

Life & Health

THE NATIONAL HEALTH MAGAZINE



DECEMBER

10 CENTS A COPY - ONE DOLLAR A YEAR

LOMA LINDA

(The "Hill Beautiful")

A Charming
Health Resort
in Southern
California



Entrance to
Main Building

The clear blue skies of Southern California, the beauty and fragrance of the trees and flowers, and the splendid panorama of the famous San Bernardino valley which spreads out before the visitor's gaze, combine to make Loma Linda one of the most beautiful places in the world. At the crest of a commanding elevation, the Loma Linda Sanitarium overlooks this whole delightful scene, the fertile, fruitful valley at its feet, the tops of sun-kissed, snow-capped mountains shimmering in the distance.

The Loma Linda Sanitarium offers its guests every comfort and convenience. The equipment is complete and the medical attention all that could be desired. Sixty-two miles from Los Angeles on the main line of the Southern Pacific.

FREE: A book of views in natural colors. Send letter or card to-day, with your name and address for this souvenir book

LOMA LINDA SANITARIUM, Loma Linda, Cal.



San Bernardino Valley from the Sanitarium

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."

Try This Window-Tent

TEN DAYS FREE

Sleep in the health-giving open air—in your own bed. You will feel so exhilarated the next morning after sleeping in

"The Farlin"

that you will never be without it. You adjust it in a minute; any child can manage it; it's never in the way. It is the simplest device of its kind in the world; can't get out of order; everybody can afford to have one. It makes every well man or woman feel better, stronger, more clear minded, fresher.

We want you to try one ten days, at our expense. Fill out the following coupon, and mail it to us to-day. You assume no obligation. Your name and address on this coupon will bring you full illustrated information.

Our References are any Bank in Battle Creek

The Farlin Ventilated Window-Tent Co.,
99 Upton Avenue

Battle Creek, Michigan

For Ten Days FREE TRIAL

The Farlin Ventilated Window-Tent Company
99 Upton Ave., Battle Creek, Mich.

Kindly send me full particulars of how I may have one of your window-tents for ten days free.

Name

Address

State



Black River Valley Sanitarium

WATERTOWN - NEW YORK

An institution of medical and physiological therapeutics employing the various forms of electrotherapy, heat, light, vibration, hydro-electrical, electric-light cabinet baths, also vapor, salin., Nauheim baths, violet rays, galvanic, faradic, and sinusoidal currents, massage, and physical training, diet, etc. Special attention is given to chronic and nervous cases.

A carriage will be sent to all trains when due notice is given. Terms upon application.

ISADORE L. GREEN, Med. Supt., 1008 Wash. St.

Watertown, N. Y.

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."



Man's belt—front view

The "Storm" Binder

And Abdominal Supporter

Adapted to Men, Women, Children, and Babies

No whalebones, no steel, no leather in its construction. Washable as underwear. A perfect support. For use after operations on any part of the abdomen. Comfortable for work or recreation. For use in obesity, general relaxation, sagging of stomach, intestines, or pelvic organs, and many hernias.

Illustrated folder and price-list sent on application.

Mail orders filled within 24 hours

Katherine L. Storm, M. D.

1612 Diamond Street - Philadelphia

Are Babies Worth Saving?



A queer question, perhaps, but pertinent, in view of the facts. For every five funerals in this country one hearse carries a baby. The significance becomes apparent if one realizes that babies do not die because they are born "delicate," but because of improper food, or because of neglect due to the ignorance or the poverty of the mother, or both. A baby with vitality enough to get into the world alive is well enough equipped to live out an ordinary life, provided it has proper care.

During the last ten years more than two million babies less than a year old have died in the United States,—more than enough to populate the cities of Albany, Washington, Richmond, Atlanta, Birmingham, Indianapolis, Milwaukee, Grand Rapids, St. Paul, Denver, and Seattle! But they are only babies, and nobody misses them but their parents and a few sanitarians who realize that this heavy infant mortality is a serious drain on the country.

In European countries vigorous effort is being made to stay such an unnecessary waste of human life. Especially in France is it realized that race suicide is fatal to the interests of the nation, and that the high infant mortality is a most important factor in race suicide.

A few health officers and humanitarians, noting the fact that a very large proportion of these baby deaths occurred during the summer months, made some experiments in behalf of the baby, which yielded amazing results. The saving of infant life that resulted from this preliminary summer campaign was so gratifying that it was planned to inaugurate an all-the-year-round campaign. It is now known that the infant death-rate can, by proper means, be cut down at least one half; that is, the knowledge we now have, properly applied, should, in ten years, save one million babies to the United States.

Now that a few of us Americans have come to realize that the baby is a vast national asset, there is felt some sense of the obligation to give it a fair deal.

An association has been formed,—The American Association for the Study and Prevention of Infant Mortality,—in which membership is not limited to physicians and investigators, but is open to parents and to all who are interested in the baby. The first annual meeting of this association will be held in Baltimore, November 9 to 11.

Among the topics to be discussed are: The extent to which artificial feeding is practised among the better classes as well as among the poor, and its influence upon infant mortality; the influence of maternal nursing upon infant mortality, and how maternal nursing may be promoted; the part which education plays in infant mortality.

The January issue of "Life and Health" will contain a popular report of this meeting, bringing before our readers the thoughts of the most prominent physicians, nurses, sanitarians, settlement workers, and educators, on this most vital subject—the conservation of child life.

CONTENTS FOR DECEMBER

GENERAL ARTICLES	PAGE
A Foreword by the Editor	749
What Some People Have Found With God in His Great Out-of-Doors, <i>George Wharton James</i>	750
A Great Congress on Food Hygiene, <i>A. B. Olsen, M. D., D. P. H.</i>	755
The Law of Rest in the Healing of Disease, <i>George D. Ballou</i>	760
The Power of Influence, <i>William J. Cromie</i>	761
Gastric Catarrh, <i>J. R. Leadsworth, B. S., M. D.</i>	763
Autointoxication—Self-Poisoning, <i>W. A. George, M. D.</i>	766
Autotoxemia, <i>W. W. Worster, M. D.</i>	768
Drugs and Drugging, <i>D. H. Kress, M. D.</i>	771
Substitutes for Drugs, <i>H. F. Rand, M. D.</i>	774
Healthful Cookery, <i>Lauretta Kress, M. D.</i>	785
Give the Baby a Chance, <i>Mrs. Frank Jessie Otis, M. D.</i>	787
Hints on Baby's Care, <i>A. P. Reed, M. D.</i>	789
Sunshine and Fresh Air, <i>John N. Quinn</i>	790
EDITORIAL	777
Impressions of the Humane Conference—A Warning by a Friend of the Oyster.	
AS WE SEE IT	780
Humane Conference—Humaneness and Health—The Moving-Picture Show— The Soft Pedal on Our Own Sins—Race Prejudice or Race Instinct?—Poisoning From Snake Bite—"Too Ixpensive fer Me"—Preservatives in England.	
THE MEDICAL MISSIONARY AT WORK	
Experiences in the Jungles of India, <i>Louisa M. Scholz</i>	791
Found It in the Bible, <i>R. H. Habenicht, M. D.</i>	793
SOME BOOKS	794
IN THE MAGAZINES	797
NEWS NOTES	798

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.

CHANGE OF ADDRESS.—When a change of address is ordered, both the new and the old address must be given.

HOW TO REMIT.—Remittances should be sent by draft on New York, Express-order, or Money-order. **Cash should be sent in Registered Letter.**

Address, Life and Health, Takoma Park, Washington, D. C.

We Guarantee the reliability of every advertisement inserted in **Life and Health**. We want every reader to feel that he can deal with our advertisers with the fullest confidence of fair treatment.

If, notwithstanding our most thorough investigation of all advertising submitted for publication, an advertisement should be published through which any subscriber is dishonestly dealt with or imposed upon, we request that full particulars be sent us at once so that we may take proper action for the protection of our readers.



SHEEP, SOUTHERN VALLEY, OREGON

How large-hearted, tender, and wise the shepherd becomes, living the open-air life with his flock.—*George Wharton James*

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

Published Monthly

GEORGE HENRY HEALD, M. D., EDITOR

Washington, D. C.

EDITORIAL CONTRIBUTORS

G. K. Abbot, M. D.

D. H. Kress, M. D.

H. F. Rand, M. D.

W. A. George, M. D.

R. S. Ingersoll, M. D., M. R. C. S., Eng.

J. R. Leadsworth, A. B., M. D.

Lauretta Kress, M. D.

F. J. Otis, M. D.

W. W. Worster, M. D.

A FOREWORD BY THE EDITOR



TWO notable international congresses, the Food Congress in Brussels and the Humane Congress in Washington, call for attention.

The International Food Congress held last month in Brussels, gives further evidence that civilized man is learning that it pays to take time to study carefully and thoroughly the physiology and the hygiene of digestion, the chemistry of foods, and kindred topics. We can not give a full report of this great conference, which met in seven sections for several days. We have given merely an echo. Later issues may contain other matter of interest pertaining to this congress.

The meeting of the Humane Congress in Washington was a notable event in many respects. Not so long ago cruelty to the helpless human and subhuman was the rule rather than the exception. Punishment of offenders was severe and barbarous. It would seem that only comparatively recently have the finer feelings of mercy entered largely into the heart of mankind. Now as the result of a vast educational movement, through such books as "Black Beauty," such periodicals as "Our Dumb Animals," and such organizations as the Bands of Mercy, the better part of man is making fair growth. We are emerging from savagery. The editorials this month are devoted largely to the Humane Conference.

It would seem that each month the article by George Wharton James is more practical and more earnest than the one preceding it. The series is truly a "call of the wild," and should lead to a clearer knowledge and a greater appreciation of the "out-of-doors." Other articles on the "Out-of-Doors" by Mr. James will follow.

Dr. Leadsworth's articles, because of their illustrative cases, always appeal to the people. The article on "Gastric Catarrh" in this issue will have many interested readers.

A very prevalent condition, autointoxication, or autotoxemia,—that is, self-poisoning by poisons generated within the body or in the intestinal canal,—is considered by two physicians of experience, who have given directions intended to prevent this condition of self-poisoning, when possible, and if it is too late for prevention, to bring about a cure.

An unfortunate belief that has almost as strong a hold on the masses as the Salem witchcraft once had,—that any ailment or disease may be cured by something in a bottle, if we only know which bottle,—is combated by Dr. D. H. Kress, who, in England and Australia as well as in America, has successfully lectured on hygiene; and Dr. H. F. Rand shows that curative effects may be obtained in other ways, which avoid the evil effects of drugs.

Dr. Lauretta Kress, who has had an extended experience in conducting cookery schools and instructing nurses in invalid cookery, has given an article on healthful cookery. Following issues of "Life and Health" will contain specific directions for simple hygienic cooking prepared by an experienced professional cook.

"Give the Baby a Chance!" One will be likely to give the baby more intelligent care after reading the article by Dr. Otis. The January issue will be devoted quite largely to the care of the baby. See announcement on another page.

WHAT SOME PEOPLE HAVE FOUND WITH GOD IN HIS GREAT OUT-OF-DOORS

George Wharton James



WHAT some have done others may do. "God is no respecter of persons," and what he gives to one he is ready to give to all. The fresh air, the sunlight, the sky, the stars, the clouds, the winds, the flowers, the odors, the colors,—the *everything* of all that is in the open air is as much for one as another. An emperor or a king can get no more sunlight or air than I can, or you, or the poorest wretch that walks the earth. Hence let us get out into the open and claim all there is. It is our inheritance, our birthright, our God-blessed gift.

But these physical things are only the *secondary*, and not the primary and important, gifts that come to us from close contact with the great out-of-doors. There is a mental and spiritual freedom, a largeness of heart, of conception, of life, of expression, of act, of thought, of the whole and complete being, if one really and truly absorbs the spirit of the out-of-doors. Whatever there is in you is enlarged, increased, made more powerful and potent. A good lawyer is made a better lawyer by contact with the open; and so with a musician, a doctor, a judge, a teacher, a professor, a minister, an inventor, a mechanic, a schoolboy, a schoolgirl, a housewife, a mother, a father. In every walk and relation of life God's great out-of-doors will benefit and bless you if you will simply open your heart and mind, and allow the goodness to flow in. And it is to point out a few striking examples that this particular chapter is written.

Did you ever read Edwin Markham's "Man With the Hoe"? That poem could

never have been written by an indoor man, a city man, a professor of political economy in a university. It needed an open-air life, open-air training, open-air methods of thought, open-air freedom, open-air candor, open-air simplicity, open-air fearlessness, to dare to write such an arraignment and impeachment of the cruelty of the "lords and rulers in all lands."

Edwin Markham has ever been a child of the open air. He lived in the mountains, fields, forests, and canyons when he was a little boy. His only books were the Bible, Shakespeare, and John Bunyan. He did his thinking out of those books and what nature taught him. Hence he knew nothing of the city ways of looking at life. He *knew*, from his contact with God's great out-of-doors, that every man, no matter how lowly his lot, has a *right* to be a poet, to smell the sweetness of the flowers, to enjoy the swing of the Pleiades and other stars, to revel in the colors of sunrises, sunsets, and many-tinted blossoms, and that no other man could ever, by any possibility, have the right to so arrange the wealth of the world, or the distribution of the necessities of life, that there was no time or inclination left, after the arduous day's labor was done, to enjoy these things. The out-of-doors taught him that all men are brothers and God is the real Father of us all. Do men treat each other as brothers? No! Then there is something wrong! No matter what pulpits, presses, papers, teachers, colleges say, there is something radically, potently wickedly wrong, and that wrong is in the men who have the power to arrange

things so that all men may be fairly treated, and yet who do not so arrange them. The logic of the out-of-doors is plain and simple; the wayfaring man, though a fool, need not err therein. Are men brothers? Then every brother will be ready, nay, anxious, to see that every other brother has all the chances of joy and happiness that he seeks for himself. And that was the spirit in which "The Man With the Hoe" was written.

So not only did Markham get much from the out-of-doors, but he has given much to others of what he so gained.

The Bible is full of stories of heroes whose heroism has been made greater and higher and nobler and truer by contact with the great out-of-doors of God. Moses spent a long time in the wilderness getting ready for his great work of leadership, and he there saw the burning bush. Elijah used to flee to the open air to gain strength and courage to go and preach with effective vigor against the wickedness of kings and courts. Jesus spent hours in the mountains and on the desert, and all of his simple illustrations, to enforce the power of his teaching, are taken from the open air,—lilies, sparrows, the sky, and the like. Paul learned lessons on the ocean, so that he was not afraid even when the vessel was wrecked.

