ago, remaining six and one-half months. Two years later I returned and took away the most precious of all treasures, a beautiful, perfectly normal child. My two children are my all now, and my richest blessing. My present stay, needless to say, has already benefited me."

A Mississippi patient writes: "I cannot begin to tell you how greatly pleased I am with the Sanitarium. It surpasses all my expectations, and is indeed wonderful. I want to come every year and bring all my relatives and friends along with me. I am starting to build up my weak muscles and have gained three pounds of the ten that my physician said I needed. The other seven will most assuredly be added. I feel infinitely better since coming to Battle Creek and I shall carry as many of the principles home with me as possible."

The above letters must strike every one as being remarkable in this respect. The individuals have been relieved of their troubles, yet the point upon which emphasis is laid in almost every case is the instruction the patient receives in healthful living. This is only in accord with the Sanitarium ideals. It is not enough, says the Battle Creek Idea, either for the institution to cure a patient, or for the patient, from his point of view, to be cured. The outstanding fact is that through ignorance (in most cases), the patient is down on his physical uppers, as it were. If the Sanitarium can show the individual how to live, how to avoid the mistakes he has made in the past, the Sanitarium feels that it has accomplished the first of all its aims.

## LOBBY NOTES

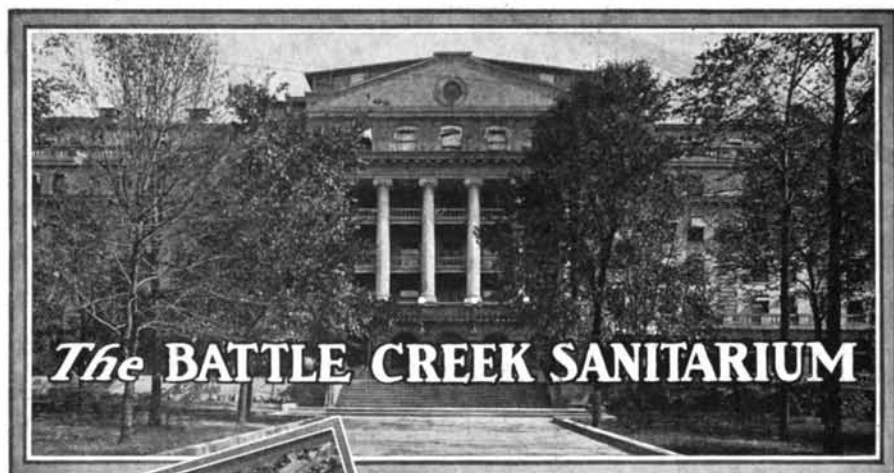
DR. J. T. CASE, Sanitarium Roentgenologist, delivered a stereopticon lecture last week before the Ingham County Medical Board of Lansing, Michigan.

MRS. ELIZABETH BATES, of Atlanta, will be a guest at the Sanitarium for the next two months. Mrs. Bates is a charming Atlanta hostess, and has made many friends at the Sanitarium during her previous visits.

MR. JOHN C. ROBINSON, President of the Pennsylvania Life Insurance Company, of Detroit, Michigan, who has been visiting the Sanitarium for the past few weeks, has returned home much improved in health.

MR. G. E. REES, a Salvation Army Commissioner, who for some weeks has been an honored and a popular guest at the Sanitarium, was tendered a banquet by the many friends he has made at the Sanitarium the other evening. The tables were tastefully decorated, and the occasion was a most enjoyable one to all. Mr. Rees has since left to assume his duties in Canada.

SIR HORACE PLUNKETT, member of the King's Privy Council, former Secretary of Agriculture for Ireland, and a leader in the movement for the regeneration of Irish life, is at the Sanitarium on his fourth visit. Sir Horace Plunkett was at the Sanitarium early in the present year, gathering material which he made into a paper which he read before the Royal Dublin Society on March 4th. The paper made a powerful appeal for more natural methods in the treatment of the sick and for the physiologic methods as employed at the Sanitarium, and made a profound impression throughout Great Britain, where it has been spread broadcast in booklet form. The London *Lancet*, the highest medical authority in the world, and the London *Spectator*, commented most favorably upon the paper.



## LEARNING TO LIVE

Most people are ill because of wrong modes of living. The moment you enter the doors of this "University of Health" your habits and daily mode of living are changed . . . you are taken back at once to simple principles—simple diet properly regulated, health-building exercise, fresh air, sunshine, physiological medical treatment if needed, and rest for body and mind.

Even a week or two spent at Battle Creek, amid all these conditions so perfectly adapted to rest and health betterment, will give you a new start in life—a real "uplift"—and send you back refreshed and invigorated.

If you are interested in "right living"—if you want to know more about the value of a real rest vacation at Battle Creek—send for this book. The coupon brings it.

**The BATTLE CREEK SANITARIUM**

THE SANITARIUM, Battle Creek, Mich.

Send me the free book illustrating and describing the Battle Creek Sanitarium, also "Simple Life in a Nutsell" and sample diet menus.

Name.....

Street.....

City.....

State.....

# BATTLE CREEK

NOVEMBER **IDEA** 15, 1913



THE NORTH LOGGIA





VOL. VI, No. 22

BATTLE CREEK, MICHIGAN, NOVEMBER 15, 1913

PRICE, 5 CENTS

# A HEALTH UNIVERSITY SUCCESSFUL EXPERIMENT

## AMERICAN THOROUGHNESS AT BATTLE CREEK ASSISTING NATURE TO CURE

BY RUTHERFORD WADDELL, M. A., D. D.

