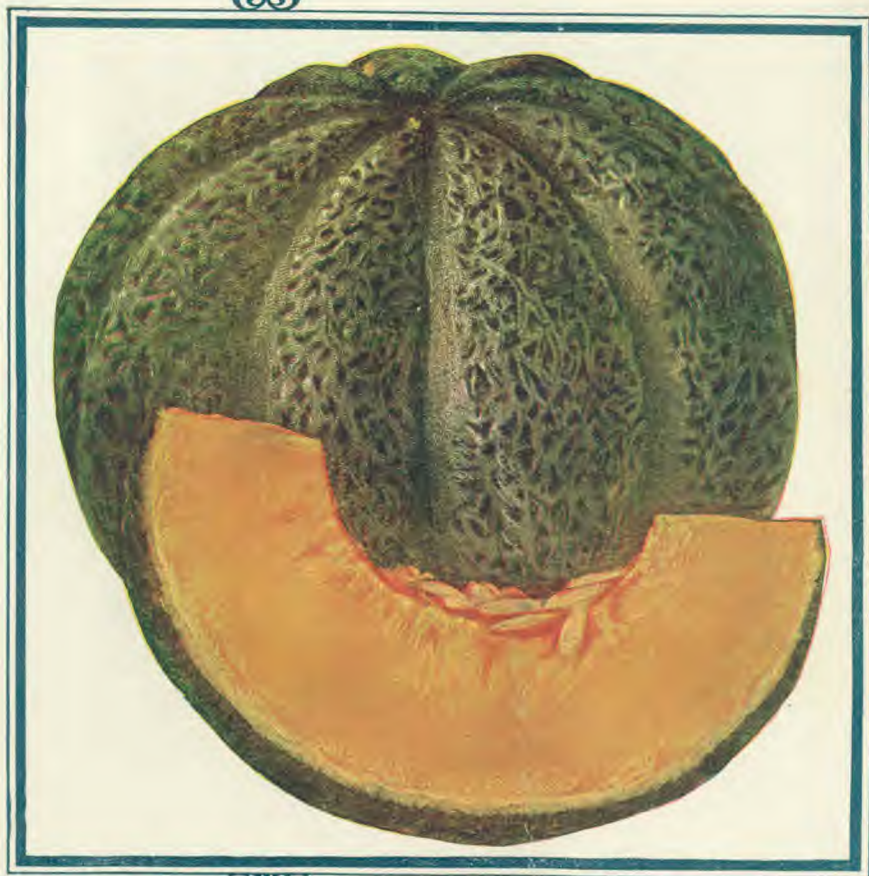


Life & Health

THE NATIONAL HEALTH MAGAZINE.



OCTOBER



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October Number

of the

Signs of the Times

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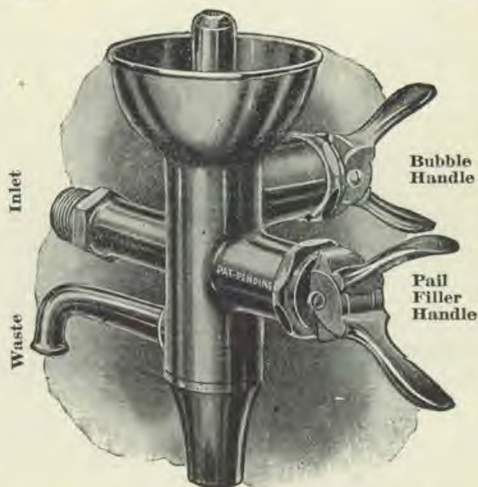
There are other helpful articles, of which "A Cure for Constipation" and "Natural Methods in Curing Disease" will be of special interest. A number of timely articles on present-day conditions and their real place in world events go to make splendid reading for several evenings.

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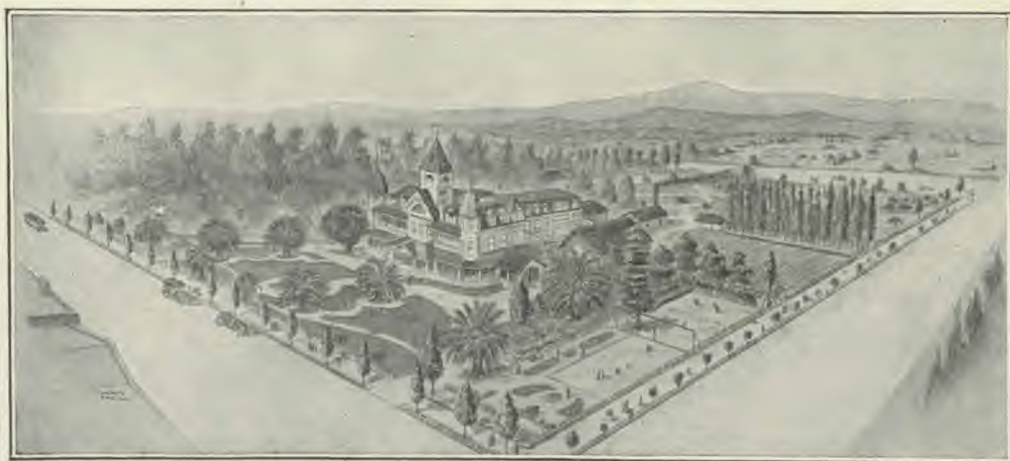


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GLENDALE SANITARIUM -:- -:- -:- -:- -:- GLENDALE, CALIFORNIA

This Issue

GIVING a hurried glance over the mortality tables, one sees that the average of life is lengthening, and takes courage. There is an important factor he does *not* see in this hasty glance; it is that the increase in longevity is almost entirely due to the saving of baby lives. The conditions at the age when men should be at their prime are becoming deplorable. Men now age and drop off much sooner than formerly. Dr. W. B. Holden points out the cause and the remedy in his article "What Are We Coming To?"

Dr. G. K. Abbott gives another illustration of the value of hydrotherapy in correcting abnormal physical conditions. This paper is adapted from his forthcoming book on "Hydrotherapy for Nurses," which will soon be issued by the publishers of LIFE AND HEALTH.

"Conditions Favoring Ill Health," the editor's second paper treating of the relation of the intestine to health, explains in simple language the relation of intestinal bacteria to disease.

Perhaps there is no one thing that so takes the charm out of life as inability to sleep. There is no remedy outside of some strong hypnotic that will uniformly induce sleep. One person's favorite remedy may be absolutely inert for another sufferer. Dr. Paulding gives, in his paper, a few of the causes of sleeplessness, and what may be done in relief.

Mary Alden Carver, who finds the autumn her favorite season, has written a sympathetic article, which may help some readers to come closer to nature and to health during the autumn months.

Mr. Lome grows very enthusiastic over the peanut, dietetically and economically. The peanut certainly is a most excellent crop, both for its direct returns and for its fertilizing quality. As a steady diet we would advise our reader to be cautious of the peanut. Be on speaking terms with the goober, but do not become too familiar!

The November Issue Will Contain

By M. A. Laselle: "Poor Ventilation in Churches."

By G. K. Abbott, M. D.: "Restorative Effects of Hydrotherapy."

By Lucy A. Yendes: "Headaches: Cause, Prevention, and Treatment."

By W. W. Worster, M. D.: "The Science of Drinking."

By Laretta Kress, M. D.: "Two Mothers,"—a story telling why one baby was rugged and the other sickly.

By George E. Cornforth: "Apples and Citrus-Fruits."

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Entered as second-class matter June 24, 1904, at the post-office at Washington, D. C., under the Act of Congress of March 3, 1879.

TERMS: \$1 a year; 10 cents a copy. Special rates to agents.

POSTAGE IS PREPAID by the publishers on all subscriptions to all countries.

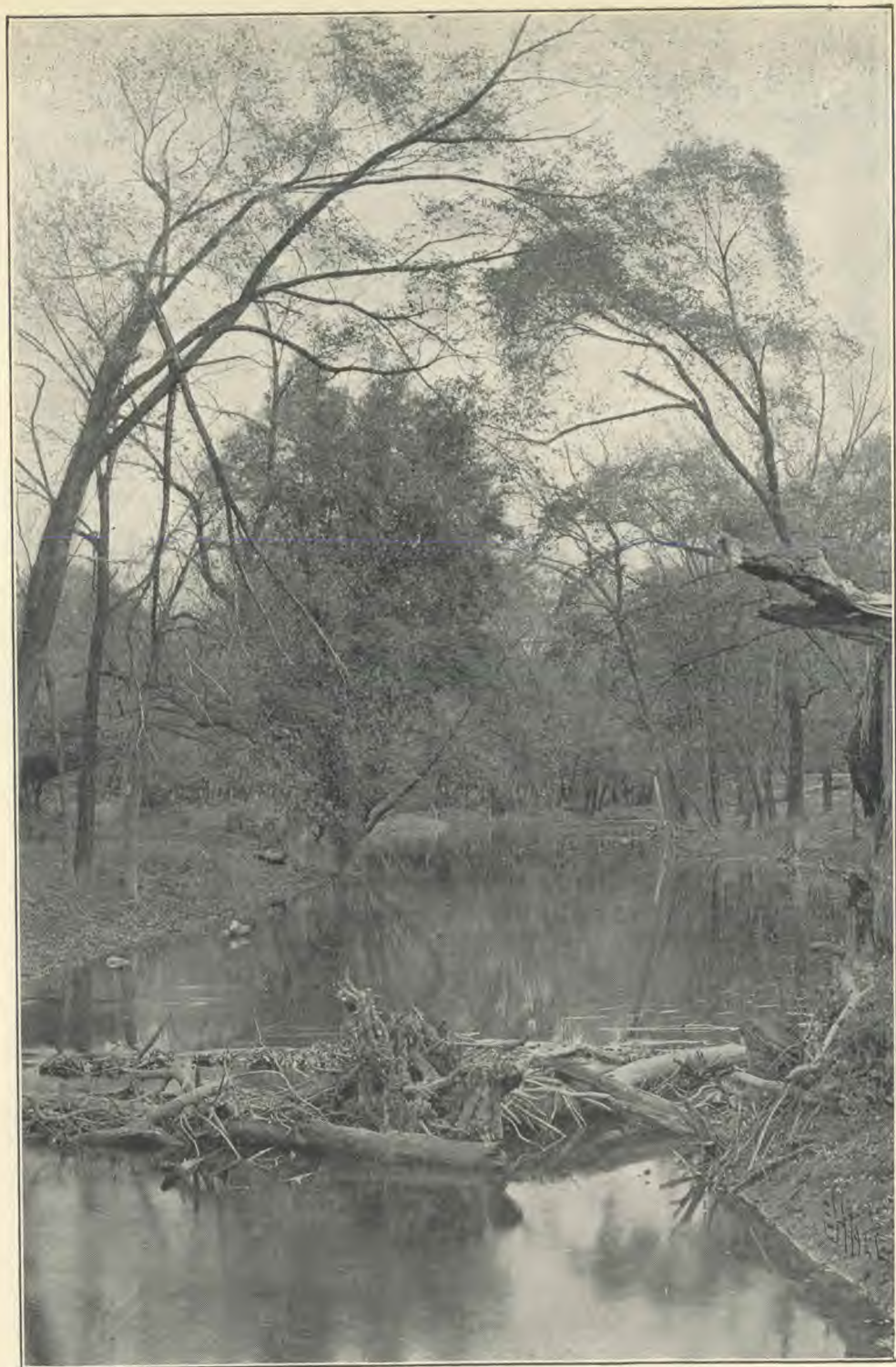
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PREPARES FOR REST"

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Published Monthly

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THE ETHICS OF ADVERTISING

If you want to know the ethics of a publication, scan its advertising pages.

❧

If it contains get-rich schemes or get-well schemes, written in roseate language, draw your own conclusions.

❧

There is a type of ethics that permits a man owning property to rent it for a saloon, a gambling-den, or a house of ill fame, with the justification that it's none of his business what is done in the house by the renters.

❧

The man may belong to the church, and yell for prohibition or local option.

❧

But he will countenance no law, whatever its value to society, if directly or indirectly it pulls on his pocketbook.

❧

The advertising man sometimes says it's none of his business what is done with the space he rents; but it is his business.

❧

The rental of space in a supposedly respectable periodical for questionable purposes is prostitution.

❧

It is a type of venality that is becoming more scarce in the better grade of publications.

❧

Even the newspapers are, for some reason, becoming measurably cleaner in this regard.

❧

If the campaign is continued, how long will it be till advertisers are honest?

Why, after all, should there be a doctrine that advertising, in order to be successful, must exaggerate, and misrepresent, and falsify? You answer.

❧

The meanest class of advertising frauds is that which filches the few dollars from the pockets of the sick.

❧

Of all people in the world the sick are most in need of what little comfort they can get from a rightful use of their money.

❧

Their needs are greater than those of well people.

❧

And their earning power is much less.

❧

We were in a meeting of free-thinkers recently, where one speaker condemned the action of the government in suppressing absent-treatment frauds.

❧

His basis was that the government should not step in. The people should be permitted to gain their education by the experience.

❧

On that score why not do away with all pure food laws? Why not allow the selling of typhoid milk and rotten beef?

❧

"Let the buyer beware," is the old motto which our public-spirited men are attempting to change to, "Let the seller beware."



WITH the exception of pneumonia and cancer, the mortality from all infectious diseases has been greatly lessened during the last thirty years. The death-rate from typhoid fever has been reduced 54 per cent since 1880. The diphtheria death-rate has been reduced 80 per cent since 1880. A large proportion of this decrease in diphtheria mortality is due to the use of antitoxin, which was first introduced in the treatment of this dread disease in 1895. In New York and in Pennsylvania the death-rate from tuberculosis has decreased nearly 50 per cent in the last thirty years.

The scourges of smallpox have lost their terrors. In civilization, thanks to the general acceptance of vaccination, an epidemic of smallpox is impossible. Sanitary officers are able to control the plague. By means of practical methods of destroying mosquitoes and of keeping away from their bites, malaria is rapidly disappearing. General sanitation and isolation are conquering yellow fever. Municipal control of the water-supplies for our great cities accounts for the 54-per cent decrease in the death-rate from typhoid fever. More rigid efforts on the part of the health authorities and the cooperation of an intelligent and enlightened public make it not impossible further to decrease the death-rate from all the above-named infectious diseases. Because

of these sanitary measures which have already been adopted and carried out, it is evident that the lives of many youth have been saved, and that consequently we would expect a great decrease in the death-rate during the first three decades of life. This we find to be true. During the first thirty years of life, the death-rate has decreased about one third. This would naturally raise the general average length of life. But when we come to middle life, we find the prospect not so pleasing. In the last thirty years the death-rate from the ages 40 to 49 years has increased 35 per cent; from 50 to 59 years, 24 per cent; from 60 to 69 years, 34 per cent; from 70 to 79 years, 24 per cent; and from 80 years and over, 7 per cent. Now these statistics, in order to be understood, will bear a little explanation. At the present time, for every million people the death-rate between the ages of 40 and 49 years is 35 per cent more than the death-rate among a million people in 1880; thus the increase in the death-rate above 40 years to each million of the population between each of these decades is from 24 to 40 per cent greater than it was in 1880.

This increase in death-rate is due largely to degenerative diseases of the heart, the brain, the arteries, and the kidneys. For instance, the increase of the mortality rate from kidney disease since

1880, in Chicago, has been 167 per cent; and in Connecticut, 139 per cent. The increase from heart-disease in Massachusetts has been 105 per cent, and from apoplexy 130 per cent. In New York City the increase from kidney disease in the last thirty years has been 73 per cent; from heart-disease, 84 per cent; and from apoplexy, 34 per cent. We can see from this that while sanitation and hygiene have been saving the lives of the infants and youth from infectious diseases, at the same time the death-rate of the middle ages has increased in about the same proportion from such diseases as apoplexy, Bright's disease, heart-disease, and arterial diseases.

We may consider with profit some of the lessons that these figures teach us. First, what is the cause of the increase in Bright's disease, heart-disease, arterial diseases, and apoplexy? Certainly it is not due, in a great measure, to the infectious diseases that are controlled by sanitation. It is not due to the supposition that people are not living, in many ways, more hygienically than they used to; for the fact is that the general sanitation of the people is greatly improved over what it was thirty years ago.

The other day the writer was talking with one of the leading physicians of Portland in regard to the decreasing mortality from tuberculosis and other infectious diseases and the increasing mortality from Bright's disease and other degenerative diseases. This physician predicted

with emphasis that the mortality from the latter class of diseases would continue to increase until people learn to live very differently than they are living now.

It is believed that the main cause for the increase in Bright's disease, heart-disease, arterial disease, and brain disease, is due to the stress under which practically every member of all classes of American society is living. From its humblest to its highest walks, a frightful intensity has taken possession of our entire national life. Men are not satisfied to-day with the amount of work that they were able to do forty or fifty years ago; but they hurry and worry, ever striving for achievements far beyond the ambitions of their fathers. The people in this country have gone money-mad. It is the get-rich-quick schemes and the speculations and the stress of "burning

the candle at both ends" that lie at the bottom of these degenerative diseases. It is not unusual to find men of thirty-five and forty years who have mastered great business enterprises and amassed large fortunes. It is common to see these men, just in the prime of life, all broken down, and far less robust physically than their grandfathers were at twenty or thirty years older. In many occupations it is impossible for the man fifty or sixty years of age to get employment. At this age he is too slow for the pace that is set by the younger men. Among physicians it is the young men who are doing the work. The gray-haired physician is



MEN IN THE PRIME OF LIFE
ALL BROKEN DOWN

no longer the type of the great doctor, and men with national and international reputations are more apt to be under forty than over forty years of age. This is true in all the professions. The managers of our great corporations are all young men. Instead of being able to carry on a reasonable amount of work at the ages of fifty or sixty years, many Americans are completely broken in health and are chronic invalids.