Cromwell, Washington, Peter the Great, Gustavus Adolphus, and all great leaders of the people, have been, in greater or lesser measure, men of the out-of-doors. Lincoln was especially an out-of-door man. His boyhood was a boyhood of poverty, which compelled familiarity with the out-of-doors. He split rails; he lived in a log cabin; his early life was spent in the simple labors of the farm out-of-doors, kissed by the sunlight and bathed and washed in the dews and winds of God. Some years ago I made a study of all Lincoln's written and spoken words. From the

beginning to the end of his career the directness of the open air is in them. No subterfuge, no indirection, no uncertainty, no faltering. The tree never shapes itself to please its critics. It grows in accordance with the inherent laws of its nature, ever seeking the heights above and spreading out as its inner self prompted it to do. Lincoln lived the same. Hence he was ready for his great task when a pilot was needed for the imperiled ship of state. If he had been uncertain in himself, uncertain where he wanted to guide the vessel, if he had not known (and I say it with reverence), as nearly as a man may know, as God knows, the American Union of States would be a thing of the past. Had he been a time-serving politician, an uncertain quantity, his "policies" would have wrecked the country. He had no *policies*. He had *principles* to which everything had to bend, or break, and principles are best gained in contact, especially in early life, with God's great out-of-doors.

But it is not simply "great" men who find wonderful things in the out-of-doors. Take the ordinary, common men of mediocre talents, of every-day desires and accomplishments. Compare them with the like number of city men whose lives keep them confined indoors. Not only is there a great difference physically, but there is another—nay, there are many other differences. I do not refer, now, to those trampled-upon sons of toil, "chained to the wheel of labor," that led to Edwin Markham's indignant protest. Outdoors or indoors, when a man's whole mental and physical being is dwarfed and stunted by the pressure of incessant and arduous labor, he can not be compared to the ordinary free man of our American civilization. But go into the woods of the logger's camps; go to the mines; go to the grain ranches of California, and see the men on the



Get an old prospector who has delved in the rocks of the Grand Canyon to tell you the story of his experiences, and you will soon find how much larger and broader a man he is than the ordinary man of the city

monster headers, drawn over the wheat fields by thirty-six horses, heading, threshing, and sacking the grain at one operation; go to the camps of the cowboys; go to the homes of the California orchardists and study the men you find there. What do you see?—Health, strength, and vigor of body, and health, strength, and vigor of mind. These men *think*,—not think they think; they think their own thoughts, thoughts suggested in the great open, not swallowed (as men swallow a cup of hot coffee) from a newspaper and parroted as a pretense of thought. Few city men of the more humble callings ever do any thinking; they don't know how to think. Life affords them no opportunity for it, and they lack the clarity of vision, the independence of judgment, the strength of conviction, you find in the men of the open air.

Take the old stage-drivers, who used to "handle the ribbons" over the Sierran heights of our Western mountains. What brave, noble, stalwart, fearless fellows they were. And how independent and original in thought. Sit down with an old prospector by his camp-fire and let him tell you of his experiences in the open, and you will enter into a new and larger life, that you have never before conceived of.

When I see the cheap theaters, the concert halls, the vaudevilles, the moving-picture shows, the beer halls, the bowling-alleys, the "smokers," and the thousand and one other devices of the city to entertain and amuse the city-living man and woman, I imagine such people thrust out into God's great out-of-doors, as is the prospector, the cowboy, the miner, the sheep-herder,—away from all civilization, from books, from



Copyright C. C. Pierce & Co. Used by permission

The Indian of the desert makes a palm-tree shelter to keep off the sun, otherwise his life is practically an outdoor one

concerts, theaters, and extraneous amusements,—and I ask myself what would become of them. They would die of ennui, of mental vacuity, in a month. Unable to entertain themselves, unable to find mental occupation, they would die of inertia and melancholia. But the out-of-door man, rough and uncouth though he be, finds in God's thoughts expressed in nature a thousand and one sources of interest and occupation that benefit and bless him. The baker of Thurso, Robert Dick, got into the open and studied the rocks, and became a world-famed geologist, as did his greater prototype, Hugh Miller, the Scotch stone-mason.

The Indians had no books, no newspapers, no shows, no theaters, no concerts, no beer saloons, no dance halls,—nothing of those things that city men and women of to-day feel they can not live without. Yet they grew up healthy, sturdy, happy, and, as a rule, full of genuine character. So with the men and women of our own race who are children of the out-of-doors. They are able to find in nature sources of interest. If the children of the cities

knew one-tenth part as much of the good things that surround them, as the Indian children know of the stars, the sky, the clouds, the storms, the snow, the tracks of the birds and animals, their habits and movements, the flowers, the trees, the reptiles, the animals of their surroundings, they would not need nickelodeons and moving-picture shows to occupy their minds.

Then, too, we should not forget that the rudeness and awkwardness are not always on the side of the country-bred boy, girl, man, or woman.

The city clerk in a haberdasher's store, with perfumed hair and manicured nails, laughs at the awkwardness of the common plowman when he ventures to the city; but put the clerk in the plowman's place, and how absurd he looks, and *actually is*. It takes both skill and strength to guide a plow and make a straight furrow; and to be an expert orchardist is no mean intellectual occupation.

What a wonderful result the study of God's thoughts in plant life has produced in the brain and heart of Luther Burbank! He has helped to change the

food supply of the world, in fruits, nuts, and vegetables, as well as given to us scores of new and improved varieties of flowers. He has simply sought to know God's plans and methods of work, and then endeavored to follow them. By so doing he has become one of the wonders of the world.

Thoreau, Izaak Walton, John Burroughs, John Muir, Mary Austin, and hosts of others have written classics, simply because they went out into God's great open, and took in what he there gave to them. Reader, isn't it worth while trying to do likewise? At least try it!



LUTHER BURBANK

A GREAT CONGRESS ON FOOD HYGIENE

A. B. Olsen, M. D., D. P. H., Superintendent Caterham Sanitarium and Editor
"Good Health"

[The second International Congress on Food Hygiene and the Rational Feeding of Man, which convened in Brussels from the fourth to the ninth of October, was a notable gathering of eminent medical men and women, chemists, and other scientists. A number of the leading governments sent official representatives to the congress, and, besides these officials, there were a large number of subscribing members who took part in its proceedings. Dr. Olsen attended the congress in the interests of LIFE AND HEALTH, and the (London) *Good Health*.—Ed.]



AFTER the opening session the congress separated into seven sections, each of which was presided over by a scientist of distinction, with whom was associated one or more secretaries.

In the sections the problem of food hygiene in many aspects received detailed and ample consideration. The problem of alimentary hygiene being a large one, no one would expect that a single congress would be able to deal fully with every phase of the subject. Most of the papers presented bore evidence of conspicuous ability and keen research.

Adulteration of Food

Several papers were devoted to food adulteration, and the use of antiseptics for conserving food; and a very interesting and at times rather warm discussion followed. It was pointed out that the use of food preservatives enabled manufacturers to use a poor grade of material, and sometimes material which would obviously not be fit for human consumption. The congress was practically unanimous in condemning the use of food preservatives, although some of the representatives of France made a strong attempt to advocate the addition of sulphurous acid to certain wines. All thinking men and women must indorse the position of the congress with reference to the use of preservatives in the preparation of food substances.

The Use of Organic Salts

A paper was read by Dr. Ragnar Berg, of Germany, advocating the free use of specially prepared organic salts in connection with an ordinary diet. He maintained that food ordinarily does not contain a sufficient quantity of the various salts required by the body. In the discussion which followed, Dr. Otto Connheim, of Heidelberg, stated emphatically that the ordinary diet, consisting of natural food cooked under the usual conditions, contains an ample supply of all the organic salts required by the body. He contended that it is not only unnecessary, but also undesirable, to add artificially prepared salts of any kind to such a diet, and it is needless to say that he stated the consensus of opinion of the congress.

Vegetarianism

A goodly number of papers dealing with the subject of the vegetarian diet were presented to the congress. Dr. M. S. Sawamura, of Tokyo, presented an instructive paper dealing with the "Diet of the Laboring Classes of Japan." The doctor, speaking from personal observation and experience, explained that, with the exception that they eat a small quantity of fish, the working classes of Japan are vegetarians. He stated further that a great many people do not even utilize fish in their diet, but depend solely upon plant foods. In his opinion, the people subsisting upon a rice diet, with or with-

out the addition of a little fish, are well nourished and well fit to engage in strenuous labor.

In a personal conversation, Dr. Sawamura stated that in the army flesh food, other than fish, is only served once a week. The soldiers' daily diet consists chiefly of rice, beans, greens, and other vegetables, and fish. During the late war with Russia, tinned meats of various kinds were also used, but very sparingly.

Dr. Ioteyka, of Brussels, read an instructive paper dealing with "Alimentary Illusions." The doctor has been a keen student of dietetics for several years, and has published a number of papers dealing with the subject. She is a pronounced food reformer, and advocates a non-flesh diet. In her opinion the free use of flesh foods, with their waste products, all of which are more or less poisonous, produces an irritating effect, not only upon the digestive organs, but equally upon the nervous system, and this irritation weakens the resistive forces of the body and opens the door to disease. Dr. Ioteyka is an enthusiastic fruitarian, and her paper was listened to with marked attention by the members of the congress.

Prof. Otto Connheim, M. D., of Heidelberg University, read a paper on "Vegetarianism." He divides all people into four classes, according to the amount of heat calories they require.

1. Those who perform little or no muscular work, 2,300 calories per diem.
2. Those who perform light muscular work, 2,800 calories.
3. Those who do hard muscular work, 3,400 calories.
4. Those who do the most strenuous muscular work, 4,000 to 6,000 calories.

It is the firm belief of Dr. Connheim that one hundred grams of protein are required daily by members of any of these four classes. In other words, he holds that the sedentary man or woman

requires just as much protein as the most strenuous laborer.

According to Dr. Connheim, in order to obtain one hundred grams of protein from the following foods the amount of heat calories will be in the case of —

Beef, 500 calories; eggs, 1,100; cheese, 1,500; milk, 2,000; maize, 4,100; bread, 4,600; potatoes, 5,000; rice, 5,600.

Taking into consideration the sedentary man, the doctor points out that if he confines himself to a purely vegetarian diet, taking maize, bread, or potatoes, he will, in order to obtain the one hundred grams of protein, be obliged to take a large excess of carbonaceous food, far more than he can utilize to advantage. Consequently he concludes that vegetarianism is a perfectly suitable diet for laborers and all those who do a reasonable amount of muscular work, but that, on the other hand, it is not at all satisfactory for sedentary persons or brain workers.

What About Nuts and Legumes?

In his interesting table, Dr. Connheim omits entirely to take into consideration the large proteid value of most nuts, and particularly almonds and pine kernels, as well as legumes, such as lentils, beans, and dried peas. All these foods are rich in nitrogenous matter, and, in order to obtain the one hundred grams of protein which the doctor considers necessary, a comparatively small amount of these foods would be necessary.

But it is also necessary to point out that ordinary vegetarians do not exclude eggs, milk, and milk products from their diet. Consequently there would seem no difficulty even for the sedentary man to obtain the natural elements required by the body in ample quantity without resorting to animal flesh.

It may be well to add that sedentary persons can not expect to maintain all-

round, vigorous health without resorting to some muscular exercise. Good digestion depends almost as much upon a reasonable amount of exercise as upon the careful selection of the food.¹

Anemia in Porto Rico

In the interesting discussion which followed the reading of these papers, Dr. Ashford, of Porto Rico, made a valuable contribution. On going to Porto Rico some years ago, the doctor found that about one third of the deaths on the island were due to anemia, and some thought that this was on account of an impoverished diet and lack of animal flesh. He stated that the diet of the average Porto Rican consisted of rice, beans, vegetables, greens, and a little codfish, but practically no meat. However, investigation showed that the anemia was due to the wide prevalence of a parasitic disease which is the result of gross carelessness in sanitation and personal hygiene on the part of the people. He said that he had under his own personal observation a child whose percentage of hemoglobin had fallen to less than one fourth of what it should be. In the course of two or three months, on a diet consisting solely of bananas, this child recovered health, and the hemoglobin rose to one hundred per cent. Dr. Ashford stated that he was acquainted with the numerous other similar cases, and that he was compelled to conclude that animal flesh in any form was not necessary for the provision of pure blood and sound physical health.

One of the representatives from Scotland told the writer that he believed carbohydrates were essential to proteid metabolism. In other words, that on a purely proteid diet starvation was bound to occur.

¹ It is also well to remember that some eminent physiologists have made it extremely doubtful whether the body requires one hundred grams of protein a day.

Professor Carlson, of the University of Chicago, who presided at the meeting when vegetarianism was under consideration, stated that with many, diet became a matter of religion. In his opinion a man should follow his natural appetite and take the food which from experience he finds best suited to his constitution and physical requirements. He saw no reason why a man could not maintain sound health of body and mind without resorting to animal flesh.

Milk and Tuberculosis

A great deal of attention was given to the importance of using only clean milk from healthy cattle; and it was unanimously insisted upon that in cities and towns where the milk supply is more or less uncertain, it should always be sterilized before using, and especially so in the case of children. It seemed to be the general opinion of most members of the congress that the chief cause of tuberculosis in infants and children is the use of contaminated milk. Various methods of ensuring clean, pure milk were discussed. The Pasteurization of milk, that is, heating it sufficiently to destroy the germs without interfering with its nutritive and digestive properties, was believed to be the best method of dealing with it.

Crusade Against Tuberculosis

But it was unanimously held that the Pasteurization of milk and similar processes are merely makeshifts or temporary methods, and that the vital thing is to begin a wide and effectual crusade against tuberculosis for the purpose of eradicating it entirely. Prof. Ravenel, M. D., of the University of Wisconsin, advocated a "wide-spread campaign of education as one of the most important steps." He said: "The danger of bovine tuberculosis to the human race and its cost from the economic standpoint, and the best methods for its suppression

and eradication, should be taught in all schools of human and veterinary medicine. The public in general must be informed of these matters by lectures and demonstrations of various sorts."

Professor Ravenel also advocated the slaughter of tuberculous animals.

Perhaps more papers were read dealing with the importance of a pure supply of milk than on any other subject, and this indicates the supreme importance of the question. As ordinarily sold in most cities and towns of the civilized world, milk is undoubtedly the dirtiest and filthiest of all the foods consumed. And it is not only the dirtiest and filthiest of foods, but also the food which is most likely to be contaminated with disease-producing germs. If a pure milk supply could be ensured everywhere, one of the most prolific sources of tubercular disease would be done away with, and we should see a marked fall in the death-rate due to this terrible scourge.

Dr. L. Gedoelst, professor in the School of Veterinary, Cureghem, wrote a most valuable paper on "The Practical Organization of Milk Inspection," with particular reference to the large cities. We can only briefly summarize his conclusions, as follows:—

1. All milk should be efficiently inspected, both from the hygienic and chemical standpoints, from the stable where it is produced to the consumer who uses it.

2. It is the duty of the public authorities to organize such a service of milk inspection, and, further, it is also their duty to instruct all those who have anything to do with the milk, in regard to the absolute importance of rigid cleanliness.

3. The inspection and control of the sanitation of the stables and dairies should be confided to a properly qualified veterinary surgeon.

4. The analyses of milk for the pur-

pose of discovering fraudulent tampering or additions should be confided to a public analyst.

Much attention was given to the production of pure, wholesome butter and cheese. The fact that butter often contains germs of tuberculosis was emphasized. The best remedy is to have a pure milk supply, but if this can not be guaranteed, then it is necessary to sterilize the milk before separating out the cream and making it into butter.