(FROM THE AUKLAND (NEW ZEALAND) STAR, FOR OCTOBER 6, 1913)

Is health the greatest of possessions? It is certainly the most desired. The universal salutation when people meet is an inquiry about health—"How are you?" or "Hope you are well." Thus we question and wish. "Give me health and a day," says Emerson, "and I will make the pomp of Empire ridiculous." But the greatness of this gift is not realized till it is lost. Supreme possession though it be, there is nothing of which we are more careless. In youth we squander it with elaborate prodigality. We act as if "tomorrow would be as this day, and even more abundant." A wise man learns from the experience of others, a fool only from his own. Thus, judged in the matter of health, men and women everywhere seem to confirm the grim, well-known aphorism of Carlyle. But Nature is very considerate, and she allows great latitude. She permits us to play with this gift as if it were a child's toy. We think her indifferent. But the day comes at last when she calls us to a reckoning. She may have allowed us to take liberties so long that we may have begun to imagine that she will not exact from us payment for the bills we have drawn. But no mistake could be greater. She is an inexorable creditor, and will not let us depart till we have paid the utmost farthing. One has only to walk the wards of a hospital, or to listen to the sighings and tossings of the countless multitudes in private houses, to realize how peremptorily Nature at last squares her accounts with her health outlaws. If only youth but knew and would learn!

### The Battle Creek Sanitarium

The Battle Creek Sanitarium is an "attempt to organize under one management the best results of experience

and the latest findings of medical science in everything pertaining to health culture and the treatment of the sick." I have spent some four months at this institution. I would like to indicate a few of the points which seem to me to justify its claim to be a university of health. One of the first requisites of a university is a good situation. Battle Creek is in the State of Michigan, climatically one of the most favored States of the Union. Its heat is never oppressive, nor its cold intolerable. Its air is pure and invigorating. The Great Lakes exercise a marked influence in equalizing its temperature. I was there when it was over 90 degrees in the shade, but I did not feel uncomfortable. It is set in the heart of an opulent Nature. The scenery round about is lovely. In summer it has a wealth of flowers unsurpassed even by Florida, "the land of Flowers," and there are more species of trees in Michigan than in all Europe combined. The fauna are not less remarkable. No less than 330 species of birds have been identified. The geological formation is equally noteworthy; the drift deposits are rich in fossils of every species, and the geological student has a veritable mine to work in. It is in the heart of this fauna and flora that Battle Creek is located. The town itself has a population of some 25,000 people, not too large to swamp individual life and not too small to permit of its descent to the status of a gossiping village. The wide and well-kept streets are lined with all sorts of trees, that afford a pleasant shade in the summer. They are very beautiful in their autumn glories, or when, stripped of leaves, we look up through the delicate traceries of their branches to the frosty skies and—"Dear God! the heavens, how fathomless and broad!" A building is not less essential to



## "Repeaters" at Sanitarium Have Big Banquet

"A SATISFIED customer," a commercial adage has it, "is the best advertisement." The Battle Creek Sanitarium is fortunate in having throughout the country many thousands of these walking advertisements. A number of them gathered in the south dining room on Tuesday, October 28th, for a "Repeaters' Banquet," the guests all being persons who had made previous visits here. The speeches were bright and snappy, much amuse-

ment being afforded by the give and take of repartee. Particularly diverting were the passages at arms between Mrs. Daniel Alden Wallace, of St. Paul, Minnesota, and Sir Horace Plunkett, of Dublin, Ireland.

Mr. Edwin K. Piper again did yeoman's service as toastmaster. "Last week," he said, "we had a banquet for newcomers, for the freshmen in this great Sanitarium school of health. Today we have asked you graduate students to come together to find how you have profited by your studies. For it is easy to see the results of a course in this university. People come here with sallow skins, bent figures, dull eyes and a tired look and we can tell at once they are freshmen. After passing through the curriculum here, they depart with clear skins, erect carriage, snappy walk and bright faces, and we know they belong to the alumni association."

### What One Guest Learned About Sweetbreads

Mr. Fred L. Rossbach, a prominent merchant of Chicago, told of the educational value of the Battle Creek Idea. "I suffer from too much uric acid in my system," he said. "Some time ago I was at dinner with a friend in New York and he urged me to eat some sweetbreads.

a university than a site. The main building of the Battle Creek Sanitarium consists of six stories, with a floor space covering four and one-half acres. It is fireproof, frost-proof and stormproof. From floor to roof there is nothing that will burn, with the exception of narrow door and window cases. In addition to this main building there are thirty others and a score of cottages, the whole being able to accommodate 1,200 people. The building has been—like everything else connected with it—an evolution. It was originally a two-story one, but as ideas widened it was found necessary to have house room for them. In place of this small, two-story affair of less than half a century ago, there are now these magnificent struc-

(Continued on page four)

'They will never harm any one,' he assured me. So I ate them. When I came to the Sanitarium, I was amazed to learn that they contain four times as much uric acid as roast beef, and were therefore the worst thing in the world for me. I used to eat great quantities of fruit, but here I learned that my diet should contain a larger proportion of cereals. I intend to follow these new ideas when I return to Chicago and to advocate them among my friends."

#### Why People Repeat

"Recently when in New Haven, Connecticut," said the next speaker, Mr. W. S. Thompson, of Harvey, Illinois, "I visited the factory of the Winchester Arms Company and saw many kinds of guns—big guns [laughter], little guns, simple guns, intricate guns, plain guns, highly ornamented guns—all kinds of guns except the well-known 'son-of-a-gun,' and he was absent [laughter]. They were all repeaters. This is an age of repeaters. Here too, I see various kinds of guns—big guns, little guns, highly decorated guns [with a bow to the ladies], and they, too, are all repeaters. I myself am a rapid fire repeater. I come very frequently. I was here in April and July, and came again in October. Perhaps I'll come again in November. Before I visited this place, I had a prejudice against sanitariums. I imagined they were like hospitals, filled with people who sat around with long faces and told their symptoms. But I found this place was very different from that. The guests here are fond of fun and they have a jolly good time."

#### A Battle Creek "Crank"

Miss Mary H. Bohn, who has written an admirable series of articles for *The Hotel World*, of Chicago, describing the Sanitarium and its methods, explained that she first came here twenty years ago. "I was so enthusiastic," she continued, "that my friends called me a 'Battle Creek crank.' I am proud of the title. If I were not that kind of a crank, I should now be only useless junk."