There is no phase of our life in which this tendency is not manifested. Our fathers were satisfied with the weekly newspaper, and they would leisurely sit by their firesides after the day's work and read the current events of the world. Now the great majority of people, even in the rural districts, demand a daily newspaper; and in the cities, men will not read the morning paper in the evening or the evening paper the next morning, but must have both. These papers are hurriedly glanced through while on the street-car, rushing from one place to another. Leisure is quite unknown. Very little time, indeed, is spent in calm thought and deliberation, in consideration of the nobler virtues of life. Even the wealthy, idle class dissipate their energies in the mad whirl of society functions, theaters, entertainments, and in worry over speculations to double their unused and unnecessary millions.

In the memory of all of us we have seen the twenty-mile-an-hour train superseded by the forty-, fifty-, and sixty-mile-an-hour train. Horse-cars have been

displaced by the more rapid electric cars; these in turn by the automobiles; and now automobiles by the air-ships. All these methods of rapid transportation make it possible for more people to congregate in and around the large cities and to desert the rural districts. The hum and excitement, the intensity, and the increased rivalry and competition of the cities certainly have a marked influence in wearing out our nation. We do not even take time to eat. One humorist has remarked that an appropriate epitaph on many a tombstone would be, "Died of quick lunch." The evils of the quick lunch are not due alone to the digestive disturbance set up by improper mastication of the food; but the quick lunch itself is an index of the strenuous state of the mind and nervous system, which is so taxing upon our vitality. We are all familiar with the old adage, "It is not work but worry that kills."

Results of this intensified living are manifested in the great increase of functional nervous diseases in this country. Hysteria, neurasthenia, and insanity are increasing at an alarming rate. Sanitariums for the treatment of functional nervous diseases are multiplying rapidly. Children in their teens have been petted and pampered and indulged until their selfishness results in nervous breakdown and hysteria. The lessons of morbid strife and competition are instilled into the minds of our youth the moment they enter the public schools. In school their goal is not honesty, integrity, and real worth,



DISSIPATING THEIR ENERGIES
IN SOCIETY FUNCTIONS

so much as it is the 100 per cent. After school they change their goal from 100 per cent to 100 cents. Honesty to the average business man is just honest enough to keep out of jail. In former years the lessons in the readers of the public schools were largely on subjects of virtue, integrity, and uprightness; but now our school-books are full of fables, humor, and fiction. Fathers are too busy with their business, and mothers are too much absorbed in society, to instruct their children.

Another manifestation of the results of this intensity and unnatural manner of living is the great increase of suicides. In the last thirty years the suicide-rate in the United States has increased from 12 a million to 126 a million — tenfold in about thirty years. As a rule, these suicides do not represent the lives of individuals who have struggled against poverty and distress, but those who have given themselves over to selfish gratifications of every kind, to the selfish pursuit of power, position, and possessions, none of which were necessary to normal life. The majority of these persons were men of affairs, who worried themselves into self-destruction because they had let selfishness crowd out their love for God and their fellow men. Most physicians recognize to what a large extent worry has undermined the lives of many. Ambition — an impulse that is perfectly laudable in itself — has been carried to a great extreme. It is not well for any one to be satisfied with his own condition: improvement and

advancement should be the aim of all. However, in our national life, and along the lines of power and money-getting, ambition has run riot. The poor and the rich are uneasy, dissatisfied, and restless. The ambition to be good and useful seems to be replaced by the desire to be rich and powerful. In the mad rush to obtain money, power, or social position, the nobler virtues are well-nigh crowded out.

To recapitulate: We find that the diseases of general physical degeneracy of the heart and of the arteries, of the brain and of the kidneys, are on the increase. Functional nervous diseases are also increasing rapidly. Insanity is increasing three times as fast as the population, and suicide ten times as fast as the population. The cause of all this is largely due to a false conception of life,— its privileges, its duties, and its responsibilities. Men have forgotten God and Christian principles. It is evident that

the cause of this unnatural intensity lies in the individual himself, and that the remedy must be individually applied. To illustrate: It is possible for sanitary laws to be so perfect and so rigidly enforced that deaths from typhoid fever would be practically impossible; but no law can be made or enforced forbidding worryment or overanxiety. No statute could be enforced forbidding covetousness. It is impossible for any law to rectify the false conception of riches at the expense of honesty, uprightness, and virtue. The remedy is a personal application of Christianity. There is



PAPERS ARE HURRIEDLY
GLANCED THROUGH ON THE
STREET-CAR

only one place in which that legislation can be inscribed where it will be of any benefit, and that place is aptly designated in the words, "I will put My laws into their mind, and write them in their hearts."

In their anxiety to get quietness, men have tried tea, coffee, tobacco, alcohol, morphin, and cocain. The effect of these is only temporary; for each and all simply postpone the evil day. There is no elixir, capsule, nor powder that will ingenerate correct principles of life into the selfish, grasping, worrying, contending, unchristian soul. What each and every individual in this country needs more than anything else is a genuine conversion to the principles of Christianity.

Christian Scientists recognize that there is serious difficulty, but the remedy they propose is neither Christian nor scientific. The Emmanuel Movement sees the need of loftier sentiments. Its remedy will fail; for in it too much depends on suggestion, autosuggestion, and appeals to the subconscious mind. The Emmanuelists rely largely upon the power inherent in one's self for salvation.

The theories of Buddha, Mohammed, and Confucius, after centuries of effort, have failed to evolve morality and goodness in their devotees; so certainly must every effort fail that depends upon de-


veloping the inherent goodness in man.

An abiding faith in Christ is the only hope; in Christianity the way is indicated, and the power to accomplish is simultaneously supplied. "Come unto me, all ye that labor and are heavy laden, and I will give you rest," says the Great Physician. "Take my yoke upon you, and learn of me; for I am meek and lowly in heart: and ye shall find rest unto your souls." "Come ye yourselves apart, . . . and rest awhile." "Be not therefore anxious." "My God shall supply all your need." "Abide in me." All these, and a priceless wealth of promises, assurances of sympathy, comfort, and blessings, both in this life and in the life to come, are freely given.


When every doctor, every nurse, every helper in our sanitariums, has the abiding experience of confidence and assurance forever, we shall be prepared to comfort these afflicted, discouraged brothers to a degree at present unknown. To do this work, and to do it well, is the only excuse our sanitariums have for existing. Others are doing as good medical and surgical work. We must not fall behind them in scientific work, but in addition we must be a living object-lesson of practical Christianity. To this end may we all earnestly, quietly, and peacefully endeavor.



EFFECTS OF



HYDROTHERAPY



ON the COMPOSITION of the BLOOD

G. K. ABBOTT, M.D.

[This series, prepared from Dr. Abbott's manuscript, is intended to help the readers of LIFE AND HEALTH to appreciate the fact that there are really scientific physiological principles underlying the application of hydrotherapy. Articles have already appeared showing the effect of hydrotherapy on the circulation and on the nervous system, and the local effect in various disorders. A selection will follow showing the effect of hydrotherapy on muscular efficiency.—ED.]

DURING physical inactivity, the blood-corpuscles are not evenly distributed throughout the blood in the different parts of the body. They tend to collect in greater numbers in the internal organs, especially in the abdominal organs, the liver and spleen in particular. Brisk exercise, however, produces somewhat of an equalization, so that more cells are found in the peripheral blood-vessels, just as it also conduces to a more active peripheral circulation. When the body becomes overheated, there is a still greater accumulation of the corpuscles in the internal organs than during inactivity. This is especially manifest in the case of the white cells, blood taken from the finger or ear showing fewer white blood-cells than normal. They collect in the viscera. Short, hot applications, however, do not produce such a decided decrease, and quite the opposite result is obtained if the hot application is followed by cold treatment. Following all sorts of cold procedures associated with friction or percussion, and after hot baths or douches followed by cold applications, there is a decided increase in the number of cells in the peripheral circulation. This increase often amounts to from 20 per cent to 35 per cent in the red corpuscles, and from 200 per cent to 300 per cent in the white corpuscles; the hemoglobin shows an increase of 10 per cent or more.

At the same time these changes in the cells are produced by cold applications, there is also a change in the chemical reaction of the blood. Blood is normally alkaline. In fevers, infections, diseases of nutrition, etc., the alkalinity is diminished, though the blood never actually becomes acid. This change is due to the accumulation of acid waste products, which partially neutralize its normal alkalinity. The reaction to cold applications increases the alkalinity of the blood, tending to restore it to normal by causing a burning up (oxidation) of the waste products. On the other hand, prolonged hot applications decrease the alkalinity of the blood unless followed by cold applications.

Practical Applications

These changes in the composition of the blood are among the most important effects produced by hydiatic procedures. All the nutritive processes of the body, and, in fact, almost every chemical change which takes place in the tissues, depend for their proper performance upon an abundant supply of oxygen. This is carried solely by the hemoglobin of the red blood-cells. Not only do cold applications hasten the blood current, but they increase the number of red cells in active circulation. Nor is this all; the hemoglobin is increased in amount, and its oxygen-carrying capacity promoted.

Such effects as these it is impossible to produce at will by the administration of medicines containing iron, or by any other "blood tonic." The immediate effects of cold applications last from one hour to two or three hours, and their repeated administration produces permanent improvement in the circulation, and progressive increase in the red cells and hemoglobin, until a normal condition is restored.

As beneficial as the results set forth above may be in anemia and other impoverished conditions of the blood, it is not upon an increase in the red cells and hemoglobin that we depend in infectious diseases, but upon the work of the white corpuscles. The white blood-cells are the patrolmen and policemen of the human body. They constitute the standing army designed to repel the invasion of bacteria. It is upon their number and efficiency that the body depends for its resistance to, and immunity from, bacterial diseases. The white cells and other cells of the body accomplish this resistance in two ways, or by a combination of these two methods.

One is by the production of substances which neutralize or antidote the poisons produced by the bacteria. These substances are known as antitoxins. Or the cells of the body may produce substances which weaken or destroy the germs themselves. Such substances are called bacteriolytins, opsinin, etc.

Second, the white blood-cells may actually eat up and digest the bacteria, thus destroying them. This process is known

as phagocytosis, and the cell which displays such properties is called a phagocyte.

It will be seen, then, that whatever agent produces an increase in the number of white cells in active circulation, and makes them more energetic, is a most powerful means of combating infectious diseases. Both these results — i. e., increasing the number of white cells, and accelerating their activity — are produced by cold applications. So powerful is the stimulation of cold that the leucocytes in the peripheral circulation may be doubled or trebled by the reaction to cold treatment. The restoration of the normal alkalinity of the blood which results from cold applications is also conducive to the better and more energetic action of the phagocytes, since their surroundings are more nearly normal. While a single cold treatment can not be expected to cause the production of more white cells, yet the frequent repetition of suitable tonic cold applications does actually stimulate the blood-forming organs to produce more cells.

Notwithstanding the many antiseptics, germicides, etc., that have been vaunted for the treatment of infectious diseases, the white blood-cell itself is the most efficient "germicide" known, and will always retain its high place in the defense of the body against bacterial invasion; furthermore, the agent which assists the body by augmenting its natural powers of defense, will never occupy a place secondary to purely artificial and chemical means of destroying the invaders.





INSOMNIA

E.L. PAULDING, M.D.



MEMBER of my medical family recently said, "My John has insomnia; he can not sleep at night. What can you do for it?"

That puzzling problem comes to every doctor, whether he is in the metropolis or in the country. There are many causes and many treatments for this complaint.

Acute insomnia often begins over some mental trouble, perhaps trivial,—the wind, the weather, the state of the crops, or a quarrel with some friend,—or it may be due to indigestion resulting from the use of fried or pickled foods, concentrated sweets or spices, or some other dietetic error.

Chronic insomnia often puzzles the physician, who, if true to right principles, will seek for a rational treatment that avoids the danger of inducing a drug habit. Chronic insomnia, unfortunately, leads many physicians themselves into morphin addiction. The doctor, often being out night after night for a week or more, goes to bed to find that he can not sleep. Knowing the quieting effects of morphin and chloral, he is strongly tempted to secure rest by artificial means. If he yields, he gradually drifts into a seductive drug habit. On no pretext should the physician meddle with such drugs.

The thinking, studying habit is one cause of sleeplessness. Horace Greeley had this form. He was once the guest of

a physician, a friend of mine. In the night the doctor was called up to attend a case. Passing by the open door of the room occupied by Mr. Greeley, and seeing a light, he looked in. There was dear old Horace propped up in bed at two o'clock in the morning, reading a ten-cent Indian novel. He explained to my friend that "something that takes away thought always puts me to sleep when my brain is too active."

Sometimes insomnia is caused by irritation. The bladder may be too full, the water may be too acid, or the stomach too full of gas. Empty the bladder; eructate the gas, then massage the stomach, pressing toward the right side with a firm, prolonged pressure. A gurgling toward the right side indicates that the stomach is emptying itself; sleep should soon follow. A writer for the *Medical Council* tells how to empty the stomach by prolonged abdominal pressure against

the diaphragm, holding the breath till the stomach is empty, compressing the abdominal muscles the same as at stool, only in the opposite direction. This method may work with many. If there is too much contraction of the stomach outlet, the effort may not be successful.

Skin irritation produces sleeplessness. In California fleas cause much trouble of this nature. Irritation of the skin from some form of skin disease, an uncom-



"SOMETHING THAT TAKES AWAY THOUGHT ALWAYS PUTS ME TO SLEEP"

fortable bed, a hot or a cold night, causing a feeling of discomfort, will frequently prevent sleep. Some have high-strung nerves, very susceptible to small discomforts.

What shall we do for these wakeful nerves? — First, remove the cause. Look after the digestion. Eat a light supper. Some are better off without any supper, but many need to eat a small quantity of easily digestible food, in order to draw the blood from the brain to the stomach; however, care should be taken not to eat enough to keep the stomach busy all night. Eat, say, two slices of bread and butter and an orange or a dish of easily digested fruit. If there is itching, treat that. If you have a hard bed, see that you are provided with a comfortable one. For a congestive, full head, if the room is not too cold, get up and let the blood gravitate downward for a little while. Sleep habitually with one pillow only, and that a thin one; but if you do not sleep, try doubling up your pillow to encourage the flow of blood from the head; or count your pulsations. The heart is apt to be quick in sleepless spells. If the heart-beats are too frequent, count repeatedly, "one, two," with inspiration, then "three, four, five, six," with expi-

ration. Soon the pulse will become less frequent, from accumulation of carbonic acid in the blood, and you will go to sleep. A friend puts his head under the covers for a while, and breathes the carbonic acid gas back into the lungs, with the effect of inducing sleep, but the head should be uncovered as soon as sleepiness ensues. Do not try to count a hundred; for you will count through to one hundred many times. Try repeating some old doggerel, like,—

"One, two, buckle my shoe;

Three, four, open the door," etc.,

with each syllable on a pulsation of the heart.

Above all, do not worry over loss of sleep. The captain of a certain war-vessel sleeps only three or four hours in a night. A neighbor sleeps three hours and a half, and is satisfied. The writer averages six and one-half hours. One acquaintance goes to bed at twelve o'clock, and arises at four. But even if one does not sleep, it is better to be still and rest for eight hours. This will prepare for work, sleep or no sleep, *provided the mind is not exhausted by worry*. Worry about not sleeping often does more harm than the loss of sleep itself.





AUTUMN'S ANTIDOTE *for* PHYSICAL ILLS

MARY ALDEN CARVER



UTUMN is the season of certainty and fulfilment. In autumn the tired brain can relax, tortured nerves can adjust themselves, and the mental, moral, and muscular powers can regain their equilibrium. Of course, there are some who become languid and slightly depressed as winter approaches, mournfully bewailing —

"The melancholy days have come,
The saddest of the year."

A more optimistic poet sang at autumn time: —

"Again the year has brought its wealth
Of golden grain and vigorous health,"

and this latter version seems the more rational and comprehensive. After the summer with its fierce heat has departed, and the sheaves have been garnered, earth prepares for rest. It is fitting for man to follow her example. This does

not mean that he should be indolent or lethargic. Out in the woodlands the little forest creatures are busy and well content. Man may well adjust his mental balance by studying the things of nature. Flocks of swift-winged birds hasten away in orderly procession. Multitudes of soft autumn leaves busily, tenderly,

begin their work of sheltering and protecting the plant babies beneath the soil. Autumn winds croon droning melodies, and rain-drops do a soft tattoo throughout the woodlands. It isn't the exultant music of summer, with its blare and bluster and gorgeous display. This autumn music is the gentler strain of the lullaby; for the earth has grown weary and would rest. A tired brain and over-taxed nervous system are soothed and calmed by these environments.

To the city man or to those who remain indoors, autumn days seem gray and uneventful; but if one sallies forth into the highways and byways, the spirit

of tranquillity is involuntarily imbibed, and the message interprets itself to the mind and heart to abandon all disquietude — to step aside and rest. The rest will of necessity be bracing and stimulating;

"The autumn time is with us. Its approach
Was heralded not many days ago,
By hazy skies that veiled the brazen sun,
And sea-like murmurs from the rustling
corn,
And low-voiced brooks that wandered
drowsily,
By pendant clusters of empurpling grapes
Swinging upon the vine."

for there is a certain snap and vigor rampant during these days "when the frost is on the pumpkin." Tonic is suggested in the sparkle of early frost crystals and in the tartness of ripe cranberries. There is rejuvenation for those who fill their lungs with crisp outdoor air.

In October there is both pleasure and profit in hunting the ginseng plant — in digging its queer-shaped roots and gathering its brilliant berries. Autumn leaves and birch bark are the lure that attract the esthetic and artistic, while on all sides there are kodak possibilities.

The fragrant cedar or balsam or the resinous pine may be gleaned for pillows and mattresses that will give one the sweet, invigorating breath of the forest, even in the winter months. Autumn is a great season for the lover of lichens and mosses; for now no myriad leaves hide these trophies from view, and they stand revealed in quaint picturesqueness. High bush cranberries and wild grapes, together with the thorn-apple and bitter-sweet, are ready after the first frosts arrive, and their fruitage draws many to the woodlands.