Our Drinking Water

Lack of space forbids dealing as fully as we should like with potable water. An entire section was devoted to this question, and many most interesting, instructive, and valuable papers were read. It is generally recognized that the public supply of water is best, especially for villages, towns, and cities. Ordinary well water must almost always be looked upon with a great deal of suspicion. Too often, and especially among country people who have their own private wells, there is great danger of contaminating the drinking water from the stables, the barn-yard, privy vaults, cess-pools, etc. Even though the well may be situated on the highest part of the ground, it is not impossible that on account of the arrangement of the soil strata contaminating drainage may take place. Many a death from typhoid fever, to name only one disease, has been traced directly to the drinking water, and fearful epidemics have occurred not infrequently in the past, due to typhoid contamination of water.

There are two ways of dealing with water which is contaminated by germs. The first and simplest is to boil the water. If the boiled water is filtered in a stone filter which is cleaned daily, or at least two or three times a week, it becomes aerated again, and is pleasant to take, and, furthermore, the organic

matter is removed; but under any circumstances boiled water is always safer than the ordinary water, for though the thought of drinking dead germs may be unpleasant, they are fortunately no longer virulent, or able to set up disease. Boiling also precipitates a fair proportion of the lime of hard water, and this distinctly improves its quality.

The best water purifier is a still. Distilled water is the purest water that we can get. It is free, not only from germs and organic matter, but also from salts of various kinds.

The Preparation of Bread

Bread, the chief staff of life of such a large number of people in most civilized lands, also received its quota of attention. The English-speaking races, as a rule, depend chiefly upon wheat for their bread, and the bulk of the bread eaten is made from white flour. The Germans and the Scandinavians, on the other hand, resort to rye bread chiefly. This is a coarser bread, dark in color, sometimes almost black, but none the less wholesome and nourishing. Perhaps the chief reason why these nations do not use wheat is because of the expense. Rye can be grown much farther north than wheat, and under less favorable circumstances, consequently it is less expensive.

Before leaving the subject of bread, permit us to point out that whole-meal bread, whether wheat or rye, is usually preferable to white bread, and that twice-baked bread, that is, bread which is cut in slices and baked through in the oven, when well masticated, is the most wholesome.

Importance of Cleanliness

Mrs. William Palmer Lucas, of Bos-

ton, dealt with "The Importance of Cleanliness." It would be well if her paper could be published in leaflet form and scattered everywhere like the leaves of autumn. "*Do not buy food exposed on streets,*" is one of her appeals to the housekeepers. The chief difficulty that she found in her work was the old one of *ignorance*—"the absolute lack of a standard of cleanliness because of the ignorance of the laws of health." She writes:—

"The sick baby is a well-known product of the congested districts during the hot months, and the food consumed in large quantities is ice-cream. The penny's worth of ice-cream from the dirty shop is the delight of the tenement child. . . . The shop is usually found to be unspeakably dirty. The ice-cream may be made on the premises, which means often on a rubbish heap in a dark, unventilated cellar, or it may be purchased from some large manufacturer."

The key-note of the congress can be summed up in one word, and that is *cleanliness*—*rigid cleanliness*. Disease is very largely a result of dirt and filth. If we can do away with dirt, if we can obtain pure water and clean food, we shall have taken a long step forward toward the annihilation of infectious disease. That the feeble efforts of the past have met with some success must be recognized by all. More vigorous efforts will meet with still greater success.

It is a disgrace that we still have in our midst such a filth disease as typhoid fever. It is wholly preventable. We know the cause, why not then get rid of it? Rigid cleanliness in every sphere of life would quickly rid us of typhoid fever and similar infectious disorders.

THE LAW OF REST IN THE HEALING OF DISEASE

MENTAL FACTORS

George D. Ballou



SOME mental moods are favorable and others are unfavorable to life and health. In the civil state and in the family the most important prerequisite to prosperity and success is peace. In like manner peace must prevail in the individual soul or there can be no physical prosperity. The foundations of personal peace are confidence, faith, trust. Where confidence is, love will prevail; we can not have confidence in another without having a measure of love spring up for his personality. Where these sentiments take possession, hope, courage, cheerfulness, and joyful expectation spring up like plants in a fertile garden. Rest of soul, mind, and body become so constant that a soothing influence is felt by every one who comes into close range. All elevating thoughts spring naturally out of these mental moods.

These conditions tend invariably to life, never to death. Were we born of an ancestry that had never known any but this class of moods, we might, by maintaining them, perpetuate life indefinitely. Did you ever know of any one being so hopeful or cheerful that it made him sick, or of one carrying such a load of courage that it tired him? Does loving trust engender weakness and frailty? or does it give buoyancy and vim to the soul? Love enables the frail mother to endure, with little or no rest, weeks of watching at the bedside of a suffering child. Heroic deeds have been wrought through confidence, love, and courage.

But alas for our race! Seeds of conditions adverse to life were sown in our natures at an early period. And now we find everywhere doubt, unbelief, fear,

hatred, envy, jealousy, evil surmisings, care, anxiety, worry, remorse, agony, despair. These conditions breed death. As all the possibilities of the oak are pent up in the acorn, so the misery and wretchedness of the entire race were pent up in the first doubt.

As courage is born of confidence, so is fear begotten by unbelief; as love springs up toward those in whom we confide, so hate generates from fear. The little one, frightened by some stranger of forbidding appearance, rushes to his mother's side with a full expression of his feelings: "Mama, I hate that old man."

Wrath, envy, and jealousy stamp their imprint on the face. Care, anxiety, and worry sap the life forces, and leave their victim weak and spiritless. Remorse and despair prepare for the suicide's end. We do not have to reflect long to bring to mind scores of cases, of chronic conditions which prove that unhappy mental moods tend to sickness and death. Some have died of nervous shock following a fit of anger or some sudden mental agony. The babe is almost sure to be sick if it nurses a mother who has been indulging a fit of wrath. Many a poor wretch sighs and groans and agonizes until he loses all courage, and becomes diseased, because so much energy has been used up adversely that there is not enough left to run the vital machinery. These adverse mental states are like leaks in a mill-race which let out so much water that there is not enough left to run the mill.

The only justifiable sorrow is the sorrow that leads to repentance, ending in forgiveness, and paving the way to peace and life.

THE POWER OF INFLUENCE

William J. Cromie



MANY people think that, because they live commonplace lives, their influence does not amount to anything, and, consequently, they are not careful regarding their words and actions. This is the most erroneous supposition that can be imagined; for all are constantly exerting influence, either for good or evil, in thought, word, and deed.

Influence of Thought

A thought seems a very small thing, but its influence may change the whole course of a man's life. It may elevate him to the highest pinnacle of wealth, fame, or Christian manhood, or drag him down to the lowest level of degradation and despair. Evil thoughts unchecked eventually express themselves in evil words and deeds. Evil thoughts are the parents of bad deeds; for like begets like. How careful, then, should one be in his thinking, for one who thinks constantly of illicit and degrading things will be more susceptible to temptation than he who banishes even the suggestion of evil, and quickly changes the train of thought.

One can think evil thoughts and not be punished, from a civil standpoint, as is the case in words and deeds, because another can not peer beyond the mysterious curtain of the brain; but if the fire of diseased or evil thoughts is not quenched, it will eventually result in the ashes of a burned-out life, which will reach out and contaminate other lives, not ceasing its evil consequences short of eternity. "A small drop of ink," says Byron, "falling like dew upon a thought, produces that which makes thousands, perhaps millions, think." The influence of a good thought is like a little spring

that bubbles through the earth and trickles down the mountainside. At the mountain's base it is so small that one can step across it. Traveling across the plain, it becomes larger, as other streams empty into it, and at last it is spanned by mighty bridges. This great river is joined by others, and is used for the commerce of vast cities, until it empties into, and becomes a part of, the fathomless ocean. So with the influence of a good thought; it is first a rill; transmitted to others, it becomes a rivulet, and finally a part of the boundless ocean of eternity.

Words

How often we would gladly recall the hastily spoken words that pained, injured, or killed the affection of loved ones. Even after having been forgiven, oftentimes the wound will not heal, or an ugly scar remains through life as a constant reminder of an outburst of passion. When one is angry, he should strive to keep his lips tightly closed, for "grievous words stir up anger," and that which is once uttered can never be recalled. He is a man of power who controls the storms and tempests of his mind, and holds back sharp, denouncing, angry words. He who, after receiving a flagrant insult, only grows a little pale, bites his quivering lip, and replies quietly, proves that he is a strong man, and is bound to exert a good influence.

A word at the "psychological moment" may furnish ingredients that will either sweeten or embitter the whole cup of a human life. Many an honorable career has resulted from a kind word spoken in season, whereas an unkind word may drive a hesitating man from the right path forever. Every word uttered, whether good or bad, has its influ-

ence, and will return some day with increased power to either exalt or condemn. There is an instrument in every life which, like the sensitive wax in the phonograph, records every word uttered. It registers constantly the slightest enunciation, and renders it imperishable. This phonograph of the mind, which is wound up at birth, is ever running off records of past thought, words, and deeds. We try to drown its appeals, warnings, and advice in distracting pleasures and diversion, as it reels off film after film of panoramic life-moving pictures. Some records are laid away in the deep recesses of the brain, to be used in great trials, severe temptations, and upon extraordinary occasions. Some may not be used until the great day of reckoning, while others may be reproduced in our descendants, in all their beautiful or terrible detail.

Influence of Deeds

Every act one commits, no matter how small, has its influence on the life of others. A stone thrown by a careless hand into the lake splashes down into the depths of the water, and disappears from view, and that is all, apparently. No, it is not all; see how those concentric rings reach out further and further, until their influence makes the water vibrate to the very shores of the lake itself. So with a suggestive look or act; it may deepen a man's disgust with purity, sharpen the edge of his sarcasm with truth, shame a half-converted man into turning from religion, kill the good seed in a man's breast, which has not yet taken root, and produce an influence slight, but everlasting, on the destiny of his life. A little dispute, a flash of temper, the movement of a finger, the trig-

ger is pulled, and the soul never returns. "One little act, like a rat-hole in a dam, may flood all the work of years."

Everything in life with which one comes in contact leaves its influence, be it ever so slight. Upon observing the red, white, and blue pole in front of a shop, a man almost unconsciously touches his face to find out if he needs a shave. The wooden image of the Indian suggests the aroma of a cigar. The presence of the bootblack sends a look of inquiry to the feet. A yawn in a crowded room is very often infectious. To a hungry man the sight of food causes the flow of saliva. If these things influence us, how careful we should be in going where danger lies! As the strength of a chain lies in its weakest link, so it is that our greatest weakness measures our real strength.

The power of influence is like the rope that holds the guide and tourists together as they climb the treacherous steeps of an Alpine pass. We hold the same relation to those with whom we come in daily contact as does the guide to those entrusted to his care. We should point out pitfalls, rather than lead to them. We should tug at the rope of safety when danger threatens, be it physical, mental, social, or moral. Other guides who have passed before have erected danger-signals all along life's pathway. We should obey the tug at the rope as we sight the saloon, the den of infamy, the gambling table, and other places of contagion. What a mighty power we possess, this power of influence! It will be either a light to illumine or a tempest to destroy. Some one has said, "Sow a thought, and you reap an act; sow an act, and you reap a character; sow a character, and you reap your destiny."

GASTRIC CATARRH

J. R. Leadsworth, B. S., M. D.



MS. H., aged forty, complains of spells of indigestion from which she has suffered, with little interruption, for several years. The most constant symptom is a sense of weight at the pit of the stomach after eating solid food. Scarcely less disagreeable is the feeling of discomfort over the region of the stomach, which gives rise to belching of gas and eructations of bitter or tasteless food. Headache is quite frequent, often ending in a so-called "bilious attack." The tongue is heavily coated in the morning, and the breath is frequently offensive. The patient is easily exhausted, and is disturbed in mind, and often discouraged because she has not the ambition and energy to execute her daily tasks as formerly.

The above is a fairly good picture of gastric catarrh, or chronic gastritis. Accompanying this disease there is frequently a lessened secretion of gastric juice, commonly known as hypo-acidity. If the inside of the stomach could be seen, the walls would be found covered with a tenacious mucus. This closely adherent layer of mucus seems to occlude the tiny mouths of the cells whose function it is to manufacture the digestive juice. Hence the nutrition is often severely interfered with.

It is well known that when one step in the digestive chain is improperly performed, the various steps following this defective process are almost sure to be impaired. For instance, when one fails to masticate each mouthful of food thoroughly, thereby allowing no time for the digestion of the starch in the mouth, the work of the stomach is likewise apt to be defective; also when stomach digestion is incomplete, there frequently follow

various disturbances in the small intestine. Hence it will be profitable to say a few words relative to the cause of gastric catarrh. Unless one is willing to search out and correct these causes, there is little hope of any relief approaching a cure.

A very common cause of this disease — and the same may be said of other stomach disorders — is insufficient mastication of food. Washing down with hot drinks, or perhaps with a couple of glasses of ice-water, the coarse, irritating, and improperly masticated food, is a dietetic sin that sooner or later gives rise to chronic digestive disturbances. Hasty eating almost invariably means overeating, and a repetition of this several times daily, eventually results in an overworked, distended stomach, and its consequent catarrhal inflammation. This is all the more aggravated by a diet made up largely of very fat substances, fried foods, hot cakes, tea, coffee, and alcohol in various forms. Another common cause is irregularity in eating, and the pernicious habit of eating between meals of sweets and iced drinks, including so-called "soda-water," ice-cream, iced fruits, etc., which, repeatedly taken into the stomach, can have no other than a highly injurious effect.

Among other common causes preceding gastric catarrh, we quite frequently find nasal catarrh, in which there is a constant dropping from the pharynx of large quantities of mucopurulent matter, which passes into the stomach and sets up a like condition there. Even where there is no apparent swallowing of abnormal nasal secretions, the disease sooner or later invades the stomach by involving adjacent mucous membrane.

Decayed teeth, a filthy coated tongue,

and decomposing food masses left in the mouth from day to day, are sufficient to produce a catarrh of even the most healthy stomachs, if there were no other exciting cause.

Treatment

From what has been said it will be quite apparent that one of the first steps in the treatment of gastric catarrh is the adoption of some measure that will rid the stomach of this coating of tenacious mucus. It can best be accomplished by the use of the stomach-tube, if possible under the directions of a physician, especially if one is a novice at such a performance. After a little practise, many patients find little discomfort in repeating this procedure. Lime-water may be added to the water used in the proportion of one part lime-water to two of plain water. The temperature of the water should be about 100° Fahrenheit. After pouring into the stomach, through the tube, about a pint and a half of the water, the funnel end of the tube is lowered into a pan or pail until the greater part of the fluid is siphoned out, when the process is repeated until the wash water comes away free from mucus. In cases where the use of the stomach-tube will not be tolerated, or where it is contraindicated for various reasons, a glass or two of warm lime-water should be drunk. Immediately after this the patient should lie on the back, and roll from side to side, until the liquid is brought in contact with all parts of the stomach walls. By then turning upon the right side for twenty minutes or a half-hour, the pyloric opening is placed in the most dependent position, and will allow the dissolved mucus to flow downward in its course.