Mr. J. O. Cheek, of Nashville, Tennessee, made his first visit here in 1900 and returned in 1910. He suffered from malnutrition, but was cured. "I wish I could say it loud enough for every one on earth to hear," he said, "that there is no place like this for suffering humanity."

#### A Repeater for Sixteen Years

Mrs. George F. Cook, of Detroit, first heard of the Battle Creek Sanitarium in Europe seventeen years ago, and has been coming here for sixteen years. "My husband," she said, "was so ill with pneumonia that the doctors gave him up but two weeks in Battle Creek restored him to health." Mr. Cook is exchange editor of the *Detroit Free Press*.

#### Sir Horace Plunkett Explains

Mrs. Daniel Alden Wallace, of St. Paul, Minnesota, demanded to know of Sir Horace Plunkett what he meant by telling her that morning that the married women who were staying at the Sanitarium, were here to get away from their husbands.

Sir Horace, who is a bachelor, arose with a depreca-

tory air and said he wanted to wave the tablecloth as a sign of surrender. "I fear Mrs. Wallace misunderstood me," he went on. "I merely told her a story, which was as follows: a witty Irishman, Lord James Morris, was on the boat going from Queenstown, Ireland, to Holyhead, England. My cousin happened to be on board and asked Sir James where he was going.

"'Oh, I am just going for a change,' he said.

"'Is Lady Morris with you?'

"'Didn't I tell you I had come for a change?'"

Shouts of laughter greeted this retort. Then Sir Horace went on: "As for my opinion of the Sanitarium, I beg to refer you to my address, delivered before a learned society in Dublin, on 'Some Tendencies of Modern Medicine.' In this I explain why I think the institutional method is very superior to the private method, for in the latter there is no proper diagnosis. This is my fourth time here. I regard Doctor Kellogg as one of the greatest public men of the day. We don't appreciate him, for pioneer work is necessarily slow. But changes are coming. Here is an illustration of how old standards are shifting. My father told me that in his social grade a man was ostracized who did not do his share of the drinking. A 'one bottle man,' that is, a man who drank one bottle of port after dinner, was merely tolerated. A 'two bottle man' was more normal, while the man who didn't drink was a social outcast. But observe the difference today! So it will be with the idea which is taught here. I believe it has gained more in the last four or five years than in the previous thirty or forty in which Doctor Kellogg and his colleagues have been preaching it; and I believe that in ten years, one-half the intelligent English-speaking people will be converted to it."

#### The Record for Repeating—34 Years

Dr. Donald D. McDougall, of Cincinnati, first came to the Sanitarium thirty-four years ago at the age of twenty, and has been a firm believer ever since. He gave the grounds of his faith and said he had brought many patients here, having brought five that very day.

#### A HEALTH UNIVERSITY

(Continued from page three)

tures, costing, together with their equipments, nearly \$3,000,000.

#### This University of Health

preserves a fair proportion between its accommodation and its situation. And now what are the principles it stands for? I can only mention a few. One of the most important is that "Nature alone can cure. Physicians do not and cannot heal." That is right. The older we grow and the more we get knocked about the surer we become of the wonderful healing forces hidden in Nature. The best doctor is the man who works in closest partnership with Nature. "The body is its own physician, or, rather, the living, creative energy which dwells in every human being is the healer as well as the creator of the body. The office of the physician or nurse is simply to cooperate with this healing power by the use of those agencies which scientific experiment and practical experi-





"Florida in Michigan"—winter scene in the Sanitarium Palm Garden.

ence have shown to be most potent and permanently efficacious." What are these? Nature has no "cure-alls," no "short cuts," no "happy-go-lucky" ways. She has certain agencies always at work, and universally present. To grow acquainted with these and learn their unvarying laws is the road to health. "Water, air, sunshine, heat, natural dirt, and natural living—these are the agents essential to the maintenance of vigorous, efficient life, and these are the agents which accomplish most in the cure of disease." Hence, in the Battle Creek system every effort is made to scientifically bring these to bear upon the patient. Battle Creek was originally established to put in operation in America the cold water cures made famous a century ago by Priessnitz. His methods were crude, but the success which he gained directed attention

to the mysterious but extraordinarily efficacious power latent in water. In Battle Creek every device has been resorted to in order to capture this power and turn it to healing purposes.

#### A Wonderful System of Baths

Their system of baths is probably the most complete in the world. There are hot and cold baths of every degree and kind. The bathrooms are beautifully constructed, and fitted with every possible device for applying water. One can make a choice from upwards of 200 various applications. Much emphasis is put on the swimming bath. There are two pools—one under the roof for winter, and one in the open air for summer use. Swimming is emphatically commended as the very best



The evening Grand March in the Sanitarium Gymnasium.

form of exercise. Then, the mysterious but not less efficacious influence of light is utilized. One of the most popular institutions at Battle Creek is the sun bath. My discovery of this was amusing to me. Wandering into a large enclosure known as the men's open-air gymnasium, I suddenly came upon what looked like long rows of dead pigs, scraped and ready for the market, lying on their sides in the sun. As I drew nearer I saw them begin to move. The whole crowd—there might have been a hundred of them—seemed simultaneously to lift up one hind leg, then both. Soon the secret was discovered. It was a company of patients having a sunbath, and performing various gymnastics under the direction of a professor of the art. These naked men, lying spread out on the sands, and performing various bodily evolutions, were as comical a sight as I have witnessed for a long time. They were of all sizes, shapes, and colors. Some of them were so stout that it must have been a long time since they had seen their toes, except in a looking-glass. It must have been one of the sort that a tailor started to measure for a suit of clothes. He looked at him and round him, puzzled for a moment. Then, placing the tape line on the fat man's stomach, he said to him: "Keep your finger on that, sir, and I'll be round after a while." On the other hand, some were so thin that you might almost have imagined that they had got up out of their coffins and forgot to go back again. An Irishman was describing to another how thin a third man was. He said: "You're thin and I'm thin; but, begorra, he was thinner than the both of us put together." That might be said of some of these patients. After the gymnastics are over they lie about on sheets in the sun, or engage in handball games, disport themselves in the swimming pool, so they gradually gravitate towards the pristine state "when wild in woods the native savage ran." One can easily pick out the newcomers. Their skins are as pale and blanched as flowers in a dark cellar; but after a few sunbaths they are tanned into Maori browns or Indian reds. When it becomes too cold the exercises are carried on indoors. The sunshine is bottled up and reproduced in the form of electricity. Electrotherapy is one of the most complete of the Battle Creek institutions. It is in use in all forms—galvanic, faradic, and static currents, and especially the sinusoidal,