The autumn season is a healthful season. The autumn air awakens in tired humanity a realization of the excellency of life, and one begins to rejoice in the "worthwhileness" of existence as his bodily powers all leap into activity. The appetite is whetted by the autumn sharpness, and *h e a v i e r* food is demanded than the hot weather could endure. Rice and beans may supplant the fruits and lighter vegetables of summer. Hominy and oily nuts make an incessant appeal, and nature has wisely provided that at this season these products shall be at their very best.

Strengthened and refreshed, one desires more vigorous living. The insidious lassitude of summer is shaken off,

and walking, rowing, riding, and camping become the order of the day. The autumn months are the banner season for athletics. One can exercise with the minimum of fatigue. It is the time when one can "run and not be weary," when one can "walk and not faint." Strenuous endeavor may be undertaken most profitably to prepare the system for the rougher days and experiences of winter; but it is well to bear in mind that precautions must be taken to guard against taking cold. It is so easy to forget how sharp the refreshing breezes really are when violent exercise has sent the blood surging through the system. An abrupt pause is made to rest and cool off, and this is frequently the origin of serious difficulty. In all autumn campaigns a light-weight wool sweater is a most valuable accessory. It is not heavy nor bulky, and is conducive to comfort in either damp or chilly weather. It is easily donned or doffed at the will of the possessor.

For those who prefer only mild outdoor amusements, there are open-air potato roasts and pop-corn festivals. Food that is taken into the body along with quantities of oxygen and ozone has a peculiarly pleasing flavor.

Autumn is a prime season for sleeping in the open air. Many who sleep outdoors all summer retreat to tiny, stuffy bedrooms when the wild geese begin to go South. By so doing they deprive themselves of rare pleasure and lasting benefit. A heavy blanket to replace the light covering used in



OPEN-AIR
POTATO
ROASTS

summer, a brisker rub in the morning, and a little warmer clothing when making the morning toilet, and — there you are! The body all lined up and disciplined for strong, efficient living! It would be a boon to invalids, consumptives especially, if they could be cajoled into giving this matter a trial.

There is no recreation which holds greater possibilities for enjoyment for one who is fond of being out-of-doors than walking.

Never set forth on a tramp unless you are well prepared so far as proper dress is concerned. Those most experienced in the matter find that nothing is more suitable than a simple outfit consisting of a short skirt, with bloomers underneath, a comfortable blouse, a pair of stout, high shoes, a small hat, heavy gloves, and the woolen sweater. Dressed appropriately, one does not fear destruction of garments, and the body is free and unhampered.

Remembering that a pavement is hard for tender feet, it is well to leave the city, when setting forth upon an expe-

dition, by way of a trolley to the suburbs. In this way, one is precipitated into the open without feeling signs of fatigue. When once in the country, much more pleasure is derived if the highway is not followed too closely. It is much more enjoyable to wander into ravines, stroll off across meadows, dip into the forest or wooded tracts, and loiter along river banks or lake shores, than to keep strictly to the highway, with its customary traffic and dust.

Whatever the quest, all should seek the open air as much as possible in the days that precede the season when inclement weather will, perforce, compel more sheltered seclusion. They who realize that the body is merely the dwelling-place for the "inner man" will seek to make of the physical being a fit abode. Multitudes insist on entertaining the mental and moral being in dilapidated bodily homes. Assuredly this is not in keeping with the divine plan, especially in the autumn season, which is the best time in all the year for physical recuperation and psychical uplift.



CONDITIONS FAVORING ILL HEALTH

G. H. HEALD, M.D.

MANY who do not consider themselves actually sick, realize that they lack much of having robust health. Here is a familiar type: Mr. A. feels somewhat run down, and finds his work, either physical or mental, more irksome than formerly; he tires with very little exertion. Perhaps the effort to saw a stick of cord-wood in two "does him up" for some time. His pulse is weak, and perhaps somewhat more rapid than it ought to be. His hands and feet are cold, even in warm weather, regardless of how he is dressed. He has at times a tendency to mental depression, and his mind is not so reliable as it once was. His doctor tells him he has neurasthenia (nerve weakness), which, after all, is a name without being an explanation. There is a tendency to loss of fat and of the tissue under the skin, giving him, perhaps, a prematurely old, wrinkled, "bony," and "drawn" appearance. At times he may have muscular tremors. He may or may not have distinct digestive disturbance, but frequently he finds that certain foods or classes of food "disagree," which in former times he could eat with apparent impunity. As a rule, sugars, including fats, are not well borne when eaten freely; and even cereal foods, when eaten in large quantities accompanied with a liberal or fairly liberal amount of albuminous food, may be the signal for digestive disturbance or for an increase of some of the symptoms already mentioned.

The Cause of This Semi-Invalidism

From some very interesting investigations of recent years, it would seem that these symptoms are due to the ab-

sorption, from the intestines, of poisons produced chiefly by a species of bacteria known in common parlance as the "gas bacillus" (*B. aerogenes capsulatus*), so called because of its ability as a gas producer. This germ is practically absent in the intestines of healthy, nursing infants, but is found in prodigious numbers in the intestines of invalids, and in much smaller numbers in the intestines of robust persons.

A Brief Chapter on Bacteria

It may be profitable to digress at this point for the purpose of giving a brief résumé of the characteristics of bacteria; for whether we realize it or not, our health or illness, our feeling of well-being or of misery, our efficiency or our worthlessness, our long life or our early grave, are conditioned very largely by the character of the microscopic plants growing in our intestines, variously known as "germs," "bacteria," "microbes," "micro-organisms," etc., all these terms meaning practically the same thing, though bacteria is a more technical term restricted to one subclass of microscopic fungus forms which multiply by cell division. Allied forms are yeast, molds, and the like; but it is the bacteria that most concern man, because of the fact that some species of bacteria have to do with the production of disease. There are other micro-organisms which are not vegetable, but animal. These microscopic animals do not particularly concern us here, though some of them do much mischief in the human intestines, where they cause a severe form of dysentery.

It is the bacteria that we wish to

study for the present. Bacteria are of interest to us chiefly because of their products. Like all organisms, plant or animal, large or minute, they cause chemical changes in the organic substances, or in part of them, with which they come in contact. These simple cell forms multiply with great rapidity. Under favorable circumstances, a single cell will, in the course of twenty-four hours, have a progeny of thousands of cells, or even of millions. In their growth and multiplication, they give off waste products, or in appropriating nutrition for their growth, they break up certain substances into other substances. The products of their activity are sometimes deleterious to higher organisms, sometimes highly poisonous. Alcohol is one of the products of the action of the yeast plant on sugar. Certain bacteria change the alcohol into acetic acid, or vinegar. This is a comparatively harmless process. A slice of meat standing in a warm place for some hours develops a foul odor and decomposes, because of the action of putrefactive bacteria. Practically all decay, fermentation, and decomposition are the result of the action of bacteria and allied forms, and many of these processes are exceedingly useful to man.

Putrefactive Bacteria

Hence it must be remembered that not all bacteria, by any means, produce harmful substances. There is a great difference in this respect. As in the forest we find many plants useful to man, and comparatively few that, like poison-ivy, are noxious, so in the realm of micro-organisms; but some of those few are exceedingly active in their work. If there is but one poison-ivy plant in a forest, a person who is susceptible to its poison will not come into contact with it if he can avoid it. So if we are wise, we avoid, as far as possible, any dealings with the injurious bacteria. Man's intestines are never free from germs, and

it is probable that many of these are harmless, or even helpful, in that they antagonize other and more harmful bacteria. Normally, these bacteria establish themselves, and to a certain extent keep out intruders. But there are other races of bacteria, putrefactive bacteria,—"wild races," as they are sometimes called,—which, when they gain a permanent lodgment in the intestines, reduce the nutrition of the body, introduce poisons, bring on a condition of gradual invalidism, lessen the protective powers of the intestines, and lead to premature decay and an early grave. Such, in brief, is the tragedy being enacted every day right before our eyes. The victim may die of tuberculosis, or of Bright's disease, or of apoplexy, or of heart failure; but the foundation of his troubles is the enemy he has been harboring in his intestines.

Conditions of Bacterial Life

In order that we may the better understand the problem before us, it will be necessary to study the conditions favorable and unfavorable to bacterial life and growth. In the human intestines there are several factors acting and reacting upon one another, mutually assisting or antagonizing, and it is upon the sum of these interreactions that the final outcome depends. To illustrate, if you plant some choice seeds in a garden, the future growth and prosperity of the plants will be dependent upon several conditions. In order to obtain the best results, the soil and moisture must be adapted to the needs of the plants. One seed requires light soil, another a moderately heavy soil, one a very rich soil, another thrives best on comparatively poor soil. One does better in the sunlight, another prefers the shade. One requires abundance of water, another does best with very little. If several kinds of seed are planted, each requiring different conditions, that one will thrive

best which finds the conditions of soil and moisture best adapted to it. If the soil is not carefully cultivated, the chances are that some weeds which we did not plant will thrive better than the plants we are interested in, and will choke them out. The conditions of soil and moisture often furnish better opportunities of growth for the plants we do not desire than for those we wish to raise. In a similar manner, the various conditions in the intestines determine what will be the principal germ growth. The kind of food, the nature and quantity of the digestive juices, the kind of germs taken with the food or washed down from the mouth by the food,—these create ever-changing conditions, which may at one time favor the growth of one kind of bacteria, and at another may favor the growth of another kind. Normally, in the healthy person there are certain germs which inhabit the intestinal canal, and keep out all intruders, or at least prevent their working to the extent of becoming injurious.

There is no such thing as a germless intestine. So far as we know, such a thing is not possible with humans. Germs thrive best in a condition where there is abundance of nourishment and moisture, and comparatively little light. Such a condition is found in the intestine, which is an admirable culture field for germ life; but under a given combination of circumstances it favors some one form of germ in preference to others; and fortunate is the person whose intestine favors always nothing but harmless species. This is the normal condition, and it continues until some indiscretions, dietetic or otherwise, disturb the character of the secretions or the integrity of the intestinal walls, or until the food itself favors the propagation of some of the more harmful varieties of germs.

Some germs require abundance of air for their best work; others work scarcely

at all unless in the absence of air. Some do fairly well in either case. The putrefactive germs, with which we are interested in this study, thrive naturally without air. In the large intestine they find conditions, such as food, moisture, and absence of air, that are eminently favorable to their growth. But in the normal intestine they find the growth of the colon germs antagonistic to them.

Some germs thrive on slightly acid foods; others, like the putrefactive germs, will not thrive unless the food is neutral or slightly alkaline in reaction. It will, then, be understood that a difference in the reaction of the intestinal contents, caused partly by the secretions, partly by the germs themselves, will be a determining factor as to which germs shall gain the ascendancy in the intestines. Certain germs which are strong producers of acid are able to live quite well in acid media, and are in this way able to maintain themselves against the encroachment of other germs, which can grow only in a neutral or alkaline medium.

Such, for instance, is the *B. lactis aërogenes*, a germ found normally in the healthy human intestine, which on sugar foods produces a large amount of acid, and discourages the growth of the putrefactive germs. This germ has been called, for this reason, a "friendly germ," though this term applies to a number of different organisms, all of which in a way restrain the activity of the gas bacillus and other producers of old age. The gas bacillus consumes sugar or proteid, but thrives better on a mixture of the two. From the sugars it causes the formation of irritating acids, and from the proteids it forms putrefactive compounds. It works most vigorously in the absence of air and in a neutral or partly alkaline medium. The presence of air or of acid will retard or stop its activity.

We now come to a portion of the study of intestinal diseases requiring close

attention on the part of the reader. A diagram is given herewith in which the germ growth in the intestines is roughly divided into two classes — friendly germs and putrefactive germs. This does not mean that there are only two kinds of germs, but that the bulk of the germs of importance to us in this study will come under these two great classifications. The friendly germs live in the presence of air; some of them act on carbohydrates and produce lactic acid; some decompose peptones, or *digested* proteids, forming indol; but they have no effect whatever on *undigested* proteids. Normally, the friendly germs inhabit the upper or small intestine. Their presence, by the acid they produce, hinders the free growth of putrefactive germs.

The putrefactive germs live best in the absence of air. They are found, mixed with friendly germs, at the beginning of the large intestine, but lower down in the intestine they become the dominant germ, and practically everything else dies off. This is the condition in the average adult.

We can classify intestinal germs roughly in two classes:—

Friendly Germs

Grow with or without oxygen.

Grow in presence of acid.

The normal germs of healthy bowel, especially of young persons.

Occupy entire bowel, but principally upper bowel.

Cause fermentation of sugars and starches, producing lactic acid.

May cause putrefaction of peptone; that is, digested albuminous food.

In a sense the friendly germs may assist the putrefactive germs by using up the oxygen, but the more energetic acid formers, as *lactis aërogenes*, counteract the effect of vigorous formation of acid.

Putrefactive Germs

Only in absence of oxygen.

Only when neutral or alkaline.

Become established in proportion to the feebleness. Probably follow certain indiscretions.

Confined strictly to large intestine except in "bad cases," when they may be found to have invaded small intestine.

Cause fermentation of sugars and fats, producing butyric acid, etc.

Act readily on undigested albuminous food, causing formation of peptone.





IN PRAISE *of the* PEANUT

HERBERT M. LOME



CHANT the praises of that modest yet potential legume which is variously known as the earthnut, groundnut, goober, pindar, and peanut. Scientific sharps have christened it *arachis hypogæa*, but as peanut it is known and enjoyed by countless thousands on this and the other side of the water. Peanut be it, then.

The modesty of the peanut is but one of his many good qualities. Notice how he wears an unobtrusive, tan-tinted overcoat, hides beneath the ground, and—like many of us—doesn't exhibit all his virtues until he has been well "roasted." "Sweet are the uses of adversity," says the immortal bard. Adversity, in the case of the peanut, takes the form of a charcoal fire and a wire cage. Sweet indeed is the odor that then rises from the gently crackling goober, and sweeter still the flavor which tickles our palate as we remove the crisp shell, strip away the pajamas of russet, and revel in the warm lusciousness beneath.

Yet the peanut, if it chose to cultivate an exaggerated ego, has reason enough. According to official figures there are over 4,000,000 bushels raised annually in this country, 3,000,000 bushels of which are roasted, the remainder of the crop being used by the confectioner or in the manufacture of oil. The value of the crop is about \$15,000,000, and nearly half a million people are employed in its cultivation. Some 400,000 acres of land are given over to the raising of the legume, for such it really is.

It will be seen, then, that from a finan-

cial view-point the peanut is very important. But what about it in a dietetic and, consequently, physical-culture sense?

In regard to this, the learned gentlemen who constitute the United States Department of Agriculture have this to say: "At present the peanut, as used among us, is hardly to be considered a food, but only a food accessory, or luxury. It is quite possible that this highly nutritious and cheap product of some of our States may come to be used in more ways than it is just now, especially in combination with other food materials. It deserves a high place among nutritive plant foods."

Perhaps under current conditions, it is just as well that the peanut is not quite so popular in a dietetic sense as are peas and potatoes, beans and barley. Why?—Well, because the yearly crop, large as it is, is only just enough to go round for roasting and candy-making. This is why there is but little peanut-oil made on this side of the water, and why, too, we import most of this lubricant that we use. Last year, 80,000 tons of African-grown peanuts were crushed for oil at Marseilles, France, alone. And statistics show that our native eaters of roasted peanuts and peanut "brittle" and peanut "bar" are on the increase. This is saying nothing of the growing demand for peanut-butter sandwiches at women's colleges and in Fifth Avenue tea-rooms. Also no reference is made to the vast and increasing consumption of peanuts by the monkeys of the United States menageries. It is a well-known natural-history fact that an ape, baboon,

orang-utan, chimpanzee, spider-monkey, gibbon gorilla, or any other specimen of the simian tribe, when imported, either contracts consumption and dies or develops a craving for peanuts and lives. In most cases he lives, which means another shrinkage in the visible supply of the humble but savory goober.

The peanut may be truthfully described as a condensed ration of nature's invention. Weight for weight, there is hardly another natural food known to man—with the exception, perhaps, of the lentil—which has so much nutriment crowded into so small a space. It is like John D. Rockefeller's signature to a big check—it doesn't take up much room, but—! It has thirty-nine per cent of fat, about forty-seven per cent of protein, or flesh former, while the remainder is nearly all usable or useful in the human system.

Professor Jaffa, of the University of California, is one of several scientists who have given the peanut the respectful attention to which it is entitled. He formed a "peanut squad," and fed its members with the legume prepared in various ways. The squad and the peanut emerged triumphantly from the ordeal. The members of the former, so it is officially stated, "lived in health on a ration composed of peanuts served in various ways, and a little fruit." One of the outcomes of the experiment was the "Jaffa ration," which is made up of peanuts and Japanese persimmons, combined with a

dash each of cereal, olive-oil, tomatoes, and milk. On this ration, so it is averred, a man can do any amount of mental or physical work at about one sixth the cost of ordinary meals. Sounds good, doesn't it? The totality of the professor's peanut inquiry seems to be this:—

Under ordinary conditions, the legumes can be made the underpinning of one's diet, provided bread and fruit are eaten also. If your occupation calls for much muscular exertion, you can eat many more peanuts than you can if you are a clerk or a clubman. Don't overroast the peanut. Chew it slowly and thoroughly before swallowing it. So shall it agree with you, and your health and strength be improved thereby.

Most peanuts suffer because of over-roasting. The tender nuts are scorched and carbonized; one's digestion suffers thereby, and the fair dietetic fame of the goober is unduly smirched. The proper way to cook peanuts is to put them in a shallow dish, and place in an oven. Have a brisk fire, and keep the nuts in the oven until they are done, and of a

delicate brown color, but *not roasted* in the ordinary sense of the term. If so roasted, the chances are that the sensitive surface of the nuts will be more or less charred, and this is bad for the flavor as well as for the digestion. Of course, this applies to peanuts prepared at home.