To get rid of the gas problem, usually bothersome in these cases, it is frequently necessary to impress upon the patient that the gas belched up is not al-

ways the product of fermentation, but is often the result of faulty swallowing — a process of “cribbing.” The belching is usually repeated until the patient is satisfied that enough gas has been forced out of the stomach to account for all the food eaten, when relief is usually experienced.

With many who are afflicted with gastric catarrh, there is a relaxed condition of the esophagus, so that a considerable amount of air is swallowed with the food. This may be sufficient to produce some of the pressure symptoms. Then the patient begins a process of gulping down air and belching, the last-named step scarcely exceeding the first. This may be kept up almost indefinitely, as was seen in one of our patients who spent most of his time between meals “getting rid of gas.” Upon being assured that this gas was largely made up of swallowed air, he decided to swallow as little as possible, and borrow no further trouble about that condition. Assuming that very little gas came from food eaten, this man began to take on a more liberal ration, and within a few months gained more than twenty-five pounds.

Many patients afflicted with various digestive disturbances imagine that food stagnates in the stomach from one day to the next. For their encouragement it may be said that the motor function of the stomach, its ability to pass on food that is swallowed, is seldom seriously impaired. A number of times of late I have had patients, who were sure that a serious condition of stagnation existed with them, come to my office early in the morning following a supper eaten the evening before; and by using the stomach-tube, I demonstrated, to their satisfaction, that the stomach was absolutely empty. This might not be the case where a hearty supper was eaten only a short time before retiring, especially

where one was unusually tired upon retiring, or the sleep was unbroken and sound.

Second in importance to getting rid of the mucus in the stomach in these cases is the question of diet. Because the hydrochloric acid and the pepsin are usually diminished, many authorities agree that meat is not well borne. If eggs are relished, and seem to be readily digested, they may be allowed; better soft-boiled or poached. Fruit should be allowed freely when hypo-acidity exists. Leguminous or vegetable soup, well-cooked grains, rice, macaroni, toast, zwieback, spinach, asparagus, peas or bean purée, corn, and baked potatoes are usually well received. All foods should be thoroughly masticated, as coarse particles irritate the stomach and increase the amount of mucus.

No treatment is so helpful in chronic catarrh of the stomach as is hydrotherapy, that is, the application of water. Applied with reasonable skill, it relieves the distressing symptoms, and with many that alone is as good as a cure. Only a few measures can be detailed here. The fomentation, applied for fifteen minutes, soon after eating, will generally relieve the portal stagnation and liver congestion. This not only aids stomach diges-

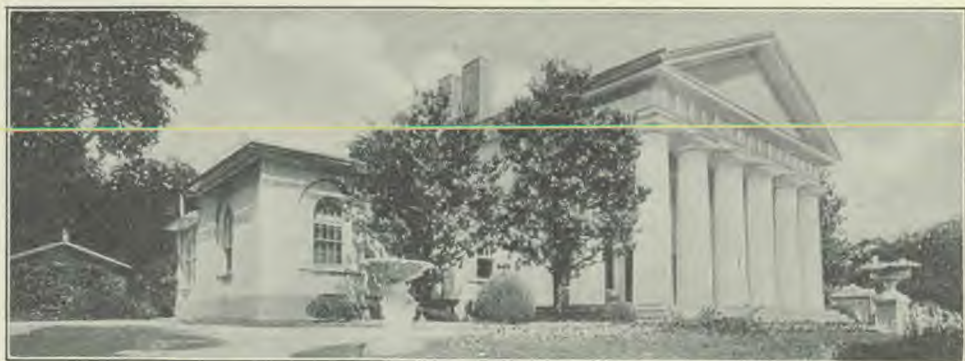
tion, but also stimulates the whole digestive and assimilative process. At night the Priessnitz pack should be worn. It consists of a wet cloth applied over the stomach and liver, over which is placed a snugly fitting, dry woolen binder. In severe cases this may be worn between the fomentations given during the day.

Five-minute sitz-baths beginning with a temperature of 85° Fahrenheit and gradually lowering the temperature with each treatment, may be taken two or three times weekly, and is a valuable circulatory stimulant.

Between times, treatment may be used, such as tepid or cold sponging, salt glows, etc. Where the food seems to remain too long in the stomach, one of the most useful and yet simple measures is to lie on the right side for a variable length of time after eating. It has been found that in this position the stomach empties in almost half the time that it does when reclining on the left side.

Simple as these measures are, it only requires thoroughness in carrying them out to afford relief in the most obstinate cases of gastric catarrh. Naturally enough, it requires judgment in tempering them to fit each individual case.

Santa Ana, Cal.



AUTOINTOXICATION — SELF-POISONING

W. A. George, M. D., Superintendent Nashville (Tenn.) Sanitarium



UTOINTOXICATION means self-poisoning or poisoning from within. The poisons formed within the body produce effects the same as if a poison were swallowed. Practically all diseases have autointoxication associated with them to some extent. In certain germ diseases the poison which manifests itself in high fever is caused by the germs rather than by the body directly; so we do not usually speak of a fever as an autointoxication.

Of autointoxication, there are many causes; we name the most important:—

1. Certain foods, such as the flesh of animals, are peculiarly liable to putrefactive changes, which create poisons in the body.

2. Overeating or eating too fast even of the best of food, hinders digestion, and thus allows the formation of more injurious materials in the body.

3. Sedentary habits and poor positions in standing and sitting, prevent the proper digestion and assimilation of food.

4. Poor elimination of the poisons naturally formed in the body. There are poisons continually being formed, which, if given off as they should be, do not cause any bad effects, but where the excretion of these poisons is retarded in any way, they accumulate, and thus poison the entire system.

5. The use of narcotics, such as tobacco, tea, coffee, and medicines of various kinds, which deaden the nerves and prevent the proper action of the excretory organs, may be a frequent cause of the accumulation of poisons.

6. Poorly ventilated rooms. Breathing of impure air prevents the giving off by the lungs of the poisons formed in the body, and also adds more to this accumulation.

7. Improper dress. Tight lacing or the wearing of belts or anything which prevents the free action of the muscles of respiration or which compresses the liver, stomach, and other abdominal organs, will retard the action of these organs, and thus increase the danger of autointoxication.

8. One of the most common causes of autointoxication is chronic constipation, which is certain to favor reabsorption of poisons about to be excreted. Constipation is often increased by a person not drinking enough water.

9. Prolapse of stomach and bowels, retarding the proper action of the stomach and intestines, and preventing the proper elimination of poisons, is a common cause of autointoxication.

10. Infrequent bathing is another very common cause, as the pores of the skin, which should be kept open, are allowed to remain closed, and the poisons which should be eliminated by the skin are thus reabsorbed and accumulated in the system.

11. A person in fair health in other ways may bring upon himself an accumulation of poisons by worrying about business or domestic troubles or anything that will depress the mind. This is a very frequent cause of auto-intoxication, and has driven many a person to the insane asylum.

Autointoxication manifests itself in various ways. Among the common symptoms are general weakness, which wears off to a great extent when the person takes vigorous exercise; headache, dulness of the mind, foul breath, coated tongue, bad taste in mouth in the morning, loss of appetite or variable appetite, vertigo, or dizziness, stupor after eating, or perhaps restlessness, and insomnia.

A person is very likely to be melancholy, or have the blues, as we say. There may be alternating constipation and diarrhea, and various forms of indigestion. The skin often looks sallow and lifeless. There is usually some loss in weight, and the loss in weight seems to be quite permanent, the person not being able to gain in flesh no matter how much food he eats. Sometimes the eyes are irritated or bloodshot, the lids inflamed, leading to the suspicion of some serious eye trouble. Cold hands and feet very frequently go with this condition. There is seldom any rise of temperature, but often a subnormal temperature. The temperature may go down to ninety-seven degrees or below in the morning. Gas in the stomach and bowels is usually present in a greater or less degree. There is often pain between the shoulders, in the neck, and sometimes numbness in the hands and feet. In some cases there may be nausea and vomiting. One would not expect to find all these symptoms in any one case, but there may be several of them present in any case of autointoxication.

Treatment

The treatment of this condition consists of two parts, the regulation of the diet and various physiological treatments. The diet should be abundant and yet so regulated as to aid as far as possible in the elimination of the natural poisons of the body, and to prevent further increase of these poisons. In order to accomplish this, the best diet is usually composed mostly of well-cooked cereal foods and an abundance of fruit. We can not speak too highly of the use of fruit in these cases, as fruit has a special tendency to help nature to clear out the poisons of the system. If a patient can take acid fruits without inconvenience, these are, perhaps, preferable to sweet fruits, although fruits

either sweet or sour are good. Lemonade or even clear lemon juice is often of value in clearing off the coated tongue and helping the appetite. The cereal foods are better if toasted, like zwieback or toasted bread, toasted crackers and the various well-baked breakfast foods that are on the market. A moderate amount of beans and peas or other legumes, as well as some of the nut foods or fresh nuts, may be used to advantage. Vegetables should usually be taken sparingly, and not at the same meal with fruit. A moderate amount of milk or cream is well taken by most patients suffering with autointoxication, and also eggs. But neither milk nor eggs should be taken in large quantities, and if they are dropped entirely for a time it is often an advantage.¹

The treatments applied in this condition are intended especially to increase elimination of the poisons, and to tone up the weakened muscles and other tissues. In order to eliminate the poisons as rapidly as possible, one of the most essential treatments in most of these cases, especially where constipation is present, is the use, for a limited time, of a large enema or colon injection, when the patient may take from two to four quarts of warm water. This may be repeated each morning for several days, until the bowels are thoroughly cleansed, and all accumulations which might be absorbed are disposed of. As soon as possible, however, this should be replaced by the small cold enema, given not oftener than every other morning, as the large warm enemas are likely to cause distention of the colon and produce the injurious enema habit.

The elimination from all parts of the
(Concluded on page 776)

¹ It should be noted that some physicians make large use of milk, especially soured milk, in autointoxication.

AUTOTOXEMIA

W. W. Worster, M. D.

FOR centuries in the past there has been a constant search for the true cause of disease and for specifics that would effect a cure. Decade after decade has marked wonderful changes in the theories and modes of treatment; but it has been in the last century only that much positive knowledge has been acquired concerning the causation of disease, and only recently has the medical profession been in possession of specific modes of treatment.

Medicine was revolutionized when the germ theory of disease causation was launched, and the more we study into it, the more diseases we attribute to this cause; but there are many disorders, such as migraine, rheumatism, neurasthenia, gout, and epilepsy, for which in times past no definite causes were found. But recently, science has been giving much attention to the probable causes of these diseases, and it has led to a deep and prolonged study into what has been termed autotoxemia, or self-poisoning. With this new light shed upon the causation of disease by these investigations, specific lines of treatment can be formulated, and health can now be enjoyed by many of a class who formerly were the victims of continual suffering.

Autotoxemia is a condition of intoxication or poisoning caused by poisons generated in the body from either normal or abnormal processes. The human body demands food for the purpose of building up and repairing tissues, also of serving as fuel to supply heat and energy. In this burning, or rather oxidizing, process of our food there are many substances produced which are very poisonous to the human system. This can be illustrated by comparing them to the ash that results from combustion of

fuel in stoves and furnaces. Nature has provided for either the elimination or the destruction of these poisonous substances by means of the liver, kidneys, skin, and lungs.

The processes of transforming food into tissue, of oxidizing it in the production of heat and energy, and of eliminating or destroying the waste products, are together known as metabolism. We shall refer to this as the metabolic process.

It can readily be understood that if more food than is needed is carried to the cells and is there burned, a larger amount of ash must be eliminated than normal. This extra burden upon the excretory organs will, in the course of time, produce more or less diminution in their activity, consequently a retention in the system of the poisons, and autotoxemia will be the result.

The brain and nervous system being of all organs the most readily affected by these poisons, autointoxication naturally causes many functional nervous disorders.

Any disease that will impair the functions of any of the above-mentioned eliminative organs, will cause a retention of the poisons which result from the metabolic process, and will also cause autotoxemia.

The above-mentioned conditions are caused by the disarrangement of the natural functions of the body. There are other substances equally as poisonous, or even more so, that are formed by abnormal processes; for instance, putrefaction of the food in the bowel. It is from this source that some of the most deadly poisons gain entrance to the human system. Almost all are informed of the serious ptomain poisonings

caused by eating decomposed meats and other substances of a highly protein nature, especially canned goods or flesh that has not been properly preserved. This condition can not strictly be called *autotoxemia*, inasmuch as the poisons were taken with the food, and not generated in the body, but it would come under the general term intoxication, the same as in the administration of alcoholic beverages; however, as the intestinal temperature is most favorable for the growth of putrefactive germs, foods that are partially putrefied before being consumed, or that are allowed to remain in the bowel for a longer period of time than is necessary, are especially subject to the action of these germs of putrefaction, which are constant inhabitants of the human bowel. In this putrefaction of protein substances in the bowel the same poisons are produced as are produced externally, and, for that reason, some severe cases of poisoning result which are strictly autotoxemic. The overgeneration of poisons in the metabolic process, or the retention of the normal poisons by inactivity of the eliminative organs, combined with the possibility of the absorption of poisons from the alimentary tract, keep the body constantly in danger of intoxication; and in fact it has been stated that the body is a laboratory of poisons. Many diseases, such as those already mentioned, can be accounted for as intoxications. We will consider separately autotoxemia from the liver, kidneys, skin, lungs, and bowel origin.

One function of the liver is to destroy the poisons that have been absorbed from the alimentary canal, especially the poisons of putrefaction. This can be proved by injecting the same quantity of nicotin into two animals the same size, in the one case throwing the nicotin into the blood entering the liver, in the other injecting it into the

blood leaving the liver. The latter condition will produce a much greater intoxication than the former, proving conclusively that the liver has to a certain extent destroyed the poisons.

Probably the most important function of the liver is that of transforming the waste products of metabolism into urea, which is thrown back into the blood and eliminated from the body by the kidneys. The perfect action of the liver is essential to health, because any inactivity on its part will mean either imperfect destruction of the poisons absorbed from the bowel and their passage into the general circulation, or the incomplete change of the poisons of metabolism into urea and their retention in the blood. Such conditions give rise to vertigo, sick-headache, fatigue, biliousness, jaundice, diseases of the skin, and other troubles of a similar nature. The bile itself is very poisonous; in fact, the substance secreted by the liver is six times as poisonous as that secreted by the kidneys.

The kidneys eliminate many poisons from the body, especially urea and uric acid. Their failure to act properly gives rise to headaches, languid feelings, and eventually to uremia, which is a blood poisoning of very severe type.

The skin eliminates many poisons, and its cleanliness is essential to perfect action. Many neglect bathing, and apparently are in good health because the other eliminative organs come to its rescue and do extra work, thereby paving the way for their future breakdown. The proper way is to let the skin do that which it is intended to do, and the other eliminative organs will have all they should do, looking after the excretions naturally intended for them.