which has the advantage of being painless in application, even while producing the most vigorous muscular contractions. When one investigates these electrical contrivances for administering light and heat to every organ of the body he will not be disposed to dispute the claim that there is no place in the world where the various useful electrical currents are applied with greater thoroughness or efficiency. Massage, of course, is also in use. A very novel form of it is in the mechanotherapy department. Ingeniously-devised machines, at once uncanny and amusing, driven by electricity, knead and rub, percuss, gently shake, and vibrate the organs of the body in a way far more effective than can be done by the human masseur. Battle Creek, however, is mainly known to the outside world by its

#### System of Dietetics.

This has a negative and positive side. There are certain foods that are absolutely prohibited. Among these are flesh foods of all sorts, save eggs, the latter only in a limited degree. In this index expurgatorius are also included tea, coffee, alcohol, pickles, pepper, spices, and ordinary cheese. The chief reason for the exclusion of these foods is that most patients are suffering from disease either produced or intensified by them. Of such is the fell brood of bacteria which swarm in the intestines. These are responsible in whole or in part for such maladies as chronic rheumatism, Bright's disease, biliousness, neurasthenia, pernicious anemia, intestinal catarrh, rickets, arteriosclerosis, or premature old age, etc. This is a fearful array of enemies, any one of which is enough either to destroy life or to make it miserable, unless, indeed, a person has the invincible optimism of Sydney Smith. Once when borne down by suffering he wrote to a friend that he had gout, asthma, and seven other maladies, "but was otherwise very well." There is thus very good reason for the exclusion of these foods from the dietary. What is to replace them? These banned foods principally supply protein, the muscle-building element of food, to the system. This is essential to health and strength. If they are excluded something else must take their place. This something else is found in nuts, fruit, and cereals. The Battle Creek system stands for

### A Low-Protein Diet,

being backed up in this by the experiments of Chittenden, Fletcher, Fisher, Mendel, and others. It is a high protein diet that is responsible for clogging the colon with poison-producing germs, causing the diseases we have mentioned. To get rid of these germs we must cut off the source of supply and sustenance. We do this by confining the dietary to vegetable products—nuts, cereals and fruits. The proof of this is in experience. Thus, for instance, more than 250,000,000 germs to the ounce have been found in the stomach fluid of patients under treatment at the Sanitarium. After a test meal exclusively of fruit no germs whatever could be discovered. An exclusively fruit diet for a while would therefore be the best means for disinfecting the stomach and alimentary canal, and fruits, the acid and sub-acid, are the best for this. Accordingly fruit has an important place in the Battle Creek dietetics. Among these apple juice and grape juice are the best germicides. Reinforcing these is, of course, sour milk. Great stress is laid on it. Expert bacteriologists prepare this milk for the Sanitarium from cultures specially imported from Bulgaria, India, and Mesopotamia. In addition to the milk ferment the "friendly germs" are also supplied in the form of cheese and tablets. In order to prepare all these foods and fruits in their various permutations and combinations for the table a small army of cooks and dietitians are constantly at work.

### A Huge School of Domestic Economy

On certain days of the week patients are admitted into the experimental kitchen, and get instruction in the methods of preparing and cooking the various foodstuffs. But perhaps not the least useful feature of the dietetic system of Battle Creek is to inform its patients not only what to eat, but how much. Most people undoubtedly eat far too much. We have all need to recall the old adage, "To lengthen your life shorten your meals." But there is an opposite danger: eating too little. How shall one know? Formerly it was guesswork. But scientific progress has made it possible to determine the food value of various ingredients. At Battle Creek an ingenious plan has been perfected, whereby on every bill of fare the patient can tell the precise amount of protein, fats, and carbohydrates each article contains, and the amounts necessary for the proper maintenance of the body.

### An Army of Trained Nurses

Another feature of Battle Creek is its nurses. The place is visited by about 7,000 people annually, and in the summer months there are usually over 1,000 people to be cared for. This requires an army of some 300 nurses. The training school for these at Battle Creek is one of the best equipped in the United States. Space will allow us to mention only one other feature of this great institution—its religious and altruistic character. A religious atmosphere prevades the place, but is not obtrusive. There is worship every morning, attendance at which is, however, purely optional. Of the early founders of the place, a majority belonged to the Seventh Day Adventists, but it is now under no church or sectarian control. It is a Christian foundation in the broadest sense of the word. That is to me a strong recommendation of its work.

### Altruistic Nature of the Institution

The altruistic character of the institution is indicated by such facts as these: The profits of the institution does not go into the pockets of any individuals or corporation. They are devoted to philanthropic purposes, and to the extension and improvement of the equipment of the establishment. The superintendent (Doctor Kellogg) gives his services gratuitously, while the other physicians receive a very moderate salary. Part of the profits is expended in sending them to the great medical schools of Europe to study the newest discoveries and methods of dealing scientifically with disease. Part of them goes to philanthropic and charitable purposes. Over a million dollars have been so expended. This has been made possible by the physicians receiving no professional fees and hundreds of the nurses and helpers giving their services for a small salary and as a beneficent contribution to suffering humanity.