The pæan of praise of the peanut is, or should be, long. It is one of the most reliable of all crops of Southern farms, where it is chiefly



raised. Rarely indeed does it produce less than nine hundred pounds to the acre, and there is always a ready market for it, locally or in the cities. Every part of it is used as food, fodder, or fertilizer. Stock of all kinds — chickens, pigs, cows, and horses — wax fat on the peanut.

It adapts itself readily to the labor conditions of the South. Not always can the farmer in that section get needed help. In such case, he simply gives his stock the run of the peanut fields, and thus turns the legumes into meat, milk, or eggs, as the case may be. The process is nearly as profitable as if the harvest was gathered in the usual way. The milk of cows fed on peanut fodder is said to have keeping qualities of a high order, while hens that have a peanut diet lay steadily.

In its relation to the soil in which it grows the amiable nature of the peanut is again made manifest. Most crops — especially if they are sown in succession — impoverish the soil, but the peanut does not. The fertility of the earth depends upon the quality of certain nitrogenous elements which it contains. The majority of plants exhaust these elements. Not so with the peanut, but quite the contrary. Listen to the official words of wisdom in regard thereto: "The chief virtue of the peanut is that it does not consume the nitrogen of the soil. The tubercles of the roots of the plant collect nitrogen from the air, and feed it to the plant without impoverishing the land." One may therefore raise peanuts indefinitely without being at all worried about the effect on the soil. In the few years immediately following the civil war, the impoverished Virginia planters raised all the tobacco they could; but because of the drain of this crop on the

nitrogen of the soil, the time came when the amount of tobacco raised hardly paid for the work expended on it. Then came the planting of the peanut, the restoration of fertility to thousands of acres, and the revival of plantation interests not only in Virginia but in adjoining States. The useful, necessary goober had in a sense saved the South.

Of a contented mind is the peanut. In common with all plants, it likes a rich, alluvial dwelling-place. But if it can not get that, it grows and flourishes on any soil, only asking for a little lime to keep off the bugs, and a trifle of attention from the hoe to keep down the weeds.

After all, it is its claims as a food that makes the peanut of special interest to the public. The writer can vouch for the fact that when you once know and appreciate your peanut, there is nothing more appetizing nor sustaining. Whether you consume it *au natural*,—that is, roasted and eaten from the shell,—or whether you smack your lips over sandwiches made of salted peanut butter, or whether you punctuate your fruit or cereal courses with the nut, whole or crushed, you will find the peanut equally satisfactory in a dietetic and a gustatory sense.

A final word of warning. Do not go in for a freak or exclusive peanut diet. Man was never made to live on legumes alone. This applies especially to those that are dried or roasted. If one third of your meals consists of peanuts, you will be approximately all right; if the proportion is greater, you will probably suffer from digestive and intestinal troubles. Variety of food is one of the sources of health, as variety of occupation is the main spice of life.



THE CANNING OF VEGETABLES

George E. Cornforth

MOST housewives find the successful canning of vegetables more difficult than the canning of fruit. My experience in canning vegetables leads me to believe that it must be more difficult to prevent putrefaction, or the decomposition of proteid, than to prevent fermentation, or the decomposition of carbohydrates. As a class, vegetables contain more proteid than fruits, and require much more thorough cooking and much greater care in sealing. Subjecting vegetables to a boiling temperature may kill the bacteria and not kill the spores, or germs, of bacteria; but the spores must be killed to insure the keeping of the food.

Greater certainty of success in canning vegetables is assured if some apparatus is used in which the vegetables can be subjected to a higher temperature than that of boiling water. Canners of this kind for home use, which give very satisfactory results, are on the market. However, with sufficient care, vegetables may be successfully put up at home without one of these canners. "Economy" jars are very convenient to use in canning vegetables.

One thing that I have found to be *absolutely necessary* to success in canning vegetables is what is called "blanching." This is scalding or boiling them for a shorter or longer time in a weak brine (one tablespoonful salt to one and one-half quarts of water) before putting them into the jars. It occurs to me to say right here that if you do not follow these directions to the minutest detail,

you must not blame the writer if the foods fail to keep.

The only sure way of canning vegetables, with the exception of tomatoes, is to cook them in the jars. In order to do this, a wash-boiler will be required, the jars being set on a wooden rack in the bottom of the boiler. The jars must be wrapped in cloth to prevent their coming in contact with one another. The rubbers and covers should be put on the jars, but not screwed down tight, in the case of Mason jars, nor clamped in the case of "Lightning" jars; one clamp should be used in the case of Economy jars. Fill the boiler to the neck of the jars with water about the temperature of the food inside the jars. Put the cover on the boiler. Bring the water gradually to the boiling-point, then keep it boiling steadily for the length of time required in each recipe, adding boiling water when necessary to keep the original amount of water. Keep the cover on the boiler, except, of course, when adding water. After cooking see that no food nor seeds have lodged between the covers and the rubbers of the jars. If it is necessary to remove the cover to wipe the neck of the jar, put the cover again on the boiler and boil five minutes after adjusting the can cover. Screw the covers down tightly, or clamp Lightning jars, or put a second clamp on Economy jars. Remove from the boiler; do not set on a cold, wet surface, nor in a draft.

Vegetables for canning must, of course, be fresh and perfectly sound.

Canned Tomatoes

Tomatoes may be canned as fruit is canned. Have the jars perfectly clean. Put the covers into boiling water. Scald, peel, and slice the tomatoes. Put them into a kettle and heat them very gradually at first, being careful not to scorch them (they may be put into a double boiler at first till the juice is well drawn out); then cook them gently but thoroughly for about one hour; simply scalding them will not do. Set the jars into a pan of hot water on the stove beside the kettle of boiling tomatoes. Dip the rubbers into boiling water, and place them on the jars. Keep the tomatoes boiling while the jars are being filled. Fill the jars till they begin to run over. See that there are no seeds on the rubbers. Remove one of the covers from the boiling water and put it on the jar. Tighten it securely. Set the jar away, bottom up, to cool. If you are using Mason jars, tighten the covers frequently as the fruit cools.

Canned Corn

Husk the corn. Blanch the ears from ten to fifteen minutes, according to the age of the corn. Remove, and dip in cold water. Cut the corn from the cob about half the depth of the kernels, then scrape out the rest of the pulp. Pack the pulp into the jars to within one and one-half inches of the top for one-quart jars, and two and one-half inches from the top for two-quart jars, covering the pulp to the depth of one inch for one-quart jars, and one and three-fourths inches for two-quart jars, with hot water or slightly salted hot water. The corn will swell, hence the jars should not be quite filled. Put the covers on loosely, and cook in boiler for four hours.

Canned Corn on Cob

Strip the husks from the corn. Select ears of the right length to fit into the jars. Blanch in boiling salted water for fifteen minutes. Pack the ears into jars; then fill jars with hot, weak brine. Put the covers on loosely, and cook in the boiler five hours after the water begins to boil.

Canned Spinach

Pick over the spinach, wash it well, put into boiling water, and cook for about ten minutes. Drain off the water, and put the spinach into cold water. Heat it again to boiling in a little water. Put it into jars and cook in the boiler for one hour. It is true that much of the goodness of the spinach is lost by the blanching, but it is the only method of canning by which it is sure to keep.

Canned String Beans

If string beans are young and tender, they may be canned whole, the "strings" being removed from both edges of the pod. If more mature, it is better to cut them into pieces from three-fourths to one and one-half inches long. Put them into a bag and dip them into boiling water for two minutes. Remove them from the water, and put into jars. Fill the jars with a hot, weak brine; then follow the directions for canning other vegetables, boiling them three hours.

Canned Beets

Select young, tender beets, wash them well, then boil till tender. Put them into cold water, and after removing the skins, pack them into jars. Fill the jars with hot water, and follow the directions for cooking in boiler, cooking them one hour.

Canned Pumpkin

Wash the pumpkin, and cut it into cubes, removing the seeds. (I do not peel pumpkin.) Put it into boiling water, and cook until tender. Pour off the water. Mash the pumpkin, and pack it, while hot, tightly into jars, filling them to within three fourths of an inch from the top for one-quart jars and one and one-fourth inches for two-quart jars. Follow directions for canning other vegetables, boiling for one hour.

Canned Asparagus

Wash the asparagus well. Blanch it in boiling water five minutes. Arrange in the jars with the tips upward. Fill the jars with hot, weak brine. Put on the covers loosely, and boil for three hours, according to general directions for canning in jars.

Canned Peas

Shell the peas. Put them into a bag, and dip them into boiling brine (one tablespoonful of salt to one and one-half quarts of water) for from five to ten minutes, according to the size and age of the peas. The older the peas, the longer the blanching should continue. Remove the peas from the brine, and dip them into cold water, to set them, so they will remain firm. Fill the jars, which have the rubbers on, to within one-half inch of the top in case of one-quart jars, or one inch in case of two-quart jars; then pour in as much hot water or hot brine as the can will hold. Put the covers on loosely. Then follow the directions for cooking in the cans in a wash-boiler, boiling them four hours from the time the water begins to boil. A little sugar may be added if desired.

THE MEDICAL MISSIONARY AT WORK



BURMA, INDIA

Ollie Oberholtzer-Tornblad, M. D.

RECENTLY I took a trip into the Shan States of northeast Burma, and thinking the readers of LIFE AND HEALTH would be interested in hearing from this part of the world, I will relate a few experiences.

This part of Burma is composed of numerous small states, controlled by native rulers subject to the government of Burma, and known as the Shan States, though many other tribes live here besides the Shans. For some distance from the Burmese boundary the Burmese language or a dialect of Burmese is spoken. The Shan States are mountainous. Though the mountains are not so high as the Himalayas, the altitude is sufficiently high to make the air cool and pleasant. During the months of December, January, and February, there are occasional frosts. The rainfall is only about fifty inches, while that of Lower Burma is about two hundred fifty inches. The people are more of a Mongolian type than those of Lower Burma. They are simple-minded, hard-working, and of the strictest sect of the Buddhists, not making use of either eggs or milk.

It seems that the Shan States have been much neglected by all mission workers, and as a result there are only a few Christians here. I seldom meet any one who has ever heard of Jesus or his love. The task is anything but easy to begin telling the people of the gospel in such a way that they can comprehend it.

One time a poor woman, hearing that I was passing through the place, came to get some medicine; and while I was telling her about Jesus, and that he is coming soon, she looked up in amazement, and asked, "Is the Son of the eternal God coming to the Shan States? Has he come to Rangoon?" I explained the subject to her. Then it dawned upon her mind that she had heard there were people in Rangoon who did not worship Buddha's image. Such are considered a separate class, apart from ordinary people. I once asked a young Chinaman if a certain man who was holding a position of trust was a Burman. He answered, "No, he is a Christian." I then asked him if he himself was a Christian. He answered, "No, I am a Chinaman."

From my door I can see numerous villages, where thousands of people live, and not one is a Christian. They have scarcely heard the story of Jesus. Last Sabbath while talking with a woman, I inquired if she knew any Christians. She did not know them by that name, but called them "Master Jesus people, or followers." She said there were none here, but that in a village about four miles distant there were some, who at one time visited their village and read to them about Jesus. Then she placed her elbow on the floor, and rested her head in her hand, to demonstrate to me how they all listened. I began to tell her the story of Jesus, that now he is in heaven

and loves us more than a mother loves her child. Here she interrupted me, and repeated over and over, "as a mother loves her child," pointing to her baby, whom she had brought with her for me to admire.

She told me that the women could not read, but said her husband could read. I then gave her a copy of the Gospel of Luke, and told her to take it home and have her husband read it to her, and then return it to me, when I would tell her some more.

While I was talking with her, a company of travelers came up, and greeted me as warmly as if we had been old friends. They said, "How glad we are to find some of Jesus' disciples here where there are so very few." I gave them some tracts, for which they thanked me, and assured me that when they came near, they would call. They also invited me over to their meeting, at a village four miles away.

A few days afterward I saw two men

coming toward the house. One was a bright young man, who greeted me, and then reached down and took up one of the tracts I had given out a few days before. He said that was good, and asked if I would please give him one. His home was farther on toward the Chinese border. I gave him a copy of all the Burmese tracts I had with me. So some of the seeds of truth have gone to the farthest corner of Burma.

At times when we look around and see the pagodas on every high hill, and think of their thousands of devotees, we are made to inquire, What are we among so many? I sometimes think we act much as did the ten spies, who said, "We were in our own sight as grasshoppers, and so we were in their sight." We do not have to nurture these thoughts long for them to develop fruit; for they are able to bud, blossom, and bring forth the mature fruit of doubt and unbelief in one night.

Moulmein, Burma.



Photo by Underwood and Underwood (Courtesy Bible Society Gleanings)

THE LARGEST STATUE OF BUDDHA IN THE WORLD, AT
PEGU, IN BURMA

MEDICAL MISSIONS WIN THEIR WAY

T. E. Bowen

CATCHING the inspiration of the Master's example, medical men have gone forth into the great mission fields, such as China, India, and Africa, and through patient, loving ministry have won victories for the cross of Christ in the very strongholds of heathen idolatry and sin. In the mad rush for wealth and fame, there is grave danger that we shall neglect the responsibility resting upon us of sending forth the light of truth that has blessed us, and made our conditions in life so much more favorable than those found in these countries.

In this article we present a few facts gleaned from "Medical Missions" regarding some of the early institutions established in lands of heathen superstition and darkness:—

"In 1834 the Rev. Peter Parker, M. D., of the American Board of Missions, arrived in China, the first medical missionary to that great empire. His hospital in Canton soon became so popular that patients of all ranks, and from distant parts of the country, flocked to it. In 1839 Dr. Lockhart, the agent of the London Missionary Society, arrived, and began work in Macao. Toward the close of the same year, he was joined by Dr. Hobson. The operations of these pioneers of medical missionary work in China were, for a short time, interrupted by the breaking out of hostilities in 1840. When peace was restored, Dr. Lockhart went to Shanghai, and Dr. Hobson to Hongkong. Excellent mission hospitals were built and furnished at both places, and both missionaries were greatly blessed in their 'work of faith and labor of love.'

"Dr. Lockhart, speaking of the work which he was thus privileged to inaugurate, says: 'In 1838 I was sent out by the London Missionary Society as their first medical missionary to China. A house was taken for

a dispensary and hospital, and the people were informed that they would receive gratuitous medical attendance. They came in great numbers, so that in the course of a few weeks our house was quite full, and the street was crowded every morning with patients flocking to us for aid; and it was pleasant to see how soon, by this work of humanity, we could find a way to their affections and their hearts, and how the people who were thus relieved would dwell upon the words of the preacher. I believe the truth thus found its way to the hearts of many who, without the hospital, would never have known the glad tidings of the gospel. Many persons came from the northern and western provinces to our hospital at Shanghai. When under treatment there, they heard the gospel preached. Returning to their distant homes, they took with them portions of the Word of God, and various religious tracts; and thus the message of salvation found its way into large districts of country which, without this agency, we had no means of reaching. This is the great object of medical missions. We strive to win the confidence of the people—to get them around us—to open their hearts by kindness to receive the Divine Word—and thus, sowing the seed at a favorable time, bring many to know Christ, whose hearts

might otherwise be prejudiced against his truth. We repeatedly heard of patients who, having been to the hospital, and having there heard the gospel, carried with them portions of the Word of God to their native villages, and induced others of their friends to come down in order to participate in the same benefits. So the work went on, and I say with confidence, that medical missions in China have been successful in winning an entrance for the gospel to the hearts and consciences of the people, which no other agency could have so well effected.

"About this time very valuable testimony to the remarkable influence and success of those early medical missionary operations among the Chinese was borne by an intelligent eye-witness, Dr. Wilson, inspector of naval hospitals, who, in his work entitled 'Medical Notes on China,' thus refers to medical



BOY WITH ELEPHANTIASIS

missions: 'Among the most promising means now employed for reforming, or, rather, revolutionizing, the moral, intellectual, and social condition of the Chinese, we would rank the medical missions recently established on their shores. In their frequent, and, from their very nature, familiar intercourse with the afflicted, the medical missionaries possess advantages which the man who addresses himself only to the understanding can not obtain. They have consequently more potent means of touching the heart, and turning feelings of gratitude into instruments by which they may act powerfully on the darkened mind. Though they do not directly assail the strongholds of bigotry and conceited ignorance, they hope to raise up institutions of light and liberty, and to substitute for the worship of idols the adoration of the true God.

"The Rev. Griffith John, one of the most experienced and best-known missionaries in China, writing regarding the London Missionary Society's medical mission at Hankow, says: 'I am happy to be able to state that our hospital at Hankow is a thoroughly Christian institution. Every helper is, so far as we are able to judge, a genuine disciple of the Lord Jesus Christ, and in perfect sympathy with the higher aim of the establishment. From end to

end, and from top to bottom, the atmosphere of the hospital is a purely religious one. So actively engaged are the assistants in making known the truth to the patients, that it is almost impossible for any one to spend three or four days within the building without obtaining a fair knowledge of the fundamental truths of the gospel. I never enter the wards without feeling that the institution is a great spiritual power.'

"The Hankow mission hospital was built in 1874, largely by funds raised among the Chinese themselves. The land was a gift to the hospital by Dr. Reid, who for many years freely gave his time to the medical work of the mission. Accommodation is provided for about forty patients, and out-patients are seen five days a week. 'Every day,' writes the medical missionary, 'when the patients are assembled in the waiting-room, the gospel is proclaimed to them. That they get a clear mental knowledge of

the truth, we know by the intelligent answers given to the frequent questions asked in the consulting-room. Those who remain as in-patients receive daily religious instruction, and through kindness and attention to their bodily sufferings, we seek to lead them to the Great Physician, who alone can meet their spiritual wants.'

"Patients come from great distances for advice and treatment, even from the provinces of Hunan and Kiang-si. From Mienyang alone, though over a hundred miles distant, we have had twenty-three in-patients during the year. In this way the gospel reaches many who would probably never have come under its influence in any other way.