The lungs eliminate poisons; breathing the air of a poorly ventilated room causes languor, headache, dizziness, and may rob the blood of necessary oxygen.

The absorption of poisons from the intestine is perhaps the most important cause of autotoxemia. While the toxemia from the failure of the liver to act causes the most decided symptoms, yet its failure is mostly caused by the eating of improper food. Putrefaction of food in the intestine is one of the causes of neurasthenia. Autotoxemia is liable to be brought on by constipation, even if the best of food is eaten. Enteroptosis, which is a relaxed condition of the abdominal walls, allowing the abdominal contents to drop downward and forward, has a great tendency to cause constipation, with the putrefaction of food, and is responsible for many cases of toxemia. This condition can be remedied by wearing properly fitting abdominal supporters, by taking such exercises as will strengthen the abdominal walls, by keeping the bowel movements free and active, by partaking of such foods as are least liable to putrefy and constipate, and by practising regular habits of eating and answering calls of nature.

The use of buttermilk and kumiss has been greatly lauded of late for their efficiency in inhibiting the germs of putrefaction. The author has had considerable experience with the use of these products, and is free to state that he has

noticed many excellent results from their use. They must be used daily for a period of several months to accomplish much good. The use of a buttermilk enema has also proved to be a powerful weapon to use against the germs of putrefaction.

Food substances play an important part in the causation of autotoxemia. Recent scientific investigation has shown that one tenth of our food units should be composed of protein and nine tenths of sugars, starches, and fats. The protein is utilized to build and repair tissues, while the others are burned for heat and energy. If an excess of the protein is eaten, it has a great tendency to cause intoxication from two sources: when putrefied, it produces ptomaines; and when burned in the system for heat and energy, it produces poisonous substances, which cause the liver to do extra work.

In conclusion, the essentials of good health and the prevention of autotoxemia are strict attention to diet, especially in regard to the amount of protein, carefulness in eating, regular bowel action, strong abdominal muscles, perfectly clean skin, plenty of good fresh water to flush the kidneys, fresh air, and moderate exercise.



DRUGS AND DRUGGING

D. H. Kress, M. D.



LOOK forward to the time when the people will give up the extraordinary habit of taking medicine when they are sick," said Sir Frederick Treves, one of King Edward's physicians. There never was a time in the United States when there existed a greater demand for drugs than the present. Probably one hundred millions of dollars was paid out last year by the people of the United States for patent medicines alone. In addition to this there are drugs which are in such general demand that they are classed with the actual necessities of life. There are many drug addictions. Wine, tobacco, coffee, and tea are used because they contain a drug. For these drugs we pay out about three billions and a half dollars in money each year. The use of opium and its derivatives is rapidly increasing in the United States. According to the report of the American Pharmaceutical Association in 1902, there was an increase of fifty-seven thousand pounds in the importation of opium into the United States, as compared with the figures of the preceding year. One hundred and sixty thousand pounds of the salts of morphin were consumed during the year 1903, over twice as much as the amount imported for the twelve months of 1901.

There are numerous trade preparations containing heroin which are widely advertised as cough sirups, asthma cures, etc. Heroin instead of being an innocent preparation is one of the most poisonous agents of the morphin family. Laudanum is another member of the same family employed in various preparations.

The extent to which drugging may be carried will be seen from an experience

related to me in Australia by a frail, anemic woman in her persevering but vain endeavor to secure health. In order to get this remarkable history accurately, I requested her to take time to put it into writing, which she did. The following is a copy of it:—

"I started with medicines prescribed by doctors, and took them as religiously as though they were life-drops. Then I took a case of wine to strengthen me. This was followed by a case of porter—four dozen bottles. Then followed in succession Mother Siegel's Syrup and Irish Moss. Clement's Tonic was next taken through the advice of a friend. I smoked cigarettes and Nimrod's Powder, on the recommendation of another acquaintance. My husband heard of Webber's Vitadatio; accordingly, I took forty bottles. Next came a course of Viava treatments, which cost me £25 (\$125). Then followed in succession Wood's Peppermint Cure, Sheldon's New Discovery, another case of porter, a bottle of overproof rum and Warner's Safe Cure. I have tried Pink Pills, Holloway's Pills, and others, the names of which I can not recall. I have also taken internally, kerosene, turpentine, cod-liver oil, and Scott's Emulsion."

While this is the most extraordinary case of drugging that has come under my care, it illustrates to what length men and women are willing to go in order to secure that which will afford relief from the annoying symptoms associated with ill health. The one who is in health feels well, and therefore has no need for drugs. The general use of drugs is an evidence of general ill health and degeneracy. The majority of men and women are not well, and consequently do not feel well. It is often the desire on the part

of these to feel better than they are, that is responsible for this "extraordinary habit of taking medicines."

Alcohol, nicotin, morphin, and caffen are the drugs which are most commonly employed. Unpleasant feelings, or symptoms as they are termed, are warning signals nature erects along the pathway of transgression. They are designed to call attention to the fact that something is wrong, perhaps the laws of life are being transgressed, and reforms should be made in eating, drinking, breathing, working, etc. To tear down these signals by the use of drugs without making the needed reforms, encourages continuance on the pathway of transgression *unwarned*, but not *unharm*ed. The nervous, fatigued mother feels the nervousness and fatigue less while under the influence of caffen; but when the influence of the drug has worn off, the nervous condition is found to be aggravated and the fatigue more pronounced. Another dose, and later still another is demanded; in fact, to continue the desired feeling of well-being, it is necessary for her to keep constantly in a state of caffen intoxication. This is responsible for drug habits. The masses are constantly in a narcotized and drugged condition. Thousands are rushing forward on the broad way which leads to nervous bankruptcy and physical destruction, unconscious of their danger. The Bible says, "Wine is a mocker," and what is true of wine is true of all preparations containing narcotic drugs. "Whosoever is deceived thereby is not wise." The apostle admonishes Christians as follows: "Be ye not unwise, but understanding what the will of the Lord is. And be not drunk [or deceived] with wine, . . . but be filled with the Spirit."

Treatments of to-day aim chiefly at the removal of symptoms and not at the removal of causes. When a headache appears, the information usually de-

sired is not, What is the cause of the headache? but, Where can I get something that will stop this pain quickly? It is not difficult to find a remedy for which the claim is made, "This medicine makes you well and keeps you well." The highly advertised preparations containing acetanilid, phenacetin, or antipyrin are usually resorted to by the ignorant and innocent. By medical men these are classed with the most dangerous drugs known to the profession. They depress the heart, and finally arrest its action altogether. While they remove certain headaches and reduce the temperature in fever, they always leave serious effects. Not a few cases of sudden death have occurred from their use. When a physician gets a patient with blue lips, weak, palpitating heart, and a pale anemic face, upon inquiry it is not uncommon to discover the condition to be due to the use of one of these drugs. Caffen relieves some headaches as effectively as acetanilid does others. If the headache is due to anemia, it applies a spur to the heart, and increases the flow of blood to the anemic brain. On the other hand, the headache of the coffee drinker, which is due to a congested brain, may be relieved by acetanilid; for acetanilid, instead of stimulating, depresses the heart action. But the heart continually spurred on by caffen, and then held in check by acetanilid, can not long stand such abuse. This affords a partial explanation of the many sudden deaths occurring from heart failure in these days.

There is a rational way of relieving headaches. Headache should not be considered a disease. It is a warning signal nature erects, calling upon sensible men and women to inquire into its cause. The trouble may be due to eye strain. If so, it is useless to take caffen or acetanilid. It is best to consult a good oculist and have the visual defect corrected. If it

is due to autointoxication or the fermentation and decay of foods in the alimentary canal, reforms should be made in eating and drinking and other habits which are a contributing cause of indigestion. The general health must be built up. Headache may be caused by a lack of blood in the brain, due to destruction of the red blood-cells following autoinfection of intestinal origin. As a palliative, hot applications to the head afford temporary relief. If the headache is due to hyperemia, or to too much blood in the brain, resulting from the use of flesh foods, coffee, etc., a warm foot-bath, and cold applications to the head, with the addition of a hot drink, will afford relief for the time. Remember that permanent relief can be secured only by the removal of the causes. A short fast in such cases is also beneficial. The chief aim should ever be the removal of that which produces the headache. Under no condition should headaches be cured by the use of poisonous drugs.

Some months ago I received a letter inquiring if I would recommend a certain highly advertised remedy for a consumptive. I replied that I could not recommend it, and stated my reasons. But the claims made for this remedy were so forcible that the patient in spite of my advice determined to give it a trial. The next letter I received said, "The patient is improving." But a few weeks later another letter came, saying, "You were right, the patient is dead." This particular cough remedy contained alcohol, morphin, and chloroform. The alcohol and morphin produced a state of exhilaration and cheerfulness, the morphin arrested the secretions, and the chloroform arrested the cough. Natu-

rally, the patient was led to believe that improvement in his condition was taking place. It is unwise to check the cough of a consumptive so long as the disease is active, and dead and putrid matter from the lungs needs to be thrown off. The cough in all such cases is a necessity in order to prolong life. The only hope for the consumptive lies in building up the vitality of the lung tissues by the inhalation of pure air and the use of pure, nutritious foods.

During the past sixty-five years no other disease has increased so rapidly as has cancer in civilized lands. It has been authoritatively stated that after the age of thirty-five every ninth death among women is due to this disease. The numerous advertised cancer remedies no doubt have much to do with the high mortality rate. The only real remedy for cancer is the early removal of the tumor.

The use of soothing sirups by mothers to quiet the protest of the baby that has been improperly fed, has much to do with the high death-rate among infants. All these preparations are a source of danger. Medicine which exerts a quieting influence usually contains morphin, opium, or some other poisonous drug.

The sooner people discover that health is not put up in bottles or pills and dispensed at so much an ounce or box, the sooner will the "extraordinary habit of taking medicines when sick" be abandoned. Health, when lost, can in most cases be restored by merely correcting wrong habits, and living in harmony with every law of body and mind. Drugs may produce a feeling of comfort, but they can not counteract the results of disobedience. They often say Peace when no peace exists.

SUBSTITUTES FOR DRUGS

Howard F. Rand, M. D., Superintendent California Sanitarium



IN order that we may have a clear understanding of this subject, we must first have in mind what drugs are used for, then we must consider what natural agencies will do the same work in the body. It may be asked why, if drugs will perform certain desirable work in the body, there is any need of substituting what are called natural agencies. Drugs include substances from the vegetable and mineral kingdom used in the treatment of disease, many of which are poisons and are so recognized by all text-books on drugs, and when poisons are introduced into the body, there is an effort on the part of the body to rid itself of them, or defend itself against them. This effort increases, by exercise, the defensive functions of the body while the drug itself is being eliminated.

It is the purpose of this article to point out that there are natural agencies which do the same work in the body as drugs, that is, increase the defenses, stimulate elimination, and the like, without the addition of poisonous material for the body to get rid of. A fact generally understood by physicians, but seemingly not understood by "the common people," is that medicines never under any circumstances add energy to the body. They either stimulate certain functions, as the whip stirs up the tired horse, or they act to retard. In other words, practically all drugs act either as stimulants or as sedatives, but as drugs usually affect certain specific tissues or organs, we have subclasses, such as bitter tonics, which are supposed to improve the digestive functions; motor excitants and motor depressants, acting on the spinal cord, muscular system, etc.; cerebral excitants and cerebral

depressants, acting upon the brain functions; antipyretics, reducing fevers; anodynes, relieving pain, and others.

The word stimulant comes from *stimulus*, meaning "goad." The driver of the wearied ox uses the goad to urge him to move faster, so we sometimes urge on the tired body, attempting to get more work out of it. The weary housewife, by means of the cup of tea, covers up her weariness, and she for the time is bright, cheerful, and active, not because the tea has added any strength, but because the stimulus has drawn on her reserved strength, which should not be used except in case of extreme emergency. Later comes the reaction, and more tea is demanded to keep up the feeling of well-being; so the habit grows. Tea is only a familiar example of all stimulants. They add no strength, but compel the using up of reserved strength, so that eventually is produced a premature breakdown.

In place of such stimulants we may use natural means which are not harmful. A cup of hot milk will often relieve a tired feeling almost immediately, and is not followed by bad after-effects. Certain water applications, particularly the brief application of cold, when properly given, act marvelously in restoring the natural condition without leaving bad after-effects. It is said that a certain minister before entering his pulpit always took a cold bath because of the stimulating effect it had on his brain.

It should be remembered that when one has worked to the point of exhaustion, it is suicidal to stimulate to further work. What the system then needs is rest and recuperation. This is far more rational than the use of artificial stimulants. Even the use of what are called

natural forms of stimulation should not be indulged in in order to coax out of the body more work than it is capable of doing without exhaustion; rest is far preferable.

Sedative agents (from *sedo*, allay) are supposed to lessen the functional activity of the organs, diminish motility, decrease pain, and so exert a soothing influence upon the system. Under this class there are two great divisions: general sedatives, including narcotics and anesthetics; and local sedatives, which affect a part only. Drugs which act as sedatives are always depressant in their nature, and the less one is compelled to use this class of drugs the better.

Can we find in nature anything that will take the place of sedative drugs? Can we slow down the activity of organs, lessen the motility and relieve blood pressure and tension? We have learned by long experience that the application of water—full baths at a temperature of about 94°—has this precise effect, and without any evil after-effects. Fresh air applied to the whole body gives a similar result, as do also rest and relaxation.

In conditions of local congestion, with excess of blood and lymph, causing pressure, pain, and lessened function, relief is obtained by the application of moist heat, by means of fomentations and the like, or by the application of dry heat by means of the sun's rays, electric light, or hot air. In acute inflammation immediate relief is often obtained by the use of cold applications, such as the cold compress. The application should not be too cold, but should be continuous at about 50°. Relief may also be secured by drawing the blood to other parts of the body, by the application of heat to the limbs or to different parts of the trunk.

Among the remedies affecting the nervous system, there are motor exci-

tants, that is, agents which increase the activity of the spinal cord and motor apparatus, such as *nux vomica*, strychnin, and the like. It is very generally recognized that these remedies, whatever good they may do, are not without evil effect. What natural remedies will bring about similar excitant effects, without producing the undesirable secondary effects? A valuable treatment for this purpose is alternate hot and cold applications to the spine by means of hot and cold water compresses or by means of hot water and ice. Such a treatment acts reflexly upon the spinal cord, and the effect is intensified if it is followed by the Scotch or jet douche. Cold-towel rubs, cold-mitten frictions, half baths, and the like give similar results.

Analgesics, or anodynes, give relief from pain either by impairing the conductivity of the sensory nerve-fibers or by depressing the cerebral centers of sensation. Opium relieves pain in both of these ways; and in the form of laudanum, or paregoric, or more frequently in the form of morphin, the most important of the opium alkaloids, it is one of the favorite remedies for control of pain. To relieve pain by means of these habit-forming drugs is unquestionably dangerous, for the drug habit, when formed, is worse than the pain. There are natural agencies by which we can relieve pain, such as the application of heat and cold, which have no tendency to form habits. If one is suffering from appendicitis, with acute pain, heat applied to the extremities and cold applied over the lower right half of the abdomen will relieve the intense congestion, and thus control the pain. Many other examples might be given of the use of heat and cold for the relief of pain, but this will serve as an illustration.