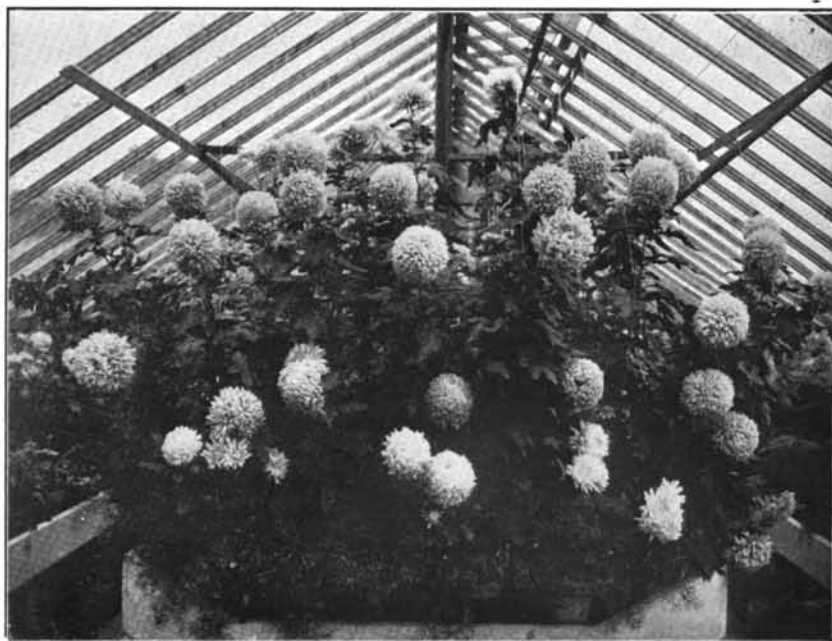
### The High Standards Maintained

I have been able to indicate only a small part of the ideas and activities of this institution, but after investigating it somewhat closely I am not disposed to dispute the claim that in grounds, buildings, and material resources, in elaborateness of equipment, in administration and teaching facilities, in scope of work and excellence of standards, this system of schools known as Battle Creek Sanitarium is fully entitled to rank with the average university. With its own dominant ideal, however, of health promotion in all its phases, this university occupies a place entirely its own, and thereby suggests a much-needed advance to our regular universities, which are so deplorably lacking in health education.



Photographic Department, where are made all the photographs used in illustrating the BATTLE CREEK IDEA and Sanitarium advertising literature, also slides and films employed in stereopticon and moving-picture lectures, which are a prominent feature of the Sanitarium educational program.





Mums in one of the Sanitarium greenhouses.

## WHY CHRONIC DISEASES AND INVALIDISM ARE BEST TREATED AT SANITARIUM

UNDER the above head, the *Medical Progress*, of Louisville, Kentucky, publishes an article by Paul Kratz, M. D., Managing Editor, giving an account of a recent visit to the Battle Creek Sanitarium:

"The Managing Editor, on a recent visit to the Battle Creek Sanitarium, Battle Creek, Michigan, was forcibly impressed with the fact that persons suffering from chronic ailments, who fail to be benefited at home, almost invariably mend under proper treatment and care at a well regulated sanitarium.

"Perhaps no institution in the world is as thoroughly equipped as this well known place to properly administer unto the needs of chronic invalids.

### The Sanitarium a Philanthropic Enterprise

"Incorporated as a public philanthropy, which has no branches, no traveling representatives, and no private interests, all accrued profits from pay patients being reinvested in apparatus and appliances and laboratory facilities in order to keep up with the highest approved medical standards, is sufficient reason why such excellent results are attained here where utter failure is met with in so many other sanitariums.

"Dr. J. H. Kellogg, head surgeon and for many years superintendent, aged in experience and knowledge in handling invalids, a man of inexhaustible vitality, and youthfulness, watches the details of the medical department with astonishing minuteness.

"At the head of the staff of twenty-one physicians, mostly specialists, both male and female, every department is scrutinized with a view of producing maximum results.

"Doctor Kellogg sends his department heads to the medical centers of Europe every year or two in order that they may keep abreast of the times and the latest findings in their chosen specialties, both as to apparatus and medical research.

"Recently at a London Medical Congress, Doctor Case, in charge of the X-ray Department at the Battle Creek Sanitarium and a delegate to this meeting, carried off the highest honors for the best work done up to that time in this department of medical science.

"Doctor Kellogg correctly says that the aims of the Battle Creek Sanitarium are to institute every feasible method known to modern science for the accurate diagnosis of disease and deviations from the normal standard of health and to employ every curative measure known to medical science.

"In carrying out this, every case is studied particularly and every means, medicinal as well as physical therapy, is applied in the most approved manner.

"Also there is here a combination of special professional, technical and institutional advantages afforded by the modern hospital with the comforts of a first-class hotel which is pervaded with an atmosphere of freedom and homelike comfort that is entrancing.

"Among new features recently added at the Sanitarium is to be mentioned the Roentgen Laboratory, which ranks with the first in the world.

"We may also refer to the Electro-cardiograph; the respiration calorimeter of Benedict for the clinical study of metabolism, etc.

"Here system is perfect and no detail however insignificant is overlooked.

"Diet too, is perfectly adapted and instruments of precision in diagnosis and treatment are at the command of accomplished physicians.

"When a patient comes to the Battle Creek Sanitarium a designated physician takes him in charge who listens with attention to the story of his illness, and reads the letter sent by the physician who sent the patient.

"A thorough examination is made, the aim of which is to uncover the fundamental physical defects and to ascertain the actual vital status.

"Careful inspection of the mouth and teeth are also made. The blood and the urine are also studied in the laboratory of the Sanitarium under competent men.

"The same can be said also of the examination of the feces, the radiographic examination of the colon, etc.

"Taken all in all, the visit by the Managing Editor to the Battle Creek Sanitarium has had a lasting influence on his mind.

"He cannot forget his courteous reception and the manifest kindness which pervades the institution."