"Among many most interesting cases, the medical missionary tells us of a father, a small farmer, who brought his two daughters, aged thirteen and sixteen, to the hospital, suffering from cataract of both eyes, and totally blind. Both girls were operated

upon, and returned home with their sight restored. While in the hospital, they received daily Christian instruction, and, by and by, both expressed an earnest desire to become Christians. After having given satisfactory evidence of a real change of heart, they were baptized. Three months after leaving the hospital, they returned with their



BURNING INCENSE IN CHINA

mother and a number of sick and maimed neighbors. The mother had been blind from cataract for about twenty years, and was now forty years old. She had not come to Hankow to be cured, she said; for after so many years' blindness she could never expect to be able to see, but she had come to receive Christian instruction. Her case, happily, was not considered hopeless. Both eyes were successfully operated upon, and her sight was restored. While in the hospital, both she and her husband were led to know Jesus, were baptized, and returned to their home a Christian family."

The victories gained by combining spiritual teaching with medical and surgical skill in the past emphasize the importance of continuing work for God on the same principle in these days.

AMBATO, ECUADOR

Mrs. John Osborne

WE were here several months before the public knew much about our treatments, for having but little knowledge of the language, we were unable to explain our business. However, a physician living near us, who was suffering with pain in his back, let Mr. Osborne give him fomentations and massage. This gave him much relief, and he offered Mr. Osborne a fine recommendation.

I also visited the postmistress and her sister, explaining our treatments, and what we had done for the sick in the States. The sister at once said, "Well, this is just what I need," and made arrangements for treatment immediately. From this our work spread, and soon we had all we could do. The Lord greatly blessed in every case. Nearly all these cases had been given up by the doctors. When sick, a patient is fed on meat, beef tea, etc., and not a drop of water is given him to drink, neither is he allowed to bathe, and the doors and windows are tightly closed. Mr. Osborne now has

a patient, a very prominent man, who had not taken a bath for four years. He was allowed to wipe his face and body with a cloth dampened with alcohol. One man had not tasted water for five months.

How could we but have success? If people can exist under such conditions, they are sure to be benefited when we open to them nature's great storehouse of blessings, and give them access to fresh air, water, and sunshine. We were given personal letters of recommendation to the president of the republic, who received Mr. Osborne in a very cordial manner, and took massage from him the first day they met.

So the work here advances. We have all necessary privileges. This government recognizes nurses' diplomas from the States, and we began work without further examination.

The people in these countries greatly need help. We are indeed glad for a part in the Lord's work, and take it up cheerfully and with good courage.



OUTDOOR GYMNASIUM IN JAVA



VICE IN LARGE CITIES

IN accordance with a resolution adopted in mass-meeting, the mayor of Chicago, early in 1910, appointed a commission, later named the Vice Commission of Chicago, to which was entrusted the work of inquiring into the vice conditions in Chicago, and making recommendations for relief. This commission appointed ten committees,—five charged with the work of investigating conditions, and five on relief measures. As a result of the combined work of these committees, a volume has been issued, "The Social Evil in Chicago," which, without attempting to follow the sensational methods of the newspapers, has, by the mere recital of the facts as they exist, shown up a condition that should convince every right thinking person that the let-alone policy and past efforts at the regulation of vice, have resulted only disastrously.

Not less thorough than the statement of existing conditions have been the recommendations for their amelioration. The commission urges the appointment of a permanent moral commission, and the establishment of a moral court.

The members of the Vice Commission, although of various shades of opinion at the beginning, became a unit before the close of the investigations. One of the sagest statements is:—

"We may enact laws; we may appoint commissions; we may abuse civic administrations for their handling of the problem; but the problem will remain just as long as the public conscience is dead to the issue, or is indifferent to its solution.

"The law is only so powerful as the public opinion which supports it. It is the habit of Americans, when they make laws, to insist on ethical ideals. They will not com-

promise. They have been endowed, however, with a fine ability to be inconsistent, and having once declared their ideals, to find no difficulty, when it comes to the administration of the laws, to allow officials to ignore them; to do things not in the laws; and to substitute a practise which is a de facto law, though technically illegal. This is the basis of graft, and the greatest evil in municipal government."

Among the reforms recommended by the commission are (1) the elimination of the saloon as a partner in vice, (2) greater care in the protection and education of children, (3) the provision of healthful and carefully guarded places of recreation for the children, (4) sex education, carefully guarded.

The commission records its opinion that "divorce is to a large extent a contributory factor to sexual vice," and deplores the fact that the unfit can so easily obtain a license to marry.

"An application for a license of any kind, whether it be to construct a house, run a push-cart, peddle shoe-strings, or keep a dog, must be accompanied with evidences that the applicants are responsible and reliable agents. But for a marriage license, one person, unattended and unknown, and, so far as one can know, an epileptic, a degenerate, or who has in his blood a loathsome venereal disease, may pass his name through a window with that of a similarly questionable female, likewise unknown, and be granted the divine right to perpetuate his kind, in turn a burden and blight on society and the community for generations to come. The whole subject of selection in connection with the institution of marriage is of vital importance in connection with the social evil. Unwise selection produces innumerable contributory agencies through unhappy marriages, inherited degeneracy and disease, and the divorce evil."

Among the causes which lead to downfall are enumerated:—

First, lack of ethical teaching and religious instruction; second, the economic stress of industrial life on unskilled workers, with the enfeebling influences on the will power; third, the large number of seasonal trades in which women are especially engaged; fourth, abnormality; fifth, unhappy home conditions; sixth, careless and ignorant parents; seventh, broken promises; eighth, love of ease and luxury; ninth, the craving for excitement and change; tenth, ignorance of hygiene."

In finishing its report, the commission, referring to the fact that there is but one moral law alike for men and women, places the blame for the present deplorable condition where it belongs:—

"To one who hears the ghastly life-story of fallen women it is ever the same,—the story of treachery, seduction, and downfall,—the flagrant act of man,—the ruin of a soul by man.

"It is a man and not a woman problem which we face to-day—commercialized by man, supported by man; the supply of fresh victims furnished by men who have lost that fine instinct of chivalry and that splendid honor for womanhood where the destruction of a woman's soul is abhorrent, and where the defense of a woman's purity is truly the occasion for a valiant fight."

It should be remembered that Chicago is no worse than other large cities; and in proportion to their inhabitants, the smaller cities have practically the same conditions. It is a disgrace, permitted by the better class, partly because of ignorance of the facts, partly because there are few who realize that this iniquity is a blot on the name of every citizen. Few realize that they are their brothers' and their sisters' keepers.

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The Modern View of Cholera

THERE is no indisputable evidence that cholera is always detected by an observation of five days. In other words, the old idea of an incubation period of five days, while applicable to typical cases, exhibits exceptions frequently enough to make reliance on it hazardous. In fact, it is now known that

there are mild irregular cases in which the incubation period may be weeks instead of days, and there are cases, or may be cases, in which actual symptoms never occur. There are veritable cholera carriers, as there are typhoid carriers and diphtheria carriers,—persons who, though clinically healthy, nevertheless are infected with cholera germs, and are passing them constantly in the excretions.

It can readily be understood that such a person, though innocent of any thought of harm, is extremely dangerous to his community, much more so than the actual cholera patient; for he probably infects many persons before he is detected.

It is true, no doubt, that cholera germs living peaceably in an individual are not so likely to be virulent as those from a cholera patient. Nevertheless, it takes very little to increase the virulence; and if they reach a person more than usually susceptible, the establishment of the disease will increase their virulence for the next victim.

It has been repeatedly demonstrated that a germ of low virulence, by being passed through very susceptible animals, may be increased in virulence until it is capable of overcoming very resistant animals.

Any accident may stir up the virulence. A case is related by the health officer of the port of New York, Alvin H. Doty, of a passenger who had been under observation for sixteen days. Because he had been under the care of the ship's surgeon during the passage, he was detained under observation, and was given a dose of calomel, as were the other persons who were detained. In another twenty-four hours the man, apparently well when he arrived, was dead of cholera. Undoubtedly the germs were in his intestines, and the dose of calomel strengthened them to activity. Had he passed the quarantine officers, some other acci-

dent might have set these germs to work, causing his death and endangering his neighborhood.

It may be said for the benefit of those who look with dismay upon the recent Western cholera wave, that, according to health officials, this disease can gain no real foothold in any community where there is adequate sanitary supervision. In Italy, where in the eighties the people died by the thousands, they were in this last epidemic numbered by the dozens, and the epidemic is stamped out.



Paper-Bag Cookery

AN English chef has made a discovery, which is really not a discovery, for the principle has been in use for many years; namely, that food can be cooked in paper bags. It is claimed for this method that food so cooked is much more tender, much more juicy, much more highly flavored, than when prepared in the ordinary way, and that with less experience, less waste of fuel, less dirt in the food (more, in fact), and less odor in the house. The discovery seems to be causing a revolution in the cooking art here. The books and the paper bags are selling, to use an old simile, "like hot cakes."

The *Daily Express*, which has taken up the matter in connection with "Self-ridges" (one of the London department stores), gives demonstrations of paper-bag cooking to which the public is invited. A large room in the upper story of the store is, during demonstration afternoons, crowded with interested spectators. Part of the interest may lie in the fact that as the dishes are cooked, they are passed around for the crowd to sample. But the main interest, I take it, lies in the fact that few of these people have ever tasted food quite so delicious. During the demonstration, which is con-

ducted by a chef who explains the various processes, there is a constant demand at the counter at the back of the room for the paper bags and the cook-books. The clerks can hardly hand them out fast enough. The cook-books prepared by the *Daily Express* sell for a penny (two cents); and those prepared by the inventor sell for a shilling (twenty-five cents). The bags come rather high, the price per hundred being, for the different sizes, respectively: 7 x 5, 35 cents; 14½ x 11¼, 75 cents; 20½ x 15¾, \$1.42. There are intermediate sizes which I have not given. To fasten the bags, ordinary wire clips, or paper fasteners, obtainable at any stationer's, are used.

It is said that the paper has been analyzed, and found to be free from injurious chemicals. The paper-bag cookery is made use of very largely in the preparation of meat and fish dishes, but it also does excellent work in preparing vegetable dishes. In fact, there is scarcely any class of cookery where it is not available.

"What is paper-bag cookery?" some will ask. It is a process dispensing with all cooking dishes — everything except the paper bag, the clips, and a grid. With this method there are no frying-pans nor sauce-pans, no dishes with food burned on, no unsightly pot sink. The food is put into the sack, the sack is sealed with the clips and placed on the grid, or grating, or in the oven, so as to allow free circulation of air; the requisite heat is applied for the time specified in the recipe; and the food is done, beautifully done. The paper bag has been an excellent substitute for the skill of an expensive chef.

Is it any wonder that paper-bag cookery is becoming popular? We hope to be able to report soon regarding the paper bag and non-flesh dishes, such as are prepared at the sanitariums.

The Monday Evening Club

THE city of Washington is unique in one respect: it has no citizens. Its inhabitants are disfranchised; at least they have no vote in the District of Columbia, though they do have the privilege (?) of going to their own homes — provided they have another home, as in Oregon, for instance — to cast their votes. The city government is administered by Congress, and every law made for the city is by Congressional enactment. Each house of Congress has a special District Committee to look after the affairs of the District, and to recommend bills for action. The administration of the affairs of the District is in the hands of a board of three commissioners appointed by Congress. There is, of course, the usual police department, health department, school department, engineers' department, etc.

To compensate the people of the District for their disfranchisement, the federal government pays half the taxes, and the people attempt by public appeals to Congress to secure as much as possible for the city out of Uncle Sam's capacious pocket.

As a matter of fact, the result is that, though taxes may be somewhat lower than in other cities, it is much more difficult to obtain needed improvements, enlargements of buildings, playgrounds, and other things which other cities that have been weaned, as it were, can get for themselves. Congressmen, recognizing the people of the District as "non-voters," do not manifest any unseemly haste in passing District bills. Washington is a large child, begging its ma for things which other children get out and earn for themselves, and ma is not always very liberal.

Though the citizens have no vote, they have means of expressing themselves. There are thirty or more citizens' associations, representing different local-

ities. There is a representative body, the "Federation of Citizens' Associations," which deals with the Congressional committees and the commission in matters of interest to the entire city. The Chamber of Commerce and the Board of Trade also look after certain interests, through the Congressional committees and otherwise.

But there is one body which is working especially for better social and hygienic conditions in the city. This is the Monday Evening Club, composed of representative physicians, the health officer, educators, editors, fathers and mothers, in fact, any who are enlisted in the welfare of the city. The club meets the third Monday of each month to discuss sane topics of vital interest to the community. And the club does not end with discussion; for when it decides on a measure, it gives this into the hands of a live committee to push; and the committees usually do things.

Among the measures that the Monday Evening Club is now advocating, and which it expects to continue working for until it secures them, are the following:—

1. The abolition of the loan-shark evil.
2. The elimination of alley slums.
3. The provision of an adequate supply of school nurses.
4. The appointment of a chief medical inspector of schools, to have charge of the medical inspectors of schools, dental inspectors, and school nurses.
5. The compulsory removal of dangerous tuberculosis patients — that is, patients who will not take the precaution to protect those around them from contamination — to the tuberculosis hospital.
6. The establishment of a special hospital for inebriates and drug-users.
7. The establishment of public baths, additional public comfort stations, and public laundry conveniences, where for a nominal sum poor women may do their

own washing under hygienic conditions.

8. The provision of more municipal playgrounds, school playgrounds, and athletic fields, half the expense to be met by Congress.

9. The use of school buildings as social and neighborhood centers.

10. Vocational training and vocational direction in the public schools.

11. An amendment to the "non-support" law, making it include illegitimate children.

12. The stricter regulation of the practise of midwifery, with a view to the prevention of infantile blindness.

14. Adequate provision for the segregation and the treatment of the feeble-minded.

15. Two additional officers for the board of children's guardians, a board which supervises the care of the "motherless children" placed out in families, and reared under the guardianship of the government. The present force is inadequate.

18. The erection of a new municipal lodging-house. The present one is too small and not adapted to its purpose.

19. Support of the milk legislation recommended by the Chamber of Commerce, including (1) a requirement that milk be kept at a proper temperature; (2) the maintenance of a bacterial standard; (3) the compulsory Pasteurization of milk not above suspicion. The present law, enacted in 1895, was at that time a model law; but sanitary science has gone far ahead of what was then considered requisite.

20. Compulsory ventilation of street-cars, public buildings (motion-picture shows, etc.), and churches.

21. The removal of the Washington Asylum Hospital to a new site already provided.

A few of the items omitted were referred back to the committee because of differing opinion as to details, it being desired that the club be a unit on all measures for which it is working.

Many of these recommendations are of a local nature, but they are related to the problems coming up in all cities looking toward permanent city betterment.

Inasmuch as our civilization is one in which there is a steady gravitation to the larger centers, it is important that public-spirited men and women take it in hand to minimize as much as possible the evils of crowding, and establish newer, more beautiful, more healthful, and better cities than we have been accustomed to in the past. This is part of the program of the Monday Evening Club of Washington.



Light Drinks Not Harmless

EMINENT physicians in Germany, France, and Switzerland — three countries where wine or beer is the common drink — are awakening to the necessity of making a careful study of the effects of small quantities of alcohol, such as would be represented by an ordinary glass of beer or wine; and some of their findings are startling. The fact that scientific men in the countries where light drinks are used, have been aroused to appreciate the importance of studying the effects of minute doses of alcohol, is in itself significant.

Here is another very significant fact: The per-capita consumption of alcohol in Belgium, England, France, and Germany — the beer and wine countries — is much greater than it is in the United States, which has the reputation of consuming a larger proportion of stronger liquor.



AS WE SEE IT

Foreign Exhibits at the Dresden Exposition

THE most interesting British exhibit was that of the Liverpool School of Tropical Medicine, showing the rats and fleas concerned in the transmission of plague, and the mosquitoes responsible for the propagation of yellow fever and malaria.

The most striking exhibit in the Japanese pavilion was perhaps the representation of their Red Cross service on the field of battle. The panorama showing the activity of the surgeon's tent during the time of battle was certainly very realistic. An instructive exhibit of the Japanese native foods was shown, together with a table comparing their nutritive values with some of our ordinary foods.

Austria's most unique exhibit showed wax models of limbs and parts of the bodies of victims of electric accidents. There were also parts of burned clothing and shoes, and in some cases limbs preserved in alcohol, showing the terrific work of an electric current of heavy voltage. Over each exhibit was a drawing showing what the person was doing when he received the fatal or damaging charge.

Brazil showed one room screened off exactly as the people of that country screen their yellow-fever patients. To view the wax patient, one had to enter a screened anteroom and look through a glass door. At one side sat the wax nurse watching the patient through a screen.

The most interesting of the Swiss ex-

hibits to the professional man would probably have been the exhibit showing the nature of cretinism, and attempting to explain its cause; to the non-professional person it would probably have been the school exhibit showing the mechanical work accomplished in the Swiss schools.

The central exhibit in the French pavilion was one showing the actual apparatus, or in some cases duplications of apparatus, used by Pasteur in his history-making work in many lines, including spontaneous generation, silkworm disease, wines and beers, rabies, and anthrax.

The United States was conspicuous by its absence. The director of the exhibit in the "der Mensch" building several times spoke to me in regret of this fact. It seems strange that where Brazil and Japan could find time and interest to do credit to themselves, the people of the United States, with their magnificent achievement at Panama, took so little interest in the exhibit. Possibly it was the knowledge (learned by us only after we reached the exhibition) that practically everything would be German and for the Germans, and that the "lid" would be on so tight that no information of value could be taken away. We can say frankly that if there had not been so much suspicion manifested that visitors were there to steal some information, those from abroad would have more interest to attend future exhibitions.

Imagine, if you will, some professor in Germany inviting us to come over

from America to attend his clinic, and then imagine, if you can, our amazement, on attempting to take notes or make drawings in order to refresh our memories and to give our readers the benefit, to be informed that no note-taking and no diagraming would be allowed! Well, that is about how we felt. Of course, afterward, as we learned that this precaution was taken to prevent quacks from appropriating things for commercial purposes, our feelings were soothed somewhat; but we can not help feeling that a more liberal policy would have insured more attention from Americans at a future hygiene exposition.