Antispasmodics are agents which pre-

vent or allay spasm of voluntary or involuntary muscles of the organism. Some act by direct depression of the motor centers, others by paralyzing the centers which receive the impressions. Alcohol and other habit-forming narcotics are used for this purpose. By means of natural agencies we remove the active cause of the spasms, which many times is located in the alimentary tract. Removing the internal irritation, enveloping the body in a neutral bath and drawing the blood from the head, relieves the cerebral centers, and hence controls the spasms.

In this article we can not give examples of all classes of natural remedial agents, so we take up the most important ones, in order to show that there are natural agencies that may be advantageously used in place of the much-used and much-abused internal remedies, which, however much good they

may do temporarily, are not without their evil effects.

Perhaps the greatest evil in connection with the use of drugs is the fact that the mass of people take them without the advice of physicians, who understand their proper use and who would give careful direction as to when and how to use them, and, most important, when *not* to use them. No person should use drugs, proprietary or otherwise, without the advice of a physician.

While there may be emergencies where the physician might find it necessary to use drugs, it certainly is unwise for one who is not a physician to attempt drugging of any kind. It is always wiser to use a natural agency. If the desired results are to be obtained through other means, some reliable physician should be consulted before undertaking any other procedure.

Sanitarium, Cal.

AUTOINTOXICATION — SELF-POISONING

(Concluded from page 767)

body is increased by hot treatments or sweating procedures, such as the hot vapor-bath or the hot full bath, the hot-blanket pack, or the wet-sheet pack carried to perspiration. The hot foot-bath, taken at the same time with fomentations to the stomach and abdomen, followed by a cool sponge, helps to eliminate the poisons rapidly. It is well for these patients to practise taking a cold sponge bath upon rising in the morning.

Exercise is also a very important procedure in helping to relieve autointoxication, as it increases the action of the organs of the body, and thus helps in the elimination of the poisons. Everything

possible should be done to make the surroundings hygienic. The rooms should be properly ventilated, and in some cases great benefit may be received by sleeping out-of-doors. Such cases are often greatly relieved by a change of any kind, such as a trip to the mountains or to the seaside. This is usually due to the fact that the patient breathes more fresh air, takes more exercise, and perhaps bathes more frequently, thus bringing into action more of the excretory organs of the body, and giving the poisons off more rapidly. As this condition is usually associated with digestive troubles, anything that will improve the digestion will help to relieve autointoxication.



IMPRESSIONS OF THE HUMANE CONFERENCE



THE first and strongest impression resulting from an attendance at the International Humane Conference is admiration for the workers and for the noble, disinterested work they have done and are doing. The next impression is that the work naturally divides itself both vertically and horizontally; the vertical division being between those who are working for animals and those who are working for children, the horizontal division being between those who are attempting to bring in the humane reform by force and those who are attempting to do it by humane methods. Not that these are hard-and-fast lines, for one worker may operate on both sides of either the horizontal or the vertical lines.

We all need to learn to be more humane, even though we belong to some society. We have back of us a heredity of many generations of cruelty, and this cruelty is likely to show out at most unexpected points, even in those who profess humaneness. For after all, we are humane only in spots. In the land where they are so humane that they can not even bear to kill the rats and other vermin, the child widows suffer inconceivable cruelties. Some women of supposedly more civilized countries lavish money on pet cats which would be better spent in feeding the starving infants in the back alley.

Some of our humane friends have learned that punishment does not reform the "bad boy." Perhaps some day they will learn that the bad man is but the bad boy grown up; that he had no humane friends to reform him by kind-

ness, and his wrong acts, for which he is only partly to blame, have become a fixed life habit. Perhaps this older "bad boy" has children of his own, and abuses them. This arouses the ire of some one who is humane in the spot of child protection, and the man is summarily punished.

How long will it be before our humane friends will apply the methods that have reformed so many unfortunate boys and girls, to these boys and girls of older growth and age, who are yet only boys and girls as regards character formation? Some social workers who are possibly not identified with the humane societies are realizing that punishment is not reformation.

After all, what is punishment? We see it in its crudest form in the Negro lynching. Is it intended to reform the Negro? Is it supposed to be deterrent? Or is it the result of base passion, as elemental in its nature as the act of the Negro? And much of the punishment, even when performed legally, has the earmarks of revenge; and revenge never reformed anything. A misguided deputy sheriff during a rabies panic followed up an innocent dog, and killed it in an inhumane manner. It was a case of aggravated stupidity. He was possessed of a hysterical mania differing little from that manifested during the Salem witchcraft, and supposed he was doing his duty. He was fined twenty-five dollars, and a prominent humane worker said he ought to have been imprisoned. Was that for reform or revenge? A number of lantern slides showing examples of infant neglect and starvation

and cruelty in England were exhibited, and in the comments on each slide we were told that the parents were sent to the work-house. Humanity in spots! Have we not a duty to these misguided parents, as well as to the children?

This is the darker side of the picture, that part under the horizontal line. Above the line is the general movement for humane education, the formation of bands of mercy, the movement for humane instruction in the public schools — provided the children in this educational movement are not taught to be kind in spots — to perform a humane act in an inhumane manner, such as imprisoning the provider of a large family and bringing suffering on all the family because the father has been cruel to his horse.

But there was another sentiment expressed very freely in the conference, and one that will probably dominate the organization in the future. Dr. Stillman, president of the conference, speaking in reference to the prevention of child delinquency, gave utterance to a self-evident truth: "Force never convinced anybody. We must lay more emphasis on prevention. The social as against the legal must be the future method of work." The excellent paper by Edward G. Fairholme, chief secretary of the Royal Society for the Prevention of Cruelty to Animals, England, was an amplification of the thought: "The future of humanitarianism lies in education." And, on the whole, this sentiment seemed to pervade the conference, and will gradually permeate all branches of the humane movement. The movement for humane education, and especially for humane education in the public schools, is quite general, the principal workers realizing that prevention by early education is far more efficient than the attempt to cure a propensity to cruelty, whether it is the result of thoughtlessness or maliciousness.

A delegate to the conference, seeing a colored boy kick a dog, began talking with him, learned he was from the State of Virginia, spoke of the greatness of George Washington, who had come from that State, and after winning the confidence of the colored boy, spoke to him about the thoughtlessness of kicking the dog. The lesson so kindly given will probably never be forgotten by the boy. That was a humane method of inculcating kindness.

One expression made at the conference, "Prosecution should be the last resort," ought to be a watchword for all humane workers. The move for a technical school for the education of humane workers seems to be in the right direction, especially if this education brings these workers in touch with other social workers; for while there is a good to come from specialization, the good is lost when the specialization is carried so far as to lose touch with social work of a kindred nature. Rev. Mr. Gilchrist well said: "We need to take this work out of the hands of fanaticism by means of a college for humane education."

On my way home from the last meeting of the conference, I had in my hands one of the books of the Humane Education Society, which started up a conversation with my seat mate, a stranger to me, who said:—

"The trouble with these humane societies is that they go too far. I once bought a hipped horse for my son. You know a hipped horse is one having one leg shorter than the other, so that there is a limp, though there is no pain. My son had not used the horse long before he was in court and had to pay a fine of five dollars."

I explained to him that there was a movement on foot to educate humane officers in the elements of veterinary practise so that they could work intelligently. He replied:—

"It will be a very good thing, for often these people are women who know nothing about a horse and what is humane treatment. Moreover, they get half the fine, and that is an inducement to them to arrest a man on the least pretext."

I could not answer him, as I was not informed as to the disposition of the fine, though any one can see if such is the law, it gives opportunity for grave abuses. Another complaint this man made was that the humane people will not arrest the drivers of the Knox Company, or any of the influential users of horses, because they do not dare to, but they will arrest some poor man whose whole investment, on which he is dependent for the support of his family, is his horse, and put him to heavy expense, or perhaps cause him to kill his horse. Whether this is a just charge I can not say. That the charge is made shows that humane laws actually work against the work of the humane education people, in stirring up antagonism and giving the impression that these laws are only another method of oppressing the poor.

One of the pioneers in this work, who has been a fighter in both senses of the word and has not forgotten the crude methods necessary in the early days of the cause, said, "The prosecution of those who do not know how to deal with animals is my religion." It is to be hoped that the future emphasis of the movement will be on the upper side of the horizontal line, and that this kind of humaneness will gradually be eliminated. This same man said that it would be hard to tell whether the mayor or the humane society is in charge of the city of Philadelphia, a statement which I am charitable enough to think a little hyperbolic, for if it is strictly true, it is not creditable either to the society or the city.

One man, discussing a most able and sensible and humane paper from England

on animal protection, must have taken some exception to the paper, for he took occasion to say that he would as soon tread on a baby as on an ant. He believed the life in the ant as sacred as any life, and thought its soul might be continued after death. No doubt this man would find it congenial to live with those who refuse to kill vermin, and where plague-rats can not be killed, but must be kept in cages, the sexes separate to prevent further propagation, and well fed and cared for until they died of old age. I would suggest to him that he form a S. E. C. H. K. M., that is, a Society for the Education of Cats in the Humane Killing of Mice, and some thousands of kindred societies. It is a pity, by the way, that these cats with souls were not taught instinctively that mice have souls, and that they will have to meet these mice "on the other side." I will say in justice to the conference that there was very little of such sentiment expressed, and there was very little jingoism.

What do I mean by jingoism? Unwarranted suspicion and tendency to impute to the other fellow wrong motives. The movement started by the conference to eliminate from moving-picture shows anything that will cause a distrust or ridicule of foreigners is a worthy one. The only case of real jingoism I happened to witness in the conference was in the reading of a melodramatic paper on "The Excessive Exploitation of Rabies," in which the writer accused the Department of Agriculture and the municipal health boards of malevolence, deceit, and ignorance, and stated that their work on rabies is done in favor of commercialism. Dr. Stillman, at the conclusion of the paper, made a statement which perhaps the majority of physicians would find no fault with, in which he took off the rough edge of the paper just read, and then the

reader gave what may be considered as an apology or an explanation for some of her criticisms.

On the whole, one is impressed that these people are broad-minded and whole-souled, and they are to be commended that they succeeded so well in keeping the cranks from stirring up antagonisms. Particularly were they successful in preventing a discussion by antivivisectionists, though doubtless many of the members of the humane movement

believe that there are abuses in the matter of the infliction of unnecessary pain in connection with animal experiment, and a few probably adopt the extreme view that animal experiment is not justifiable under any circumstances. These latter being of the jingo class, any opportunity given them for discussion would have probably resulted in confusion, and consequently would have proved an injury to the progress of the humane movement.

A WARNING BY A FRIEND OF THE OYSTER

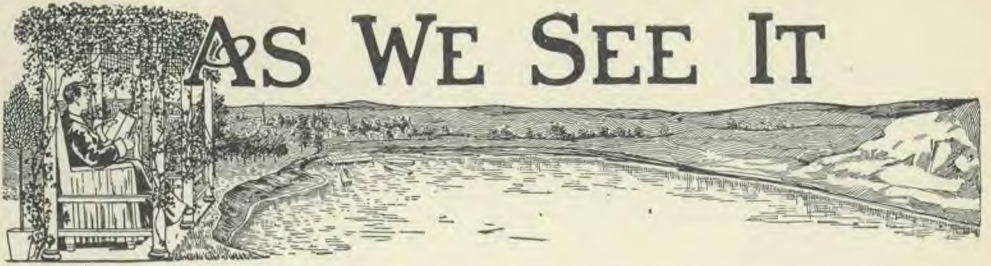
NO one would accuse the editor of the *National Food Magazine* of a prejudice against the oyster as food, and hence the following quotation from the September issue of that magazine is all the more significant. The title of the article is "Timely Warning About Oysters."

"Oyster poisoning and typhoid fever epidemics caused by eating contaminated products have been of such frequent occurrence of late years as to create a great deal of prejudice against the naturally wholesome and succulent bivalve. Even before the season has opened, the United States Department of Agriculture is sending out notices of convictions in cases of oyster adulteration. Oysters are so fragile, so subject to decomposition, that the temptation is great for dealers to doctor them with chemicals, thus producing the dreaded 'embalmed' oysters. Formaldehyd and borax are the chemicals popularly employed in this process, and it will require the greatest activity on the part of government and State officials to successfully guard against such frauds.

"Oysters that produce typhoid fever are usually gathered from water contaminated with sewage. Not long ago the Metropolitan Sewage Commission of New York and the Merchants' Association made an ex-

haustive investigation of waters and oyster-beds surrounding New York, and reported the harbor to be one vast cesspool, foul with disease germs and undissolved sewage matter. Two million oysters are taken annually from these waters. These and other investigations about New York, Boston, and elsewhere have resulted in considerable improvements, but still the conditions are far from what they should be, and there are good grounds for the fear and suspicion that have come over the public regard for the once-beloved *Ostrea virginica*. It will require a revolution in the methods of cultivation to restore this good reputation. Then nearly all the oyster-beds contain a great many sick oysters,—yellow and flabby mollusks,—the result of a pest called the water weevil, which gets at the oysters when they are maturing, and so poisons and cripples them that they never regain their normal condition. A very careful system of assorting must be observed to prevent these from entering the markets.

"But one of the most serious causes of pollution is the practise of taking the oysters from the salt-water beds up into fresh-water creeks and rivers, to 'freshen' them. In the trade this is called 'drinking' or 'fattening.' It causes the oyster to swell up and whiten and to look far more tempting than before. But this swelling is a sickly bloat, and the whitening is the pallor of disease poison."



Humane Conference

THE First American International Humane Conference was held in Washington, D. C., October 10-15, under the auspices of the American Humane Association. The first three days were devoted to child protection, the last three to animal protection. In some places one society conducts both branches of humane work, but in many places the work of animal protection and child protection are carried on by different societies. The American Humane Association is a federation of the various American humane societies, whether for animal protection or for child protection. It was proposed at this conference to establish an international humane federation.

In connection with the conference, which was held in the new building of the National Museum, there was a humane exhibit, furnished largely by the societies of this country and Europe, said to be the most complete humane exhibit ever assembled in this country.



Humaneness and Health

WHAT excuse for giving so much space to the humane movement in a journal devoted to the problem of health? The warrant, if there were no other, is found in Isa. 58:7, 8: "deal thy bread to the hungry, . . . bring the poor that are cast out to thy house; when thou seest the naked, . . . cover him; and . . . hide not thyself from thine own flesh. Then shall . . . thine health spring forth speedily." If for no worthier motive, a selfish or egoistic motive would suggest kind-

ness as one of the best prescriptions for good health.

Again, kindness is doubly blessed. As Portia said of mercy, it blesses the giver and the receiver; for the emotion created both by the reception and by the doing of a kind act is health-giving in its effect.

Furthermore, after all, health is but the means to an end, and that end is kindness.