## Some of the World's Famous Women Who Have Become Flesh Abstainers

THE New York *Sun* recently produced a remarkable list of famous women who have become converted to a non-flesh diet. For a variety of reasons, says the *Sun*, flesh-abstainers are on the increase throughout the world. The *Sun* article is as follows:

### George Bernard Shaw

Perhaps the most famous vegetarian in the world today is George Bernard Shaw. He has sounded his trumpet many times to draw attention to the subject. His reason for being a vegetarian is that meat is distasteful to him, that it is repulsive to him to think of eating the carcasses of slaughtered animals, that meat eating is unclean, unartistic, and revolting. He also feels repulsion against all alcoholic drinks and tobacco; why should he fill his system with such unnecessary rubbish, he asks, and dull and befog his brain with them, when he is so much better without them?

Mr. Shaw, is tall, robust, and healthy, with a ruddy color, clear eyes, and an elastic gait. His diet consists of fruits, nuts, vegetables, and cereals. He often makes what he regards as a hearty meal on four bananas, and when he is travelling he does not have the trouble that most people do, for he can carry in his grip a supply of nuts, and with the fruit and vegetables and grains that he can buy he can manage beautifully. He said at a meeting of vegetarians:

"There are two sorts of mankind, those of higher and those of lower character. The lower craves meat. I do not like meat and never did."

And again he said:

"Daniel was a vegetarian, and after a time he became very handsome. That struck me at the time. I am not sure that it did not have something to do with my views."

### Marie Corelli

Miss Marie Corelli is another English vegetarian of literary fame. She is a vegetarian because of her aversion to killing; the thought of taking life to satisfy the appetite is shocking to her. One has only to see Miss Corelli to realize that meat is not at all necessary to an appearance of roundness and perfect health, for Miss Corelli is as plump and rosy as a child.

### The Countess of Warwick

The Countess of Warwick adopted vegetarianism about a year ago and people have surmised a good many motives for the action of the beautiful noblewoman. Some say she made the change for the sake of her beauty and figure, others because of religious scruples, and again others because she finds that her wits are clearer on a vegetarian diet. It is to be supposed that the first reason has had a good deal to do with it, and that Lady Warwick viewed with dismay the rapidly increasing flesh that was destroying all her beauty. Since she adopted vegetarian-

ism she has lost many pounds and has regained her former slenderness and loveliness. She has made a careful study of a perfectly balanced diet, and is thus enabled to nourish her body without becoming over stout or over lean. She is fast making other converts to vegetarianism, for to be overweight is almost a disgrace at the Court of St. James.

There are three famous French actresses who have, within the last ten years, become strict vegetarians, and one and the same motive prompted each—the preservation of beauty and slenderness. The actresses are Rejane, Sarah Bernhardt, and Cleo de Merode.

### Sarah Bernhardt

One can not imagine Sarah Bernhardt getting actually fat, and yet the famous actress was gaining weight and losing the lines of her figure, notably about the neck and waist. As in everything else in life, she made a careful study of the matter and conferred with authorities on the subject. The result was that she gave up all flesh food and became strictly a vegetarian. She has demonstrated that a vegetarian diet makes one younger and more elastic, and gives a clear brain and steady nerve. She has lost her heaviness, and her figure has greatly improved so that she is enabled at nearly seventy and as a great-grandmother to act the rôle of *Joan of Arc* in tights and to reveal an agile, graceful figure.

Mme. Bernhardt does not even eat eggs, as they are a form of flesh food, and she takes no chances. She sticks to a simple though widely varied diet of dried and fresh fruits, nuts, cereals, and vegetables. Her only beverage is cool spring water.

### Rejane

Rejane became a vegetarian to stay the appalling increase of her weight. She was becoming so stout as to be quite unfitted to take the parts in which she had been so successful the world over. It was a good deal of a wrench to her will power, this renouncing of meat, for she is fond of

(Continued on page eleven)

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## PASTORS FROM BATTLE CREEK AND VICINITY BANQUETED

THE banquet which the Sanitarium gives each year to the pastors of Battle Creek and the neighboring towns, took place November 3d. Wives were invited with their husbands, and some fifty people formed the company. The Rev. W. S. Potter, retired pastor of the First Presbyterian church of Battle Creek, presided in happy fashion, Dr. Benton L. Colver welcoming the guests in behalf of the Sanitarium.

A feature of the meeting was an address by the Rev. Dr. Thornton A. Mills, a missionary lately returned from Korea, who told how the Christian work in that country had been hampered by Japanese persecution of converts.

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## FORCING THE APPETITE

THERE is such a thing as forcing the appetite, declared a Sanitarium physician the other day. "But it all depends on how the forcing is done. One must not sit down at a table and say, Now, then, my physician says I must eat so much potato. I don't like potato, but I suppose I must get it down some way," and then proceed to swallow it by force. This is not the way to force the appetite, but rather simple measures like the following:

In the first place, be sure when going to bed at night to open all the windows and breathe fresh, pure air all night long. Use plenty of bed clothing, bundling up just as though going out for a sleigh ride. Next morning, it is safe to say, you will have an appetite that does not have to be forced, especially if after dressing you go out of doors for a brisk walk in the open air.

Take a cold tonic bath, or a cold water rub, or a cold air rub, doing every thing possible to come in contact with the cold. In reading the Arctic explorations we never learn of travellers in the North suffering from lack of appetite; they are always ready for their meals. In the same way no one, even in our ordinary city life should suffer from lack of appetite, provided he gets plenty of outdoor life and comes in contact sufficiently with the cold air.

Work is another means of producing appetite. The Bible says that man should live by the sweat of his brow, but the trouble with most of us is that we let some one else do the sweating. In the extreme northern countries, people sort of hibernate in the winter, as bears do, but they have discovered that in order to live, in order to be healthy, they must sweat, so they build themselves sweating houses in which they place hot stones, pouring onto them cold water which is converted into steam, filling the room with hot vapor so that when undressed they perspire very freely and the skin becomes very red. Occasionally during the bath they will rush out and roll in the snow and then dash back to the sweat house again, then out into the snow again and back into the sweat house. In this way a profuse sweating is brought about, which, in the more temperate climates, should be produced by hard muscular work.