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The Hygiene Exhibit

IN the exposition there are at least two exhibits demonstrating the evil effects of tight clothing, and there are a number of exhibits of reform clothing and reform shoes.

Much has been done to show, in a way comprehensive to the uneducated person, the nutritive value of various foods. All kinds of foods—for instance a cabbage, a plate of raw carrots, a piece of Camembert cheese, a slice of beefsteak, all so carefully made in wax as to deceive one at first sight—are exhibited, and behind each one there is a series of jars containing the exact amount of albumen, carbohydrate, fat, ash, and water contained in that quantity of the food. In this way it is shown, in a manner comprehensible to the person without medical education, how much nutriment there is in each food, and how much the body requires.

But as to the superiority of one food to another, aside from its nutritive content, one sees but little. It is true there is an exhibit showing the edible and the poisonous mushroom, another showing foods containing artificial dyes, and beside them yarns colored richly by means

of dyes extracted from foods. In the exhibit of tropical diseases there are samples of poor corn and corn products supposed to have a causative relation to pellagra, and samples of rice supposed to be the cause of beriberi; but this is entirely independent of the food exhibit.

There are several exhibits showing the evil effects of alcohol, at least one showing the injurious effects of tobacco and other narcotics, and one classing caffeine with other vegetable poisons; but as a whole, the commercial exhibits of "hygienic" beer, and "health" cigars, etc., and the beer gardens, open until one or two in the morning, must neutralize very largely the good teaching of the exhibition.

The exhibition grounds are opened at nine in the morning, and closed at one or two *after midnight*. The buildings are closed at seven in the evening. At nine in the morning the entrance price is two marks (fifty cents); at ten it is one mark; at seven in the evening, half a mark. The extra charge in the morning serves to reserve that hour for quiet study by possessors of press tickets, and those who are sufficiently interested in the exhibits to purchase a season ticket. After ten o'clock the ground is more crowded, and in the evening it is merely a resort, with gardens, concerts, and various park attractions or distractions. One eating and drinking establishment advertises to have a concert every evening from nine to twelve. This feature, which to us appears unhygienic, seems to be very popular, and doubtless goes a long way toward paying the expenses of the exposition.

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The Scientific Exhibit

OUR first impression on visiting the scientific exhibits, especially those showing the anatomy and physiology of man, was surprise at the amount of material shown. As we have inspected the vari-

ous exhibits day after day, meantime learning more of the German language, our astonishment has changed to admiration. Certainly no exhibit has ever shown the facts of anatomy and physiology in such a popular way. We can not say too much in praise of the care that has been used to have the exhibit thoroughly scientific, and yet intelligible to the common people. I suppose no physician nor anatomist nor pathologist has visited the exposition who has not viewed with surprise the extensiveness and the excellence of the exhibit; and no person with the ordinary school education can examine the exhibits for a few hours without knowing more about his body and its functions than he ever learned in school.

I am told that the projectors of this work have been preparing for it for two years, keeping busy scores of assistants on the models, diagrams, etc. Many college professors who took no interest in the exhibition at the first, thinking it impossible to popularize scientific facts, have been won over by seeing the exhibit.



The Outdoor Life

THE Germans are much more an open-air people than are Americans. The very word for "beer garden" expresses their preference for the open air. Everywhere one sees tables and chairs in the open. Even in the city a beer hall may have half the sidewalk enclosed by means of a five-foot portable hedge. Such a space, furnished with tables and chairs, over which an awning may be lowered in bad weather or at night, is very attractive to the Germans.

It may surprise some to know that hedges may be made portable. Boxes four or five feet long and eight inches wide, filled with earth and growing ivy or some other climbing plant, trained upon latticework extending upward from

the box, completes the outfit. Such boxes, which may be moved about almost as easily as a Japanese screen, serve various purposes. Sometimes one placed temporarily across the open front door gives ventilation and a park-like air, with the seclusion of the home.

The well-to-do often have summer-houses in their front yards. These are partly screened by plants, but are open on all sides, affording a good view of the street. These summer-houses, which, of course, are furnished with tables and chairs, are much used in good weather.

The streets, in this part of the city at least, are swept daily after sprinkling. The sidewalks are also swept each day. The sweeping is done principally by hand, though there are rotary brush-sweepers which sprinkle and sweep. On some streets so much water is used that they may be said to be washed, but not scrubbed, the mud remaining. In winter, we are told, the streets are kept free from snow. A large force of men is employed, and the streets are cleaned several times a day when necessary.

One noting the care of the municipality to have a clean city is surprised at the carelessness of the people in littering the streets. Sometimes a window will be thrown open, and a paper, torn into bits, thrown out shortly after the sidewalk has been swept. There is not the same care to avoid spitting on the sidewalks as with us. Occasionally we see some one, who appears as if he had intelligence enough to know better, foul the sidewalk, with not even an attempt to turn the head. Apparently the people look to the municipality to keep the streets clean and sanitary. I might say even more of what I've seen in this respect, but it would not make appropriate reading for this journal.

Woman's clothing is much more sensible here than with us. Not infrequently large waists are seen, and the

figures are not unbecoming. In the shop windows we see many fine suits with large waists. The people seem to have excelled us in the manufacture of handsome reform clothing for women.

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Beer and Intoxication

As we were inspecting some old buildings near the Dresden Art Academy, our attention was attracted to two men, one of whom seemed to be trying to help the other to his feet. Soon they started down the street hand in hand; for befuddled though they were, they still seemed to know that the oscillations of the one would tend to counteract the gyrations of the other. When they had worked their way, zigzag, half-way down the block, one stopped and let go his partner's hand in order to steady a drunken lamp-post. Then joining hands again, they continued their vain attempt to avoid the appearance of staggering, until they were out of sight.

We watched this performance with interest; for we had not expected to see such sights in a country where the usual drink is beer. It is sometimes stated that in countries where light alcoholic drinks, such as wine and beer, are in common use, there is much less evil result than where spirituous liquors are more commonly used. It is even claimed that these light drinks, by doing away with the temptation to take stronger liquor, are a real benefit. These statements are very much in need of definite proof. Our observation would lead us to the contrary conclusion.

Recently when we were in the Mensch building of the International Hygiene Exposition, studying the exhibit on alcoholism,—a very strong total-abstinence sermon, by the way,—a German came in and carefully examined the exhibit. He had actually the most besotted face I ever saw on a man not a habitual gutter

drunkard. In some respects, he was in a worse condition than the common drunkard, though doubtless he drinks only beer, and never gets what he considers too much. The blood-vessels of his face had completely lost their power to contract, and his entire face was a pasty, puffy, shapeless, livid, purple mass. Probably the man considers himself a moderate drinker, and does not realize that alcohol is injuring him; for such is the deceptiveness of this narcotic that it seems to the victim to give vigor of body and mind when, in reality, as shown by instruments of precision, it lessens and destroys both mental and physical power.

And this is not an isolated case, though the effects are usually not so marked in the face as they were in this case. It has been my fortune—or misfortune—to be on boats carrying crowds of people bent on having a good time. Many of them by night had imbibed enough to impart a stupid look to the eye. They do not realize, of course, that the effects, though apparently insignificant, are permanent.

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**The Danger of
Flueless Heaters** A SAN FRANCISCO family of four were found dead in their home recently. They had been heating the house with charcoal, and noted no ill effects, as the windows were open; but when they closed the windows at night, the carbon monoxid did its deadly work. Even had they escaped death, their health would have been seriously injured. No heating should be done by means which allows the fumes to remain in the room.

The following expression from the *Journal of the American Medical Association*, Oct. 15, 1910, is to the point:—

“As a means of warming a room, there are few things more pernicious, from the hygienic standpoint, than oil- or gas-heating apparatus used without a flue pipe to carry off the products of combustion. They not

only vitiate the air directly by consuming the oxygen and replacing it with noxious gases, but indirectly they put a premium on insufficient ventilation by making it practically imperative, with the windows and door shut in order to accomplish the object intended,—that of raising the temperature of the room in which they are used. In view of the obvious objections to this form of household heating apparatus, therefore, the advertising by the gas-heating company, which has recently appeared in most of the Chicago papers, is much to be deplored. This advertising sets forth the virtues of a gas heater, which we are told ‘needs no flue pipe. . . . It consumes less oxygen than one person, and really purifies the air by burning dust and germs.’ Whether the promulgation of such dangerous untruths as this is due to ignorance on the part of the corporation or to the unfettered imagination of its writer of advertising, makes little difference; it should be stopped.”

Advertising in Religious Papers

At the General Assembly of Scotland recently, Professor Curtis, of Aberdeen, moved to exclude from the periodicals under the jurisdiction of the assembly “all advertisements of secret or patent remedies of a medical or quasi-medical description.” The custom of religious papers (in which simple-minded people repose confidence as above the commercial tricks of the world) in accepting advertisements of nostrums is reprehensible. The religious journal should be as clean in its advertising pages as in its editorial pages. As a matter of fact, it is. A paper can not be partly clean and partly dirty. It tells what are its real principles by the advertisements it accepts. The amazing fact in this connection is that the professor’s motion was rejected by a large majority. An argument which carried much weight with the assembly was that one of the periodicals in question was practically supported by such advertisements! On such an argument we might open a beer garden in the basement of the church in order to help pay the running expenses.

A Man With Rare Courage

WHEN we realize the strength of the “interests” against which Dr. Harvey W. Wiley has fought, almost single-handed and alone; when we understand the bitter enmity and hatred that he has faced undaunted; when we consider that he has had to do this even against the indifference and antagonism of his superiors, and has had to steer clear of endless technicalities and red tape,—we are amazed. When we further realize that the work he is doing is for “the public,” that fickle complex capable of raising a Dewey up to heaven one day and casting him down to Hades the next,—the public that is quick to condemn on small pretext and often slow to reward,—our amazement changes to admiration.

We give a partial list of Dr. Wiley’s enemies for the consideration of our readers. They are powerful financially and politically; they are represented by determined men, who will leave no stone unturned in their attempt to ruin a man who has dared to stand for principle. Had Dr. Wiley chosen the easier way; had he allowed the stream of gold to flow from these different concerns into his pocket, and slacked up a little in his diligence, he could have had an easier time, and could have been well supplied with this world’s goods; and “the people” would have been none the wiser.

Among the “interests” whose bitter antagonism Dr. Wiley has aroused are: The adulterated whisky interests, the bleached flour interests, the sodium benzoate interests, the saccharin interests, the glucose trust (which we understand is identical with Standard Oil), and the patent medicine combination. These represent a combined wealth of hundreds of millions, perhaps billions, of dollars, and a power to manipulate the government that is enormous.

CURRENT COMMENT



ARE WE PROGRESSING?

SO great has been the apparent interest in health matters in the past decade that we are apt to fancy the battle for healthful living at least half won. Nothing could be farther from the truth; and any such wild imagining is productive of a false sense of security, leading to a diminution of efforts which need rather to be redoubled.

It is the physician and a few others who most need to take this condition of affairs to heart; for it is almost wholly through their efforts that any real progress in hygiene and sanitation has come to pass so far, or will be accomplished for some time to come. The public at large is immensely interested in hookworms and in the capture of plague-carrying rats. It reads with avidity any magazine article on the use of stovaine or on the transplanting of viscera. But for the matters of health near at home, which really concern it, for the conditions which govern the health of a city and of the helpless multitudes of the poorer classes, it has little practical interest. Occasionally one of the laity, who, through experience of sickness, has been led to a special interest in such matters, arises as a power for good; but, as a rule, popular interest and effort are exceedingly shallow, and if the wheels of hygiene's car are not to become ankylosed, the profession must busy itself in furnishing motive force.

It looks, indeed, as if progress toward health was to be actually hindered by certain elements in society; note the opposition to the measure in Congress for

the establishment of a national health bureau.

"But," it will be asked, "do not the returns from the boards of health show a falling off in the number of cases of contagious diseases?"—This is true; but the falling off (with the exception of such diseases as typhoid, the preventive measures for which have been more or less permanently established) is not so large as should be expected from our present knowledge of disease. Besides, with more stringent health regulations, many cases of contagious diseases go unreported, or do not even seek the aid of a physician, for fear of quarantine.

In the matter of tuberculosis we have heard one of the highest medical authorities in the country say that "any one who thinks we have made more than a dent in this problem is living in a fool's paradise, and needs to wake up."

This article may sound pessimistic, but we deny the charge. We are making progress, but we should like to see more steady and less fitful interest in the public health. Above all else, we wish the public could be of more assistance than it is. This will not come to pass until we have more thorough teaching of hygiene and sanitation as a vital part of education. It is said that only a physician knows how to take care of his own health, and we can scarcely expect people at large to know the rudiments of personal or public health unless they have had some comparable education in this direction.

The health millennium is so far in the distance that no man who has the wel-

fare of the race at heart can relax any effort in this direction. Too much remains to be done for us to fold our hands and sing songs of praise.—*The Dietetic and Hygienic Gazette.*



Upton Sinclair on Fasting

THOSE who are opposed to fasting claim that it takes away the strength, and therefore diminishes the ability to resist disease; also that it exhausts the system so that one is more likely to contract new diseases. This is a very plausible argument; it is the chief difficulty which the advocate of fasting has to meet. I am not sure that I can give the reason for my belief. I can only state that the facts have convinced me that just the opposite is the truth with fasting. No matter how weak you get, you do not get new diseases. No matter how weak you get, the hold of old diseases upon you is weakened. The explanation of this I believe to be that the original cause of all disease is the clogging of the system with food poisons. When you fast, you give a rest to the organs of assimilation, which you have been overworking and abusing. A very large proportion of the energy of the body goes into the digestion and assimilation of food, and this energy is now saved for the combating of disease. You have a reserve of food material in the form of fat and muscle, which the body can use when it has once learned to turn to this internal larder. Apparently it can not use this material with sufficient rapidity to give you strength to do continuous hard labor (for instance, you would not want to climb a mountain when you were fasting); but it gives you plenty of strength for the ordinary processes of life.

I am fasting at the present time. I ate some food which I knew was not good for me, and then I found myself taking

a cold. When I had gotten to the point where I began to feel really ill, I fasted. It has been now just forty-eight hours, and almost every trace of the cold has gone. In another twenty-four hours all will be gone. I know that as certainly as I know my own name. I simply turned that cold off, as a man turns off a spigot. There is no knowledge in the world that I would exchange for that secret about health.—*Physical Culture for May.*



Make the Motion Pictures Useful

THOMAS A. EDISON has the right idea about the use of moving pictures in education. He says that in a few years even grammar will be taught by pictures. Geography, botany, zoology, history, biography, art, and much more will be pictured to schoolchildren, instead of merely being told to them in an ineffective way. Hygiene and physics especially will be taught in this way. Information about all the peoples and nations of the world can be gathered in the form of pictures, for educational purposes. There is great complaint because of the bad effect upon children of the trashy and crime-depicting pictures shown them in the multitude of picture places all over the country. This complaint is a tribute to the educational value of the moving picture. It points the way like a beacon-light. The best way to offset the evil effects of poor or bad pictures is to substitute good ones. The good will drive out the poor. They have already done it appreciably. The better pictures always give the higher satisfaction. If our boards of education would modernize themselves, and make use of this tremendous educating force, they could accomplish wonders in forestalling and offsetting the effects produced by cheap and improper pictures.—*Woman's National Weekly.*

The Game of Silence

ONE of Maria Montessori's most curious and valuable discoveries is the educative value of silence.

The children, when the game of silence is to be played, choose their seats. The teacher then goes quietly from one window to another, drawing the shutters together, until twilight reigns in the room. Some of the little ones always cover their faces with their hands. Others continue to wriggle and to move in their places until the whole room is nearly dark, and the teacher has retired to an open doorway leading into the vestibule. Then, like a coop of young chickens going to rest, even the most uneasy ones gradually quiet down, and become expectant and serious, to await the ever-renewed mystery. When perfect silence has stolen over the assembly, so perfect that the ticking of a miniature clock in the room can be distinctly heard, the teacher calls a name, in a faint whisper: "Giovanni." Giovanni rises as quietly as he can from his little chair, and tip-toes out of the room into the vestibule. Wo to him if his small shoes creak! He must feel himself the object of some very black looks; for every one is trying to hear the name "Lucia," which is being murmured by the teacher. Lucia is more quiet in her movements than Giovanni. "Giuseppe," the teacher next softly calls, and a funny little boy silently joins the others in the hall. She continues to call in a mysterious whisper, until a dozen *bambini* have stolen out noiselessly and solemnly. Then the game is over. Nothing that savors of prolonged mental tax is permitted to be continued for any length of time in the Houses of Childhood. Those who have remained in their places will get the chance to show how stealthily they can leave the room the next time the game of silence is played.

When the game is ended, the shutters

are opened, and the schoolroom is again flooded with sunshine. The little tongues begin to wag again. But this game has calmed all excessive excitability, and restored placidity and tranquillity. Sometimes they ask for it twice in the day. When one considers that the children of these schools belong to the most noise-loving nation in Europe, the success of this game is a greater triumph than the reading and writing.—*From the article on "Maria Montessori, an Educational Wonder-Worker," in McClure's.*



Instinct in Diet

IN early life, instinct guides many children in the selection of foods suitable for them. Herbert Spencer pointed out this fact long ago in his work on education. . . . We find children who dislike meat, and others who have the greatest objection to starchy foods, such as sago and tapioca; and although this is not always in harmony with the parents' views, I consider it a great mistake to make children eat those things for which they have a natural dislike. Sometimes they become sick after taking foods forced upon them which they instinctively dislike, and it is best not to insist on their eating them.

Children are often taught to eat foods that are unsuited to them, and no doubt many of the so-called diathetic diseases, such as gout and rheumatism, might be avoided if a proper dietary could be instituted early enough.—*Charles J. McAllister, M. D., F. R. C. P., in Journal of the Royal Institute of Public Health, January, 1911.*



The Child Coming Into His Own

ERELONG we shall all know that a child is the most wonderful of the gifts of nature, a great responsibility, yet a divine blessing. To lose one through preventable disease or moral neglect will

be acknowledged one of the most shocking of crimes.