The Moving-Picture Show

THIS institution has come to stay. It has large capital behind it, and it ministers to the wants of the many in a way not so well done by any other means. At the recent humane conference, Mr. Thomas H. Agnew, superintendent Louisiana Society for the Prevention of Cruelty to Children, read a paper on "Moving Pictures and the Child," in which, after expressing his belief that the moving pictures are in many ways a benefit, educationally and in the matter of diversion and in keeping children from more questionable places, he called attention to the abuses of the moving-picture business.

He said the physical conditions were far from the ideal; there were nearly always poor fire protection, little or no ventilation, opportunity in the darkness for grave sexual departures, and even for the work of the procurer; then there was the constant temptation on the part of the children to get the necessary nickel by begging or stealing. Speaking in criticism of the character of the shows them-

selves, he said that they persistently exploited the cheapest type of melodrama, domestic infidelity, and the like, "which will make the child familiar with vices he should be taught to loathe." Another bad feature mentioned by him was the showing of questionable advertisements between acts—such advertisements as have been banished from respectable newspapers.

In the discussion which followed, one woman arose and asked whether any one had ever attended a moving-picture show that did not have at least one feature that children ought never to be permitted to see. She had herself attended several in order to see what they are like, and stated that there was not one in which she did not see at least one thing that would be pernicious in its influence on the children. And, personally, the editor thinks she is about right.

There is a censorship in New York which passes on nearly all moving-picture films, and it is their aim to keep out the worst class of films, and to encourage the production of educational films; but their standard, it seems to me, admits many films that I would not want my child to see.

Mrs. D. R. McConnell, of Queensland, expressed surprise that there should be so many questionable moving-picture films, and stated that in Australia the films are nearly all educational in their nature.

There are many films made in this country of an educational nature, of so high a grade that the most fastidious could find no fault with them. Some of these are exhibited by every show. Why could not some shows make a specialty of confining themselves to this better grade of films for those who do not want their children to see the more questionable pictures? Possibly there is not enough demand for this kind of show; if the touch of crime and domestic infi-

delity and the like were not included, the shows would be deserted. And then the showman would be up against the problem of varying standards, and perhaps in his attempt to please the fastidious he would not succeed in satisfying anybody. We would like to see the experiment tried, at any rate.

✽

The Soft Pedal WHEN Mr. Tong on our Own Sins Kaison's paper had been read, showing how China, as the result of the earnest work of Mrs. Archibald Little and others, was rapidly abolishing the pernicious custom of foot binding, a man who must have had a keen sense of the humor of the situation, expressed the wish that the American women might be benefited by the news of this reform in China.

Each nationality is likely to touch the soft pedal when discussing its own shortcomings; and the woman with a tightly corseted daughter is likely to glory in the fact that the daughters of China are being emancipated. We pat China on the back for its partly successful efforts in ridding itself of the opium curse forced on it at the point of the bayonet, and overlook the fact demonstrated in the increased sale of liquors, that we are not nearly so successful in ridding ourselves of the liquor curse.

Another incident in the conference is in point. Much praise was rendered the gentlemen from the Spanish-American republics who have been bravely opposing the bull-fight as cruel and barbarous. It seemed to me I detected a wince on the face of the chairman when one of the speakers (Mr. Juarez, if I remember) incidentally mentioned our own national prize-fight, which, though it does not take an unfair advantage of a helpless creature, can not but teach the younger generation that brutality which this society is established to eliminate. Shall we do a little more cleaning of our own

dooryard? While we are viewing with horror the bull-fight of the Spanish countries, let us not forget the prize-fight and that modification of football which gives brutes, under the name of athletics, the opportunity to maim an opponent for life.

❖

Race Prejudice or Race Instinct? SIR HENRY JOHNSON, a man well qualified to speak concerning the African race, believes, as a result of his long-continued studies in Africa, that there is no reason why the African can not take a just place in the growth of civilization. He believes that such educating influences as that conducted by Dr. Booker Washington might eventually raise the black man to a position of practical equality with the whites, but for one thing, *race prejudice*, such as was manifested by the howl of protest when Roosevelt dined with Dr. Washington. His solution of the race problem is the eradication in the white man of this race prejudice.

The London *Lancet*, in comment, says that this view will not find favor in the United States, and, further, that this trait, which Johnson calls race prejudice, is common in all Anglo-Saxon countries, and should more properly be called *race instinct*—the instinct to keep the race pure. Of this "instinct" the *Lancet* says: "Politicians and anthropologists can not blink at its strength. While it is lamented in England, it quickly appears when the Englishman crosses the water and comes in contact with the black man." Australia's legislation to secure predominance and purity of the race, the new federation of South Africa leaving the native races on the outside of the pale of the franchise, the Southern States elbowing the colored people quietly and effectively from the ballot-boxes, and the Northern States, which won the war for Negro freedom, looking coldly on, are given as examples of the

way the Anglo-Saxon meets the issue whenever he comes in contact with the black man. The writer failed to mention how the Englishman in India treats the Hindu, who belongs to the Aryan race, more nearly related to the Europeans.

The *Lancet* finds the Spanish and Portuguese have a less strong race instinct, and in consequence their virile blood has been lost by dilution with the native races, while the race instinct has preserved the Anglo-Saxon among alien races.

There seems to be a conflict between the growing sense of justice and brotherhood, and what the *Lancet* calls "race instinct." In countries like England, where the population is not immediately in contrast with the problem, the feeling of brotherhood predominates, but where the two races come together, the sense of brotherhood becomes a vanishing quantity in the presence of the so-called "race instinct," which causes a person who has no objection to fondling a black dog, to recoil from sitting next to a "colored" person, even if the person is seven eighths white and one eighth Negro.

There is no question that this so-called race instinct has existed from prehistoric times, and has been the cause of the persecutions, and slaveries, and exterminations which have darkened man's history.

❖

Poisoning from Snake Bite Is snake bite as poisonous as commonly supposed? Not if we may believe Dr. Prentiss Willson, of Washington, D. C., who gives it as his opinion, based on observation and the study of statistics, that the smaller rattlesnakes and the copperheads inflict wounds that are often not serious.

Of ninety-nine cases of bite by copper-head snakes in which there were five deaths, he believes only one of the deaths

was due to the snake poison as such. In one case, the infection of the wound, which was unskillfully treated, and in three cases, alcoholic intoxication, contributed very materially to the result.

According to Dr. Willson the ideal treatment for bite of a small snake like the copperhead is a series of ligations between the wound and the heart, tight enough to impede the lymph and blood flowing back toward the heart, but not tight enough to stop pulsation below the ligation.

The best treatment of the wound is an antiseptic dressing, which will keep out dirt and foreign matter. If a young child has been bitten, or if it is a large snake, it is better to open the wound at once and apply potassium permanganate with aseptic precautions. But if some time has elapsed since the bite, such a procedure would probably be useless, as the poison would already be distributed through the system, and would only increase the depression of the patient.

As an antidote for the poison which has been absorbed, he recommends strychnin and caffeine, which, of course, should not be given except by advice of a physician. But one might give strong coffee. The patient should be kept in a recumbent position, with the head low.



**"Too Expensive
fer Me"** THE *Edinburgh Medical Journal* makes favorable comment on the report of the Carnegie Foundation on Medical Education in America, which, it says, "deals most faithfully with each and all of the schools in the States and Canada, criticizing some of them with a candor which we may admire and envy, but which, with the law of libel as it is in our country, we can never imitate. We dare not quote all the names, but we add one or two examples." It then quotes some of the

descriptions, omitting the names of the schools.

This incident reminds one of the story told of the religious factions in Ireland. There had been so much fighting over religious disputes that it became necessary to pass a law that any one saying anything derogatory of either the Protestant or the Catholic religions should be fined, half the fine going to the informant. One day a patriotic son of the Emerald Isle was going down the street, well primed with Irish whisky, and indulging in the expression, "To h— with . . . !" "To h— with . . . !" A policeman hearing him, and with visions of a fat fee, said, "To h— with who?" Pat did not have enough aboard to take away all his caution, and he replied: "Finish it yerself, yer honor. It's too xpensive fer me."



**Preservatives
in England**

THE list of powders sold for preservatives in England is said to be appalling. On one of these powders is this astonishing language, "The required amount varies according to the class or article, a superior article requiring less than an inferior article," which means, in other words, that *if the article is decomposed or spoiled, use more preservative!* Most certainly the English need a law regulating preservatives as well as we. According to the *Lancet*: "The variety of foods so treated is so wide that it is possible that the consumer may be confronted with chemicals at every single meal of the day. He may have borax for breakfast, benzoates for lunch, and salicylic acid for dinner. In the matter of the use of preservatives in food there is something wrong with every branch of our public health administration." So it is evident that England as well as the United States suffers from the abomination of embalmed foods.

HEALTHFUL COOKERY

Dr. Lauretta Kress



MAN lives by the introduction of food into his system. Sooner or later his physical condition will show whether this food is of the right quality or quantity. Disease results if this food is improper in quantity or poor in quality, or if it is poorly prepared for assimilation.

The cook plays a very important part in the home, as she prepares the food that goes to nourish the inmates. A good cook is one who, having studied the more important principles of right living and of food combinations, can, with care and thought, apply them with benefit to all the family. But how often the work of preparing the food is left to one who is illiterate, untidy, and careless, and who works only for a wage, not for the upbuilding of right living.

Cookery is not only a science, it is one of the fine arts; but it has been seriously neglected by the women of recent years. There are few who can make good, wholesome bread. The aim usually seems to be to arrange some concoction to appeal to a perverted appetite, without any consideration of its digestive qualities. The average woman does not make any serious attempt to develop the art of cooking. To study how many food units will be needed in the building process of the human body or what particular elements are necessary for certain cases, is to her like a lesson in Greek or Latin.

Imperfect knowledge of cooking leads to diseases of every kind. Children and adults suffer the results of bad cookery. There should be schools in every city where the most wholesome ways of preparing foods for sick and well could be learned. If more time and study were spent on this great subject, there would be less need for the doctor, and there would be fewer mounds in the cemetery; but at present the cooks too often play

into the hands of the physicians and patent-medicine venders, and the undertakers.

Our palates need education to eat that which is good. Our cooks need education in making foods that nourish. Many of the strongest animals find their sustenance in the plant kingdom. Why should we not find enough in the grains, fruits, vegetables, and nuts to build a strong body structure?

There are a few points which must be considered. The food must be palatable as well as digestible. A soup, a salad, a sandwich, or any other prepared food should be made with this in view. There are flavors which each food contains that should be retained. Often in the cooking they are lost because of failure to know how to prepare it. For instance, the potato, when boiled, is put to cook in so much water that when it is done it has a large amount of water still left to be thrown away. This has extracted from the vegetable in the boiling process much of the salt which makes the potato tasty, and which is needed in the body; and when this water is thrown down the sink, the cook must do something to make this article palatable, so a large amount of salt is added, and some butter and pepper to make up for the absent elements which went down the sink. The same is true also of beans, peas, and lentils. They are usually cooked in water until partly done; this water is thrown away, and other water is added. In this first water much of the phosphates of the peas or beans is extracted, for as the water becomes warm enough to crack the skins and loosen up the starches, the phosphates are dissolved into the water. When these important nutrients are thrown away, the food is tasteless unless something is added to bring up its flavor. So salt, pepper, and fats are again added

in the endeavor to make palatable dishes. If the important natural salts of the food were conserved in the cooking, there would not be this need of adding artificial flavors. When peas, beans, or lentils are put to cook in cool water, without soaking, and a little vegetable oil (cottonseed or olive oil) is added, allowing it to cook with these legumes, this broth drained from them when done will have a "meaty" taste, because all the phosphates are there; nothing is lost. This will make a stock for various soups—quite equal in flavor to meat soup. To this broth of peas or beans or both cooked together various vegetables can be added, and we have a vegetable soup. The recipe is given below:—

Vegetable Soup

1 pint yellow split peas
 1 cup Lima beans
 $\frac{1}{2}$ cup salad oil
 1 small onion
 1 small carrot
 2 sticks celery
 1 ear corn
 1 small turnip
 2 medium-sized potatoes
 Parsley
 1 medium-sized tomato

Put the beans and peas to cook together, with salad oil; cook slowly until done. There should be a good supply of fluid on the mixture when done. Drain this off, add salt and vegetables chopped fine, cook all together until done, and lastly, add parsley, chopped fine. Serve hot.

This same kind of broth could be used in making a noodle soup.

Noodle Soup

3 yolks eggs
 1 teaspoonful water
 2 tablespoonfuls nuttolene
 1 quart bean broth
 Salt
 1 cup of strained tomatoes

Put the yolks of three eggs into a basin. Add one teaspoonful of cold water and a little salt. Stir in flour enough to make a stiff dough. Put the dough on the kneading-board and knead in as much flour as it will take. Roll out very thin. Dry a little, then roll up in a roll, cut into very

thin strips. Shake them out to dry a little more, then drop into the boiling water broth. Prepare the broth by cooking one pint of Lima beans with one tablespoonful of salad oil or olive oil until well done. Drain off the broth. Add one cup strained stewed tomatoes. To this add the noodles. Cook rapidly in the broth until the noodles are well done. If any flavoring is desired, as onion, celery, etc., it should be added to the broth before the noodles are put in. Just before serving, add two tablespoonfuls of nuttolene, if desired, chopped fine, or cut into small dice.

It can also be used in making a gravy.

Take vegetable broth from any vegetable that may be cooking—peas, beans, potatoes, etc., a mixture of all these broths is very nice. Add salt, and thicken with flour that has been browned in the oven to a rich brown color. A little celery or onion can be added if desired, or a little strained tomato.

Or it may be used in making a toast for breakfast.

Minced Scallop on Toast

Mince one-half pound of nuttose and put it on to simmer in three cups of bean broth for three quarters of an hour. Add a little sage, parsley, and salt; just before serving, chop the yolks of two hard-boiled eggs into the mixture. Serve hot on small squares of zwieback.

Healthful cookery, then, requires enough study to know the various wants of the human body and the elements in foods that will supply them. Then the food should be combined as tastily as possible to bring out all the flavors of the food itself, with the addition of the smallest amount of seasoning, so that the natural flavors can be noticed.

When a food is prepared for the table that tastes so strong of onion that one in eating it can taste nothing else at all, it is poorly prepared, or *bad cookery*. Any flavor, as onion, sage, bay-leaves, thyme, etc., should be added in such small quantities that it gives a pleasant taste to the food, but so that those eating it can hardly detect the extract flavor.

GIVE THE BABY A CHANCE

Mrs. Frank Jessie Otis, M. D.



DO you really believe that is true?"

"I most certainly do; and what is more, it can easily be proved to you."

"The other doctor never said so much about it. In fact, he never asked about it."

"But, dear Mrs. Osgood, when you saw him before, didn't you tell him you were living in a tent with Harold?"

"Yes, but you know Harold is so restless, and now he is not happy unless he is busy with his toys, and he has so many of them. We can not get away to go South until in February, and of course it is not possible for us to have the baby outdoors in this northern winter climate."

"Why not?"