What the sweating does is to remove from the body the accumulated waste matters which clog the tissues and the pores of the skin, and which are responsible for the lack of appetite in the first place. Anything that will stimulate the excretion of these poisons, opening the pores and increasing the circulation of the blood will, without any doubt whatever, restore appetite to its normal condition.

## LOBBY NOTES

THE group of missionaries at the Sanitarium has been joined by Mrs. Rosina E. Price, who for many years represented the Baptist work in Burmah.

MR. JOSEPH BLOUNT CHESHIRE, of Raleigh, North Carolina, recently spent two days at the Sanitarium visiting his daughter, a guest at the institution.

DR. C. P. PRUIN, of Chicago, a graduate both in denistry and in medicine, is spending a few weeks at the Sanitarium in rest. Doctor Pruin makes a specialty of diseases of the mouth.

MR. R. C. PRYOR, of Houghton, Michigan, has returned to the Sanitarium, having been at the Sanitarium on several previous occasions. Mr. Pryor is interested in the northern Michigan mining industry.

DR. W. S. MARTIN, of the Sanitarium staff has just returned from a ten days visit in the South. The Doctor attended a meeting of the Mississippi Valley Medical Association, afterwards visiting Hot Springs, St. Louis and Chicago, in the interest of his work.

UNITED STATES Senator Charles E. Townsend, of Jackson, Michigan, recently spent a day at the Sanitarium. He comes once or twice a year, not, as he explained, because he is sick, but because he does not want to be. With periodical examinations like those here he feels that disease cannot steal on him unawares.

AMONG the distinguished guests who have recently visited the Sanitarium is the honorable W. D. Gordon, of Midland, Michigan. Mr. Gordon was for several years speaker of the House of Representatives in the Michigan Legislature, was a former candidate for lieutenant-governor, and is a prominent member of the Michigan bar.

MR. J. M. PIERCE, of Des Moines, Iowa, has recently returned to his home after a several weeks' visit. As the publisher of three great weeklies, the *Iowa Homestead*, of Des Moines, the *Farmer and Stockman*, of Kansas City, and the *Wisconsin Farmer*, of Madison, Wisconsin, with a combined monthly circulation of 1,500,000 copies, Mr. Pierce wields a wide-felt influence. He is a frequent visitor at the Sanitarium, and Mrs. Pierce remains behind on the present occasion for a few weeks' further rest.

DR. WALTER B. CANNON, Professor of Physiology in the Harvard University Medical School, was the guest of Doctor Case at the Sanitarium on November 2d. An informal dinner was given in the main dining room in honor of Doctor Cannon. Doctor Kellogg presided and the entire medical staff of the Sanitarium met the distinguished visitor. Doctor Cannon's work on the physiology of digestion, particularly with reference to the movements of the stomach and intestines during digestion, is known the world over and his views form one of the strong foundations of our present day system of dietetics. A good deal of Doctor Cannon's earliest work was done with the X-ray; in fact, he was probably the first to apply the X-ray method to the study of the digestive tract. His experiments were done on dogs, cats, rabbits and other small



animals in the day when X-ray instruments were not sufficiently powerful to examine the stomach and intestines of human beings.

## FAMOUS WOMEN WHO HAVE BECOME FLESH-ABSTAINERS

(Continued from page nine)

good living, and especially of fine dinners of many courses, but her art is her life, and so she schooled herself to give up a meat diet and to adopt vegetarianism. Now she finds it easy to go without flesh food. She has found that she can keep herself youthful and slender in appearance, and her figure is strikingly beautiful, with no hint of the heaviness that once threatened it.

Cleo de Merode is perhaps the most famous dancer that the Paris Opera ever had. Her figure was superb in its perfect roundness and the long, beautiful throat and fine, small head of the dancer were copied many times by artists. Then of a sudden she began to show an increase of flesh. She did not dance as lightly nor look as young and fairylike. Her pictures no longer brought a ready sale on the boulevards; artists no longer beseeched her to pose for them. She was, in fact, losing her vogue. Then of a sudden she disappeared.

She dropped out of the public view as completely as if she had died and no one saw her for a year. Then she as suddenly returned, years younger in appearance, slender and graceful as a fawn and radiant with a new kind of freshness. She created a veritable sensation last October in Paris, and everybody of course wanted to know her secret. It was simply that she had adopted vegetarianism and had dieted for a year without a mouthful of flesh food of any kind. Her appearance told the rest of the story. She looks exactly as she did twelve years ago, when she first became famous as a beauty and a dancer.

### Rodin

Auguste Rodin, the sculptor, became a vegetarian when he found that he could do much better work on a fleshless diet. His imagination worked more clearly and the general tone of his productions was higher. Much the same motive prompted Madame Maeterlinck (Georgette Leblanc) to renounce the flesh diet.

Religious feelings solely have prompted three other famous women of Europe to give up the flesh of animals as food. They are Princess George of Greece, who was Marie Bonaparte of Paris; the Grand Duchess Serge, of Russia, and Mme. Dieulafoy, the famous archeologist, who has dressed like a man for many years and is a familiar figure in Paris, with her husband, who is also an archeologist of note. It is said that the two patronize the same tailor and have their clothes made exactly alike.

All three women have been converted to so-called Orientalism; that is to say, they have come under the influence of the old religions and philosophies of the East, which forbid the eating of meat, as it entails the taking of life for the purpose.

Princess George, of Greece, is an ardent student of Vedanta, having become a convert to the simple, ancient faith, which has been called the oldest religion in the world and one of the purest. She eats no flesh food at all, not

even eggs. She is a very beautiful and highly cultured woman.

The Grand Duchess Serge became an Orientalist at the time of her husband's assassination several years ago, and she now lives a life of retirement in a Russian convent, having given up her life to working for the poor. She eats no flesh of any kind, and lives chiefly on rice, wheat, and dried fruits. She is an exquisitely beautiful woman, with a face of great purity.