Childhood must be prolonged; too soon with us it is merged into unlovely maturity. Economically considered, it seems obvious that if the labor of children is sternly repressed, there will be more work for the multitude of idle adults who ask only for a chance. Only civilized man demands labor of his child. Kindness will be the key-note of child culture; only guidance is needed.—*New York Medical Journal*.



Medicine and the State

IT is part of the program of the International Social Democratic party that the state should undertake the entire control of health services, and therefore the practise of medicine, so that in the "state of the future" the fate of the doctor is sealed. Without wishing to exaggerate this fact, it must not be forgotten that there are some practical men having no sympathy with socialistic dreams who yet desire to see the medical profession made a service of the state, and among them are even members of the medical profession. Their usual argument is that there is a conflict between the interests of the medical profession and the public health which can be removed only by subsidizing it, and making its business to prevent rather than cure disease.

But while a state medical service is admissible and even desirable for administrative purposes, a compulsory absorption by the state of all medical practitioners would not be in the interests of the public, of the profession, or of medical science. If medical practitioners are to be in the service of the state, they must be given the power to compel submission to treatment, a condition which would lead to the most extraordinary abuses, while the calling of a medical

practitioner would be of all the most miserable.

In southern Switzerland such an experiment came rapidly to grief; in Bellinzona fifty-five practitioners accepted fixed salaries to attend both rich and poor, the town and its suburbs being divided into districts, the inhabitants of which paid a small tax for medical treatment. At the end of eighteen months, fifty-three of the fifty-five doctors had come to the conclusion that they could not continue the arrangement, as the demands of the public by night and by day could not be satisfied.

Moreover, it must be remembered that doctors are only human, and that human nature has its inherent weaknesses. State doctors would be deficient in diligence and ability, and the "Govt. Stroke" would be seen in their work as soon as the stimulus of free competition was removed.—*Robert Saundby, M. D., LL. D., F. R. C. P., President's address, British Medical Association, Birmingham, July, 1911. Copied from British Medical Journal.*



The Care of the Cellar

THE cellar floor should be of concrete, which may be easily swept, and may be washed when necessary. The cellar walls should be whitewashed at least once a year, and the windows kept free without and within, so that ventilation is possible.

Partition off the part of the cellar where the coal is kept, and put the coal in by a chute, keeping it in suitable bins. Rail off or box off a place for dry wood, and another for the large firewood.

Have divided from the rest of the cellar a room for preserves, pickles, jellies, etc., and fit the room with swing-shelves. If this room is not dark, build in a closet and put in shelves. In this same room may stand barrels of apples,

with potatoes and other vegetables stored for the winter.

When milk is to be kept in the cellar, the pans should be on swing-shelves, and nothing of strong enough odor to contaminate it should be close by. The butter may also be kept here. Unless the cellar is thoroughly screened, it is well to have the shelves enclosed with wire netting and fitted with swinging doors.

The ashes should never be sifted in the cellar, but taken outside—unless the work can be done in the room used for fuel, the door leading into the other part of the cellar being closed. A covered sifter should be used, if possible, to keep the fine dust from drifting into the other parts of the house.

Spring is the time for cleaning the furnace and putting it in good order for the coming winter. Have the pipes inspected then, the grates repaired, and all necessary alterations made.—*Christine Terhune Herrick, in Woman's Home Companion for May.*



Better Milk in the Future

IT may be confidently predicted that the time is not far away when it will be as much a crime to palm off on the people dirty, dangerous milk as it now is to sell diseased, infected meat. The present movement for a better and safer milk supply means—if it means anything—that old methods of dairying and handling milk must be discarded. In their stead must come new methods based on the known principles of sanitary science—methods that cover the feeding and care of cows, construction of dairy barns, care of the milk-rooms and of the vessels used for the reception, cooling, and transportation of milk, thus

insuring to the consumer milk that is clean and safe. Milk so produced will cost more, and yet less, than that produced under the old way; that is, the consumer's milk bill will be a little larger, but his doctor's bill will be smaller; for anything that promotes and conserves the health of a community saves money.—*Bulletin of Chicago School of Sanitary Instruction.*



Tobacco and Boys

ATTENTION has often been drawn to the fact that college students who smoke do not as a rule attain a high scholastic rank. Smoking is undoubtedly among other things a luxury, and those who are single-minded enough to bend all their energies upon their studies will forego that distraction as well as theater-going and other less harmful relaxations, and thus inevitably surpass the young men who find other things in college life than lectures and books.

It is a fact that the average college boy is satisfied to take an average place in his classes, and fails to see why more should be demanded of him, just as the ordinary adult is satisfied with a place in the ranks. Smoking is a symptom rather than a cause of the contemplative, so-called lazy habit of mind. It is, however, an ugly habit in youth; a huge pipe hanging from the lips of a young man in the street looks weak, absurd, out of place. . . . A young man indulging in alcohol and tobacco is unconsciously confessing to a premature degeneration, and the college ideal should be such as to frown down absolutely any immature weakness of this sort.—*Editorial in New York Medical Journal.*





ABSTRACTS



In this department, articles written for the profession, and public lectures on hygiene, which contain matter of interest to LIFE AND HEALTH readers, are given in abbreviated form. Sometimes the words of the author are given, but more often the passage is abbreviated, or else paraphrased in popular language. Technical matters and portions of articles having no popular interest are omitted. Credit the authors for what is good, and blame "us" for the rest.

HILLTOPS AND VALLEYS OF HUMANITY

THEODORE ROOSEVELT said, "Let us build up the table-lands, but let us not level down the mountaintops." What are the mountaintops? Germany has an association for the discovery of supranormal children. But it is not great talent, nor even great genius, that makes the backbone of the nation, but great character. It is not the Poes and Edisons that we would miss, much as they have served us, but the Washingtons and Lincolns. It is personality that we need, the personality that gave Lincoln and Phillips Brooks their power for good.

The belief in personality is the foundation of kindergarten work. This belief has almost revolutionized the educational work of the last ten years, and will yet revolutionize the home. It is the power, latent in every individual, ready to be called forth. We should live in the belief of this element in every child.

We need more people who are so desperately in earnest that they carry with them the contagion of consecration. There is but one way to develop this finer element of humanity,—to make a great personality: it is to remember in every detail of life the words of Jesus, "The kingdom of God is within you."

We can teach the children greatness in the events of every-day life. Clothes should be to the child like the petals of a flower, and not the occasion of a

foolish pride. At table the conversation can be so turned that he will learn the importance of eating to live. Instead of Thanksgiving being a time of overeating, it can be a season when the mystery of the harvest brings into the child's life, through careful teaching, the working of God in his universe; and from these early convictions of God may come later the power of the Spirit-filled life. Whenever something of the higher spiritual nature is rightly presented to the child, it is accepted by him.

The child should be taught courtesy, kindness of heart. This may sometimes be taught through the mediumship of animal pets. Older children may learn it through the responsibility of caring for and protecting younger children.

Punishment often violates the child's sense of justice. Let there be no punishment arbitrarily inflicted by the parent, but let the child fully understand the consequences of his act, and that it is he himself who brings on the penalty.

Parents often make no distinction between amusement and recreation. This is the reason why on bright days our parks and pleasant walks are almost deserted, and the motion-picture shows and vaudevilles are crowded. That which might re-create body, mind, and spirit is neglected for stuffy rooms which damage the health and ruin the ideals of the children.

What a poverty of resources, what a lack of understanding on the part of parents, that they thus permit their children to occupy their time with that which ministers merely to their excitement. How much parents could do for children if they would take time to play sympathetically with them! Play is the child's method of self-expression. In play the mother can get nearer to her child than in any other way; yet how often she makes fun of the play of the child!

Too often the mother who herself has had an excellent home training, and because of it has been able to keep her children together and to educate them, brings them up to regard work as drudgery. She has failed to realize that great souls are continually at work.

Perhaps some of us are teaching reverence for the catechism and the Sunday-school. That is something; but until we can give the child the feeling of the presence of God, and help him to realize in his own life the power of God, we are working without foundation.

We need more leaders whose personal life uplifts; whose unconscious influence inspires; who, when we meet them day by day, do not lessen, but increase in our estimation. It is from our homes that such characters must come.—*Elizabeth Harrison, Kindergarten College, Chicago, address before Mothers' Congress, 1911.*

❦

The Prevention of Cold in the Head

IN the individual case, we may consider this a trivial disorder. In the aggregate there is scarcely another common affection about whose cause there is so much uncertainty; few whose treatment is so unsatisfactory. In the aggregate, it inflicts on the individual a large amount of suffering, and on the community a frequent epidemic, which, from the standpoint of present knowledge, can not be adequately controlled. While

practically without direct mortality, it is often the last straw that causes the breaking of vitality in the aged and feeble. Even when it acts neither as a last straw nor by settling in the lungs or air cavities of the face and skull, a coryza undoubtedly often is the determining factor in a chain of events leading to premature death.

As a cause of coryza, a candid consideration of facts does not allow the exclusion either of the theory of infection nor of the theory of chilling. Bacteriologic study of the disease is hampered by the fact that we are dealing with a surface on which numerous bacteria are to be found, among them several forms of disease germs, as of influenza, pneumonia, diphtheria, etc., each of which is seldom present without producing disease. Many colds are plainly infectious, occurring in epidemics, not necessarily in seasons of cold and damp weather, and, in many individual cases, depressing factors and exposures can be excluded. On the other hand, a large number of individual coryzas, not differing materially from the infectious type, follow so closely upon exposures that one can scarcely exclude the factor of taking cold in the good old-fashioned sense, though the modern tendency is to beg the question by assuming that the reflex vascular process merely produces a congestion which allows the colonization of bacteria.

There is no question but that chilling, wearing of wet clothing, and variations of external temperature, are less likely to produce coryza at sea, in camps, and, in general, where the air is relatively free from bacteria, than under ordinary conditions of civilized life. Hot-weather colds, notoriously obstinate, often seem to be neither essentially due to chilling nor to bacteria, but rather to irritating dust, pollen, etc. But it is obviously difficult to exclude the action of bacteria,

on the one hand, or of vascular reflexes on the other.

The whole subject is obscured by apparently contradictory evidence, by lack of thorough bacteriological study, by generalization from poorly controlled bacteriological investigation, and by time-honored conceptions. We are strongly inclined to believe that, in the aggregate of disability and mortality, the problem of coryza is quite as important as that of cancer, and we commend it to the attention of pathologists.

It has sometimes been said that a clean person can not take cold. An individual free from intestinal and systemic accumulation of toxins, and with the skin active and unclogged with salts, sebaceous matter, and epithelium, is much less liable to colds than one who is dirty, in the internal and external senses. Many find by experience that they incur no more risk from sudden cooling off after becoming heated than from following a hot bath with a cold spray.

A form of exposure which is especially apt to be followed by a cold is sitting in a draft, particularly when the air is foul. At the same time, exposure to the wind while exercising, is not especially dangerous.

Whether from increased vital resistance or from the relative sterility of outdoor air,—probably on both accounts and from the tendency to equalize the circulation by exercise,—coryzas are much more likely to develop in those confined mostly to the house and office. However, in persons with renal disease, or for other reasons necessarily confined to the house during cold weather for the sake of an equable temperature, it is important to realize the practical fact, irrespective of theory, that the exciting cause of a cold is usually some temporary exposure.

That the indoor air should be as pure as possible goes without saying; but we

are inclined to believe that, from the standpoint of liability to coryza, it is better to compromise on moderately contaminated air rather than to subject a feeble person to a draft. In our opinion, up to the point at which the accumulation of carbon dioxide interferes with osmosis, this gas is important only as an approximate indicator of the presence of organic exhalations.

As to methods of heating houses: Heat produced by combustion in the room is liable to cause uneven temperature both in the sense of a variation from time to time and of distribution at different points, to cause drafts, and to contaminate the air both with products of perfect and of imperfect combustion. Previously warmed air also causes an uneven temperature in both senses just mentioned; it has the advantage of renewing the air of the room, but there is danger of introducing foul gases and bacteria, as well as dirt. Radiators, whether depending on steam, hot water, or electricity, neither add to nor take from the air of the room. Hence, they are free from the dangers of contamination; but, on the other hand, independent ventilation is necessary. They produce an evenly distributed warmth, but tend to cause excessive dryness. The last point has been so much dwelt upon that we may venture the heterodox view that artificial dryness is no worse than natural, and that it is of advantage by hastening the evaporation of insensible perspiration, and, hence, to some degree, counteracting the effect of winter underwear in an indoor, summer temperature. From personal experience we are inclined to believe that, with reasonable care as to ventilation, and a moderate amount of time spent in the open air, radiator heat is more sanitary and less conducive to colds than other forms.¹

¹ This is not our experience.—Ed.

With regard to clothing, contrary to time-honored hygienic advice, we believe that one should dress by the thermometer instead of the calendar, and that spring colds are less frequent in those who leave off heavy clothing when the weather becomes warm than in those who perspire up to June 1 in winter flannels, and become chilled as evening approaches. So far as practicable, cold weather should be met by outer rather than inner garments. In spite of the general view in favor of wool, it seems rational to use underwear that absorbs perspiration, especially for the feet. On the whole, a heavy grade of cotton underwear is satisfactory. As it is the air spaces rather than the fabric itself which prevent radiation, a double layer of comparatively thin garments may often be used to advantage, especially in preparation for prolonged exposure to cold. It is quite generally known that fever may be reduced by cold applied to the hands and wrists. Hence, protection of the wrists and ankles is especially important in guarding against chill. Both protection against the excessive conductivity of water, the principle of combating outdoor cold by outdoor garments, and the diminution of house infection by dirty shoes, favors the routine use of overshoes, which many persons avoid, at the cost of much dirt and perspiring feet due to the wearing of heavy shoes.

A safe rule, in regard to artificial heat, clothing of all sorts, and ventilation, is to avoid both shivering and sweating. The endeavor to toughen by exposure should not be carried too far, especially after middle age; and while fresh air, both by day and by night, is a valuable prophylactic against colds, it is advisable to undress and dress in a warm room, and to have the bed fairly warm to start with.—*The Dietetic and Hygienic Gazette*, January, 1911.

American Flour and Appendicitis

A LONDON writer in the *Medical Chronicle* attempts to prove that American-made flour causes appendicitis. The intestine in the region of the appendix is especially apt to lodge foreign particles, for the reason that normally there is a stagnation of the food at this point.

According to this writer, appendicitis first became a popular disease among the wealthy in America. This epidemic of appendicitis appeared just at the time of the introduction of flour from the steel-fluter roller-mills. These rollers quickly wear down, and must be frequently replaced. The steel filings worn off from the rollers must be in the flour, and naturally they may cause more or less irritation of the intestinal wall, in some cases, perhaps, sufficient to set up appendicitis.

When this flour was first made, it was expensive, and appendicitis was limited to the class who could afford to use the roller-flour bread. Later, appendicitis became common in England, and, curiously enough, its advent was synchronous with the general use of American roller flour. As the roller-process bread became cheaper, appendicitis gradually became a disease of the masses as well as of the classes. The last class to hold out against patent flour and appendicitis was the colored race. Until milled flour became cheap, they used bread from the old-fashioned flour or from corn-meal. Now, with their more general use of white flour, appendicitis is becoming quite prevalent among the Negroes.

While this argument against American flour is plausible, it hardly impresses one with its probability. In fact, one probably swallows more iron and mineral particles in a single hour's ride on a railway on a dusty day, than could be found in a year's supply of bread.—*Medical Record*, May 6, 1911.

SOME BOOKS

Mosquito or Man? The Conquest of the Tropical World, by Sir Robert W. Boyce, M. B., F. R. S. John Murray, London. Cloth, 280 pages. Second edition, 1910.

This is a well-written account of the conquest of tropical conditions by medical science. As the author says, no movement of modern times has called forth such devotion and such enthusiasm as this medical conquest of the tropics, in which many have given up their lives. This account of the defeat of three of man's greatest enemies—the organisms of malaria, yellow fever, and sleeping-sickness—is well worth reading. The work is in excellent type, and is well and profusely illustrated by photoengravings. Accounts are also given of the work against Malta fever, plague, leprosy, and other preventable diseases.

Soyer's Paper-Bag Cookery, by Nicholas Soyer, late chef Brook's Club. Second edition. Published by Andrew Melrose, 3 York St., Covent Garden, London. 1 shilling.

The author, a grandson of the famous chef of the same name, after some experiences that remind one of Charles Lamb's account of how roast pig was discovered, finally evolved the system, now known as "paper-bag cookery," which is becoming very popular in England. He believes that by means of this system the ordinary cook or housewife may prepare dishes heretofore prepared only by experts. To quote: "Expert cooking, which has heretofore been the luxury of the rich, can now be the equal privilege of the poor. The method can be used with equal success in the cottage and the mansion. No patent stove, no patent oven nor apparatus, no patent nor expensive appliances of any kind are required. All that is necessary is an oven (no matter what sort), a grid, and the paper bag."

Having discovered, almost by accident, the delightful consistency (perhaps the chefs will smile at this word) imparted to food by means of the paper bag, the next problem he worked on was to find a paper that would not transfer its flavor to the food. He succeeded finally by the assistance of a certain

paper-manufacturing firm in obtaining a paper that answers every purpose.

The author claims for his system the elimination of all fry-pans, stew-pans, and the like, the avoidance of pot-scrubbing and of the usual kitchen smells, and the conservation of all the natural odors and flavors usually lost in cooking. He recommends his system as a solution of the difficulties of those who dwell in flats and single rooms. The system has the advantage of cleanliness. The food is placed in a new paper bag, in which it is cooked; then the bag is burned.