Mme. Dieulafoy was converted to Orientalism during her residence in India while at work excavating ancient ruins.

### American Flesh-Abstainers

In America there are many famous vegetarians. Indeed vegetarianism has of late spread among intellectual Americans to a surprising degree, owing chiefly to the advice given by certain scientific men, including Doctor Chittenden, of Yale, and Horace Fletcher.

Doctor Chittenden asserts that the flesh of dead animals is not fit to enter the human stomach, that as soon as the spark of life goes out of an animal's body putrefaction begins, and one thus takes into the body matter in a greater or less degree of decay. So great a foothold has vegetarianism obtained that Congressman Longworth said recently that the increased price of leather was largely due to its spread.

Among the well-known people of the United States who are vegetarians are Prof. Herschel Parker, of Columbia University, who is again to attempt the ascent of Mount McKinley this summer; Ella Wheeler Wilcox, Florence Morse Kingsley, Grace MacGowan Cooke, Upton Sinclair, Horace Fletcher, Edwin Markham, and Mrs. Robert A. Van Wyck, wife of the former Mayor of New York.

Wu Ting-fang was converted while Chinese Minister at Washington, and he has made so deep and careful a study of a perfectly balanced diet that he declares that it will enable him to live to be at least 150 years of age, and perhaps 200. He says also that it has cured him of many ills.

Of the American vegetarians named, Prof. Parker, Ella Wheeler Wilcox, and Mrs. Robert A. Van Wyck became such through religious feelings. They are all Orientalists and Vedantists.

Senator La Follette is an example of a vegetarian politician. He is a rigid follower of a fleshless diet and was converted to it for health's sake. He finds he can do twice the work on a fleshless diet that he did before, and his head is vastly clearer. He has never craved meat since he gave it up several years ago.

Senator La Follette nearly ruined his stomach in his strenuous university days, when he was trying to support his mother and brothers and sisters and at the same time pay his own way through school. His later work in politics also caused him to neglect his body, and the result is that he must take the greatest care of his stomach. He has discovered that by following the vegetarian diet he can do the work he has set out to do. He also discovered that the eating of meat militated against his health, and he therefore is a loyal vegetarian, not because he is a faddist, but because he finds the vegetarian diet the most satisfactory for him.

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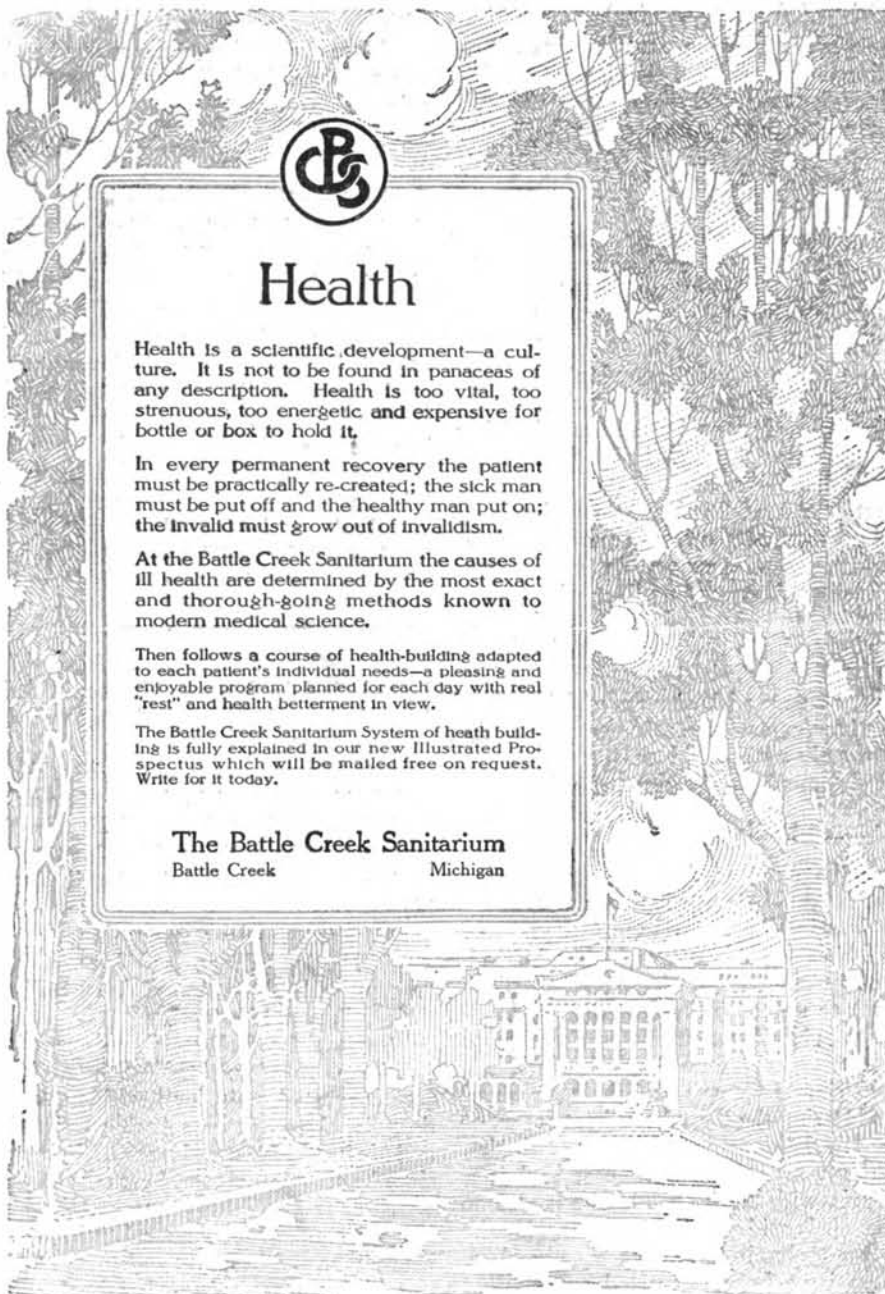
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