Mr. Soyer's book, after an introduction recounting the principal facts relating to his discovery, gives general directions for cooking by the paper-bag method, and follows by special recipes, which are prepared with reference to the usual mixed dietary, but which may be adapted to the needs of those who discard meat. Bags of various sizes made for cooking by this method, together with the metal clips to close the bags, are sold in English stationery stores at reasonable rates.

Primitive Psycho-Therapy and Quackery, by Robert Means Lawrence, M. D. Published by Houghton, Mifflin & Co., Boston. Cloth, 276 pages.

Beginning with medical amulets, talismans, phylacteries, etc., this book gives an account of the various means by which men of the priest class or of the educated class have fooled other men, or by which men have fooled themselves, into getting well. These various superstitions are often connected with religion. Among other subjects discussed are "The Royal Touch," "The Blue-Glass Mania," "The Temple of Æsculapius," "Healing Spells in Ancient Times," etc.

Attention is given to animal magnetism and healing by music. The chapters containing this matter form a prelude to the chapter on "Quacks and Quackery," which considers the operations of these distinguished gentry from the first centuries onward. An appendix gives brief biographies of some of the most noted charlatans of the last five hundred years.

IN THE MAGAZINES



Discussion of Articles on Hygiene and Kindred Topics Which Appear in the October Issues of the Magazines

Country Life in America

THE October issue contains an interesting article entitled "Fresh-Air Sleeping for Everybody," by Thomas H. Rogers. The author explains, for the benefit of those unable to afford regular outdoor sleeping accommodations, how to erect appliances for the conversion of any room into an open-air sleeping-room.

Everybody's Magazine

"Our Human Misfits," by Dr. Woods Hutchinson, describes various types of people, such as the criminal, the insane, and the weak, who do not fit into our social system. It attempts to show what proportion of these unfortunates owe their misfit to social conditions, and how many to bad stock; then proceeds to a discussion of remedies.

Woman's Home Companion

Harriet Brower contributes a sensible article on "The Music Student in the Small Town," in which she gives sympathetic advice to young students of music; and Fannie Merritt Farmer tells how to utilize grapes in a number of toothsome ways. Those interested in gaining flesh will find some helpful hints on "The Doctor's Page," in the article entitled "How to Gain Weight." One who desires to build up a healthy body of normal weight is advised to "strive for at least eight hours of sound sleep in a well-ventilated room or out-of-doors. Sufficient exercise should be taken to keep the blood in good circulation, the liver, skin, and intestinal canal active, as well as for other more complicated and less understood processes. Exercise that converts flesh into useful muscles is essential in building up a normal weight that can be used by the system in emergencies. In the case of abnormal nervous tension, effort must be made to cultivate more healthful habits of thought and greater control over both mind and body. The habit of worry is proverbially emaciating, but it is a habit that can be cured."

Mother's Magazine

"Americanizing the Foreign Housewife," by Carolyn S. Bailey, tells how Uncle Sam teaches the newly arrived immigrant mother to adjust herself to strange conditions, and instructs her in all the ins and outs of sanitary housekeeping, from caring for her baby to lighting the gas-stove.

To those who have been more or less anxious about the ravages made by cholera in this country, Dr. F. J. Stewart gives some common-sense advice about the prevention and treatment of the disease in "Why the Cholera Plague Should Not Produce a Panic."

Other articles of interest to mothers are: "The Child's Diet," and "How One Mother Cared for Her Baby, and the Result."

Pearson's Magazine

The startling fact that 1,000,000 Americans are always needlessly sick, how to change this condition, and who prevents it from being changed, are ably discussed in "Public Health Versus Private Gain," by Earl Mayo, in the October number.

"This country needs a National Bureau of Health. It has State boards of health and city boards of health, to which nobody makes public objection. It needs a National Bureau of Health, but to this there is lively objection. Why? Who can be interested in continuing unnecessary sickness?"

"There is one group of interests—aggressive, powerful, unscrupulous—that has genuine reason to fear a really serious effort on the part of the national government to prevent the poisoning of the public with adulterated foods and fake medicines, that knows it will suffer from the enlightenment of the people on the subject of health preservation and disease prevention. It includes the men through whose efforts the starch is being taken out of the pure food law,—the men who claim to cure incurable diseases with useless nostrums, or fill their pockets by cultivating in their victims a craving for habit-forming drugs,—the men whose appeals to public credulity are false testimonials and lying promises."

Columbian-Hampton's

The October number of this combined magazine contains an article describing the cabal in the Department of Agriculture against Dr. H. W. Wiley, which has brought about the recent investigations. The article is by O. K. Davis, Washington correspondent for the *New York Times*, the paper which was the first to announce that Dr. Wiley was to be "permitted to resign."

Harper's Magazine

"An American Woman in the Paris Commune." Madam de Hegermann-Lindencrone, whose delightful letters descriptive of her visits to the court of Napoleon III have attracted such wide attention in the pages of *Harper's*, now writes of an even more dramatic period of her life—her experiences in Paris during the Commune. Into these letters come many of the most famous men of the time—statesmen, poets, painters, soldiers, and revolutionary leaders—whom she knew personally. A unique narrative of one of the most thrilling periods in French history told in the simplest and most unaffected manner.

Helen Hay Wilson, a well-known English writer, contributes a most entertaining paper on "The Education of Daughters," tracing the position of women from early days to the present, and showing that some intellectual training is indispensable to the woman who is going to do serious work.

"Tracking Up the Rio Negro," a fascinating story of adventure by Caspar Whitney; "A Boy Spy in the Civil War," a remarkable narrative by Wm. Gilmore Beyer; and "New York—City of Towers," by Mildred Stapley, are three other articles of unusual interest.

Harper's Bazar

The new "paper-bag cookery," described elsewhere in this number of *LIFE AND HEALTH*, is discussed at some length by Margaret Soundstrom in the October *Bazar*.

"In these days of hurried living much saving of time may be accomplished by this new invention; also a saving of money, in the preservation of all that is best in the articles of food to be cooked. As the reward for a little care in cooking in this new way the housewife is able to present an attractive meal, easily and quickly prepared."

The Designer

"Nervousness" is not a real disease, it is merely a state of mind and body. It is most often founded on nervous irritation, overstrain, and lack of control. The immediate or exciting cause may be nothing more than a monotonous mode of life, chronic worry, a disposition to magnify small difficulties and exaggerate trivial bodily sensations; or again it may be an undue tendency to give way to the emotions—to indulge in outbursts of anger. When a group of any of these influences has long acted upon the nervous system, they are bound so to change the habits of both mind and body as to produce "nervousness" of varying intensity and severity. Thus writes Dr. W. S. Sadler, under the heading "This Thing Called Nervousness" in the October *Designer*. Other articles of interest to mothers and home-makers generally are: "The Children's Evening Meal," "When Chestnuts Are Ripe," "Practical Laundry Hints," "The Art of Making Beds," "The Care of Food Supplies," "Two Sides to the Invalid Question," etc.

Plague-Rats in London.—In Wapping, a London district near the Thames, several plague-infested rats have been caught recently, much to the dismay of the health authorities, as it is evident that the rat plague is more widely scattered than has been suspected. Moreover, a rat epizootic of plague so early in the season is ominous.

A Temperance Sermon on a Cask.—A large one-hundred-gallon cask stood in the temperance exhibit at the Dresden exposition, bearing these words: "This cask would hold about 400 litres of alcohol, which is the alcoholic content of 100,000 litres of beer, the amount a man will consume in thirty years if he takes three glasses daily." Over the cask is a card telling the reader that one drinking this amount of beer, containing 100 gallons of absolute alcohol, pays 8,500 marks, sufficient to buy himself a little home.

Motion Picture of Peristalsis.—A series of X-ray pictures showing the various stages in a peristaltic wave of the stomach have been combined so as to make an actual motion picture. It is said that this process of X-ray motion pictures of body processes is capable of much greater perfection.

Benzoic Acid Tabooed in Germany.—The official board of experts has presented to the Prussian ministry a report, which, after taking into account the work done by the American chemists, advises that the use of benzoic acid should not be permitted in foods. Especially among the weak and sickly is such use of preservatives characterized as dangerous. A further objection is made that the use of chemical food preservatives offers an incentive to use decomposing foods.



Anti-Tuberculosis Fight.—More than six hundred cities and towns in the United States, and about one hundred in Canada, are engaged in war against tuberculosis.

Sterilization of Criminals.—There are now five States, Indiana, Connecticut, California, Iowa, and New Jersey, which provide for the sterilization of criminals and defectives.

Tuberculosis Congress Postponed.—Because cholera is epidemic in Italy, the International Tuberculosis Congress has been postponed from September, 1911, to the spring of 1912.

Arteriosclerosis Not Peculiar to Modern Times.—Recent examination of Egyptian mummies shows that hardening of the arteries was a very common condition in ancient times.

Children Excluded from Picture Shows.—By order of the Berlin chief of police, children, even when accompanied by their parents, are excluded from motion-picture shows after nine o'clock at night.

Infant Mortality Congress.—The Third International Infant Welfare Congress will be held in Berlin, Sept. 11-15, 1911. Every person who is engaged in the study and prevention of infant mortality is eligible to membership.

British Medical Association Excursions.—In connection with the meeting in Birmingham, there were excursions to Stratford-upon-Avon, Warwick Castle, and Kenilworth Castle, also a visit to the extensive Birmingham sewage disposal plant, perhaps the largest of its kind, as well as visits to various factories, etc.

Public Drinking-Cups Barred in New Jersey.—In accordance with the provision of a recent act, the New Jersey State Board of Health has prohibited the use of public drinking-cups in all places to which the public have the right of access, with or without compensation, whether maintained by private or public authority.

Honorary Degree for Dr. Chittenden.—Dr. Russell H. Chittenden, of Yale, while attending the meeting of the British Medical Association, was given an honorary degree in consideration of his distinguished and valued services to science.

The Proof of the Pudding.—In Germany, where vaccination and revaccination are compulsory, there were in fifteen years 790 deaths from smallpox. During the same period England, with laxer vaccination laws, had 6,478 deaths from smallpox. Merely a coincidence, of course.

Precautions Against Rats.—As a special precaution, all vessels from countries where there is any suspicion of rat plague, must, when docking at the port of London, make use of cables which are, as it were, "rat proof." This is accomplished by having metal discs on the cables, over which the rats can not climb.

Divine Healer Must Not Accept Fee.—The supreme court of the State of Colorado has affirmed the decision of the lower court that the acceptance of a fee for his services by a divine healer is practically medicine within the meaning of the law, and is not permissible without a license from the State board of health.

Metchnikoff to Study Plague.—Professor Metchnikoff has gone to southern Russia, where plague has had a foothold for some time, in order to learn how the bacilli live through the summer. Until it is known whether the disease is carried over from winter to winter by animals or by human carriers, it will be impossible to control plague effectually.

Bournville Garden City.—One of the many pleasant features of the meeting of the British Medical Association was a visit to the garden city at Bournville, where the guests were permitted to witness the physical exercises and swimming contests of the young men, the representation of the four seasons by dancing girls, and a Maypole dance by the schoolchildren. More will be given later about the garden city of Bournville.

Won Case and Paid Fine.—A medical society in France prosecuted a midwife for illegally practising midwifery, and carrying infection from one case to another. The case was won. The woman was fined, but had nothing with which to pay the fine. The government refused to imprison her because of her age. The medical society then had to pay the costs, and the woman went ahead, plying her trade in defiance of the law, which inflicted no punishment. The joke seems to be on the medical society.

English Teeth.—At the recent International Dental Federation, Dr. Kirk, an American dentist, told those assembled that England lags far behind the United States in soundness of teeth and in recognition of the importance of dentistry. In the last forty years American teeth have improved, and English teeth have deteriorated. In England too many teeth are sacrificed, not enough attention is paid to their conservation, and there is too little provision for treating the teeth of the poor. Dr. Darby, of Philadelphia, said the finest teeth in the world are found in the north of Ireland and Scotland, probably because the people eat so much porridge and grain foods.

Temperance Lesson in Wax.—There are several series of wax preparations in different exhibits of the Dresden exposition showing the actual condition of the liver, stomach, heart, and brain of a drinker as compared with those of a healthy individual.

The Insurance Bill.—Mr. Lloyd George's bill to provide for insurance against loss of health, for the prevention and cure of sickness, and against unemployment, is one of the most advanced and radical social measures ever presented to the British Parliament. Every man is to contribute eight cents a week, every woman six cents a week, except where the earnings fall below a certain amount. The employer and the government must pay the remainder of the premium. If the man is ill, he receives a certain sum weekly, and medical attendance. If he is out of employment, he receives a stipulated sum. The measure has been warmly discussed on both sides by both laymen and physicians. In fact, it has aroused much apprehension on the part of the medical body. The contract practise provided for by the bill would doubtless cut deeply into the private practise of many physicians.

The best antiseptic for purposes of personal hygiene

LISTERINE

Being efficiently antiseptic, non-poisonous and of agreeable odor and taste, Listerine has justly acquired much popularity as a mouth-wash, for daily use in the care and preservation of the teeth.

As an antiseptic wash or dressing for superficial wounds, cuts, bruises or abrasions, it may be applied in its full strength or diluted with one to three parts water; it also forms a useful application in simple disorders of the skin.

In all cases of fever, where the patient suffers so greatly from the parched condition of the mouth, nothing seems to afford so much relief as a mouth-wash made by adding a teaspoonful of Listerine to a glass of water, which may be used *ad libitum*.

As a gargle, spray or douche, Listerine solution, of suitable strength, is very valuable in sore throat and in catarrhal conditions of the mucous surfaces; indeed, the varied purposes for which Listerine may be successfully used stamps it as an invaluable article for the family medicine cabinet.

Special pamphlets on dental and general hygiene may be had upon request.

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The Insurance Bill.—No topic, aside from the fight of the lords for their prerogatives, is exciting so much interest in England as the National Insurance bill. Physicians as a whole are opposed to its passage in its present form, believing it to be unfavorable to the best interests of the workmen themselves as well as to the medical profession.

British Medical Association.—The seventy-ninth annual meeting of the British Medical Association was held in Birmingham, July 21-29, the sectional meetings being held Wednesday, Thursday, and Friday, the 26th to the 28th. This body, not numerically so large as the American Medical Association, numbers among its membership some of the most illustrious men in the medical and allied sciences.

To Teach Hygiene in Elementary Schools.—A bill has been introduced into the British Parliament providing that in public elementary schools instruction be given in hygiene, and that girls be instructed in the care and feeding of infants. The measure is strongly supported, and will doubtless pass. It ought to pass. Even the voluntary teaching of hygiene in many of the schools has caused a notable reduction in child mortality.

Salvarsan Not a Specific.—Dr. J. Ernest Lane, as the result of an extended experience with syphilitic patients, at the meeting of the British Medical Association, reiterated his opinion already published. He hesitates to recommend the remedy as a routine treatment. While he finds it excellent in the relief of certain symptoms, he finds it, if anything, inferior as a cure to the old mercurial treatment. He advises all who contemplate using the remedy to see it applied in a number of cases before attempting to administer it.

Anti-Squirrel War in California.—As a result of the campaign of education carried on by Dr. Rupert Blue, of the Public Health Service, the supervisors of most of the counties harboring the ground-squirrel have voted, and the others will doubtless vote, money for their extermination. Dr. Blue will send experts to the different counties to instruct the local men in the work of extermination. The extermination of the squirrels will accomplish two excellent results,—it will do away with one great plague danger, and it will save many thousands of dollars annually to the farmers.

Discussion on Diet.—One of the most interesting discussions at the British Medical Association meeting was the one on the nutritive requirement of man. It was opened by Dr. R. H. Chittenden, of Yale, who stated his reasons for believing the present dietary standards, especially as regards the protein requirement, to be too high. Agreeing substantially with Dr. Chittenden were Drs. Chalmers Watson, William Russell, Alexander Harg, E. P. Cathcart, Haddon Hawick, and A. B. Olsen. Maintaining the integrity of the present high standards were Lieutenant-Colonel Melville, Dr. Robert Hutchison, and Dr. Woods Hutchinson. More regarding this interesting discussion will be given later.

A Temperance Will.—Mrs. Frances Somes, of Dorset, England, the widow of a former member of Parliament, has left a will bequeathing one hundred thousand dollars to those of her nephews and great-nephews who have been total abstainers from liquor and tobacco for the twelve months preceding her decease; and she expresses the earnest wish that they may remain abstainers. She also in her will expressed her desire for a simple funeral, and added: "I do not wish the light excluded from the house immediately after my decease. Our merciful Father gives us light to cheer us, and I think it a wrong custom to exclude it at the very time we ought to be asking for strength to submit to what must be a trial even when we know it to be better for the departed one." She must have lived a beautiful life.

Research Defense Society.—Because of the activities of the antivivisection societies in England, and their disingenuous methods, the Research Defense Society was founded in 1908, with the object of making known the facts regarding experiments upon animals in England, and the laws and regulations under which these experiments are conducted. While some of the leaders of the antivivisection movement are not to be credited with common honesty of purpose, it is doubtless true that the vast majority of opponents to animal experiment are so because of misinformation given them by their leaders. The society held its annual meeting on June 19, in the building of the Royal College of Physicians, London. Lord Cromer, who is also vice-president of the society for the prevention of cruelty to animals, and a great friend of animals, presided. Addresses were delivered by Sir Frederick Treves and others.



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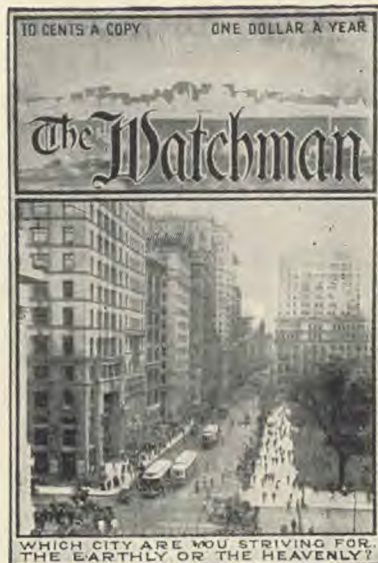
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