"Well, doctor, how can we do it?"

"Do it! My dear, you have solved more than one difficult problem in your thirty years of mothering. Just make it his business to spend ten or twelve hours each day outdoors; your business is to see that he is properly protected for this work, and that it is *THE business* of some trusty strong youth to stay with him every moment, riding him on sled or go-cart, taking him to watch the skaters, the men harvesting ice, the jolly coasters, or just enjoying all the wonderful and interesting things to be seen in God's great outdoors. See that this caretaker has warm underclothes, rubber boots, warm gloves, and is sensibly clad in every way. On extreme days, put heated bricks, irons, or hot-water bottles to the little one's feet. Don't for a moment think it impossible to live outdoors days—and nights too for that matter—in this glorious northern win-

ter. Why Mrs. Osgood, our first baby was kept out this way until the neighbors complained to the humane society. Indeed, they did! The society's officials paid no attention to the first complaint, merely saying that in their opinion no one in the neighborhood reported would treat a child cruelly, or in any way neglect it. After the third complaint an officer was sent out. It was on a bleak, sleety, windy, snowy, just plain *cold* day in December. The baby was outdoors soundly sleeping in his cab. (Just here let me say that if you are buying a baby's buggy for service in all weathers, don't get one with an umbrella top, but rather invest in one with a carriage top which may be adjusted and have a hood attached.) The officer came up, sheepishly, just after the maid had stepped into the house for something, slipped his hand inside the cab next to baby's body, and cautiously felt his way down to the little one's feet. There he found a most comfortable hot-water bottle, and saw Bill protected by two blankets and the carriage top. Satisfied, he quickly readjusted the cover, passed on to the complaining neighbor with the remark, 'I guess that baby is as well cared for as any baby in Chicago,' and continued his more serious rounds of humanely caring for horses and dogs and people and babies and things. Well, Mrs. Osgood, you need not be surprised when I tell you that within eighteen months a member of this complaining family died of tuberculosis, and I felt like saying, 'Poor thing! If we had only put the humane officials on your track, the results might have been happier and more successful for you.' By the way, Bill's caretaker (Yes! Bill is our boy's

name), who had been compelled to leave school because of physical inability, grew strong and fat and developed rosy cheeks and as happy a disposition as babe himself in this daily outdoor world. Yes, it cost us something, but our boy is a model of physical well-being now, and as he expresses it, 'sleeps as warm as a chicken' in the cold air of his sleeping quarters, although he is not humored with any form of artificial heat, just well protected under and above. His idea of how warm a chicken keeps was gained by watching the mother hen brooding her little ones at his grandma's country place."

"How happy you must be in your healthy family!"

"They are frightfully noisy sometimes, and there are buttons to sew on and holes to patch and darn at both ends of their stockings, and troubles to smooth over, but there is never a complaint when it comes time to go 'out-the-doors,' for which I am truly thankful. We try to live simply, so that much time is saved from household tasks to keep them out."

Dear readers, all this conversation really occurred, and it was about a real little boy who for two long years must live with his body, as active and freedom-loving as your boy's, encased in a cast to keep the little back from being humped because destructive tubercle bacilli have fastened themselves upon the bodies of some of the vertebræ in

that little spine. The only known cure is to be found in the increased vitality which comes from living outdoors. Don't ask me to take space to prove this to you, but know that what cures this condition will prevent it. That is why I write. Since becoming acquainted with this dear little sufferer, my mind is not at rest until I say something to encourage the average mother to make it possible for all her little ones, from the infant up, to spend hours and hours out-of-doors.

Winter is the brooding time for tuberculosis; the deaths come in spring and summer. Don't let it develop in your home. Set about to prevent it in a thoroughly systematic way, and know you are combating an enemy as real as the mine's fatal damp, although not more visible to the unaided eye. Do not wait until the enemy has weakened your loved ones. One wintering indoors with a consumptive in the family destroys ten families in the Dakotas to one in Tennessee because of the more open winter in Tennessee. Yet nowhere is this disease more successfully treated than in our northern climates.

Don't you believe for a minute your invalids *must* stay indoors. Their life depends on getting them outdoors. You can do it! You must do it!!

Prevention, dear one, is far more valuable than cure,—a pound to an ounce, sixteen to one, and every unit pure gold.



HINTS ON BABY'S CARE

A. P. Reed, M. D.



CRYING to a certain extent is physiological, and hence normal to the infant, and one that never cries is really in more danger than one that cries somewhat excessively. The overindulgent mother may undoubtedly give her baby the cry habit, from feeding, rocking, and coddling it for every little fret—a habit hard to overcome. Persistent, constant crying, however, probably means something that demands investigation, since, if there is not a poignant pin at the bottom of it, there may be something worse, in the way of an earache, colic, or some acute malady about to set in.

It has been well said that during the first year "an infant should be neither amusing nor amused." The temptation to make a plaything of the infant is so great that, through overhandling and fondling, its vitality is in danger of being overtaxed, while it gets insufficient rest, and sometimes permanent trouble is caused thereby.

Especially should all unusual, unnatural positions and antics be avoided, as a menace to the health of the infant. Nothing should interfere with its repose, of which it needs a generous supply.

The temptation to have baby sit up in the lap too soon, if indulged, may lead to spinal curvature. The horizontal position is safest during the first four or five months of life.

Promiscuous kissing is to be deprecated, as not only wearisome, but as an active means for germ dissemination.

Simplicity and comfort is the motto for common-sense clothing during infancy, as, indeed, it is for any period of

life. This implies avoidance of undue pressure at any point, and of irritation from any source, with no superfluity in the weight of the clothing,—just enough weight to insure warmth and protection.

Weakly infants are much strengthened by salt baths, which may be of the strength of, say a tablespoonful of salt to a gallon of water. These baths may be followed by a massage to the body, given gently with olive oil or cottonseed oil, wiping off the excess left on the skin when through.

Do not forget that the baby needs water just as much as does its mama, also air just as good as there is out-of-doors, avoiding, of course, violent winds or drafts and rank exposure to King Sol's rays. When babies are taken out in their carriages, they should be wheeled on quiet streets, and in places as free from dust and bad odors as possible; hence this precludes the taking of them when one goes shopping or on business.

The baby should not be expected to eat a large variety of food when its teeth are appearing one after another. Its bill of fare should not include an excess of starch and sweets. If care is taken in this respect, and baby is given fresh air and good hygienic conditions of life, I feel sure the second or teething summer will be shorn of much of its old-time terror, and that the mother will come to see that teething, as well as worms, has been made to cover evils really caused by other things.

Remember that every child walks pigeon-toed to begin with, and do not think it has missed a family characteristic of toeing out, or that it is deformed in any way.

SUNSHINE AND FRESH AIR

John N. Quinn



ACCORDING to the United States census of 1900 tuberculosis and pneumonia were the causes of some three hundred thousand deaths out of 1,039,094. Sunshine, fresh air, nourishing food, and moderate exercise are the enemies of these two dread diseases. When we exclude the sunlight from our homes, how quickly they become musty, moldy, stale; how soon the flowers lose their cheery colors, and their leaves wither and die! So also with our bodies. If we shut ourselves away from the life-giving rays of the sun, we become anemic and weak, and life becomes a burden. Our step loses its buoyancy, our cheeks their color, our face its smile; out of our heart goes the joy of living; our tongue withholds the words of cheery greeting, and instead, words that are crabbed, sour, and disagreeable leave our lips.

The sunny side of the street may at times be uncomfortable, but there is vitalizing power in God's sunlight. A good habit to form is the habit of seeking the sunshine. By so doing our bodies will become stronger, heat and cold will have for us but little terror, and we will always be ready joyfully to respond to whatever service we may be called upon to render to God or to our fellow men. Therefore, let not a little but an abundance of sunshine into our homes, even if we do have to sacrifice window shades and lace curtains and other accessories of modern civilization.

The very abundance of the air with which God has provided us, suggests its necessity in the maintenance of health. A few facts may help to emphasize the importance of using this gift from God more abundantly than we do:—

It is estimated there are seven hundred twenty-five million air-cells in the lungs, which expose not less than one thousand four hundred square feet of surface to

the air taken in during one respiration.

The lungs absorb from fifteen to thirty-five per cent of oxygen, which purifies and vitalizes the blood.

The weight of oxygen absorbed by the lungs is about sixteen thousand grains every twenty-four hours, or about twice the weight of the solid food taken into the stomach.

All the blood passes through the body every forty to fifty heart-beats. Should we compel the blood to pass through the lungs three or four times without permitting it to come in contact with fresh air, death would result.

We breathe from forty to sixty per cent more air when expanding and contracting the chest, therefore another good habit to form is that of deep breathing.

We can go without food for weeks and without water for days, but let one hold the breath even a fraction of a minute, and distress will follow.

As we look into the pale, wan face of the consumptive, who is slowly dying, we can see the dreadful effect of oxygen starvation.

Deep breathing, Indian club swinging, and slow running, are excellent methods to be employed for the increase of the action of the diaphragm.

When one breathes correctly and fully, the black, venous blood, foul with the ashes of burned-up brain-cells and debris of worn-out tissues, is transformed by the lungs at every breath into pure, bright, red blood. Therefore breathe, breathe deeply, and keep on breathing if you wish to know the joy of pure physical life.

Do you have that tired feeling? are you troubled with the "blues"? then go out into God's great ocean of air and breathe it in to your lung capacity. In a short time the poisons will be eliminated, and you become joyous and light-hearted.

Breathe, *breathe*, BREATHE. *

THE MEDICAL MISSIONARY AT WORK



EXPERIENCES IN THE JUNGLES OF INDIA

Louisa M. Scholz

QUR last month's report of labor at the dispensary was one of the best during the time I have been engaged in this work, not because of the great number of patients or the financial income, but because of the experiences we had in seeing God's healing power in direct answer to prayer.

Miss Burroway says that during her five years of labor in Karmatar there has never been such a busy time during the hot season, except when there has been an epidemic. We made from two to four visits every day. Many times we were out at noon in the heat, and sometimes were out all night. We traveled an average of eighteen miles a day, besides attending to our work in the dispensary. During the month we had 392 patients, gave 1,472 treatments, and made ninety-one visits. Many of the visits were made out into the jungles. One day we were called to a confinement case five miles from our bungalow. We always know when such calls come that the native midwives have tried their utmost and the patient's life is in danger. We reached the village about eleven o'clock in the morning, and found the woman in a very bad condition. The child had been dead for several hours. We did all in our

power for four hours to relieve the poor woman, but without result. The people around said, Let her die. Miss Burroway told them that God could help her, and again we asked the Lord in prayer to help us if it could glorify his name. A few minutes later the child was born, and we praised the Lord. But the people fell down to worship me. I tried to explain to them that it was not I, but God who worked through me. They said: "Yes, but you are our God. We can not see God, and you did it." After the woman recovered, while the hearts of the villagers were yet tender, Miss Burroway returned and gave a stereopticon lecture illustrating the life of Christ.

In another case the child was born, but the woman's eyes were almost set when we reached her; and her body was covered with cold perspiration. We could not feel her pulse, and the heart's action was very weak. All our efforts seemed to be in vain. We called the husband, and told him the dangerous condition of his wife, and that only God could save her life. Again we prayed. After the prayer there was a strong pulse, so that I could try to relieve the woman. We knew that God had answered our prayer, and trusting in him, I kept on working. The result was



A HIGH-CASTE BRAHMAN
GIRL

remarkable. Nine days after, the woman was up walking about and enjoying life.

Another instance was in the case of a young man eighteen or twenty years of age, who was seriously ill with typhoid fever. Two doctors had given him up, when they called me in. The doctor and relatives wanted to know what I would do for him. I told them I would put away all drugs and use hydrotherapy. The doctor was unfavorable to this. Two days later they asked me to come and see the young man again, and wanted me to take the case. I did not feel clear in the matter, as it meant assuming a great responsibility, but the people pleaded so hard that I could not refuse.

There was but little hope. It was the third week of his illness. I decided to take the case for two days, and during that time ask God to make it very clear to me what I should do. I only wanted God's name to be glorified. The patient seemed to get on so nicely under the hot and cold applications that I felt impressed to go on.

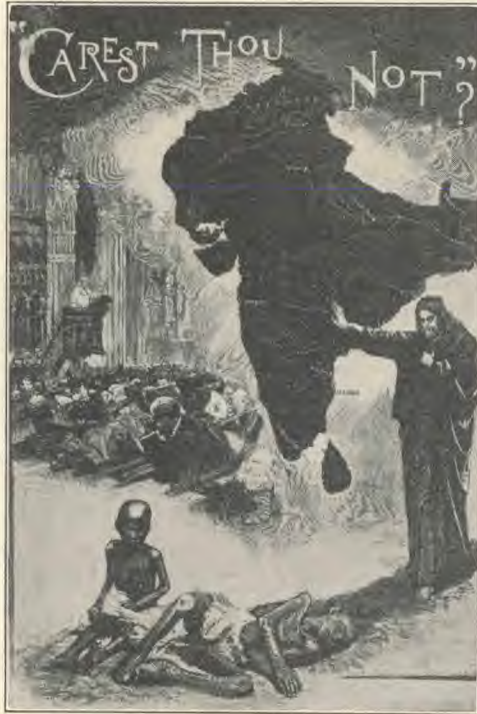
His father and brother-in-law, both

well-educated Hindu men who could talk some English, came at this time to stay with him. I taught them how to give packs, sponges, fomentations, etc., and it made my heart rejoice to see those two men give the treatments. They kept every little detail, the record of the temperature, etc., just as nurses do.

One day the young man's condition was very critical, and I did not feel like

taking the responsibility any longer. But the father said, "We do whatever you tell us, and we know that you do all you can, and he is in God's hands." Miss Burroway and I had prayer at his bedside in this Hindu house, and when we arose, the father's eyes were filled with tears. The young man is now recovering, healed by the power of God, for which we all thank and praise the Lord.

We do not take credit to ourselves for these wonderful results. We know that it was the Lord who did the work. We have his promises to-day, and they are sure if we have faith enough to believe. May God help us to get into closer connection with him, that he can give us more faith.



FOUND IT IN THE BIBLE

DR. R. H. HABENICHT, of Argentina, South America, relates the following experience, concerning an Italian, a Roman Catholic, who came to see him. This man was very ill, and the doctor was obliged to tell him and his wife that he could not live more than ten days at the most; and within that time he died. Not long afterward, the wife was also taken ill, and came to the doctor for treatment, remaining for several weeks in his home. Their family worship every morning was something quite novel to her, as she had never seen anything like it before. She attended worship every morning, and also accompanied them to the Sabbath services, all of which she liked very much, and expressed her appreciation of what she saw. Her interest increased until the time she left.

When leaving, she requested her son, who had come for her, to buy her an Italian Bible, as she would like to read more concerning this religion; but the son said, "No, you do not want one of

these Bibles; these are Protestant Bibles, and are different from our religion," and refused to buy her the Bible. Seeing the great desire she had to possess a Bible, Dr. Habenicht made her a present of an Italian Bible.

After a few weeks had passed, the son returned to the doctor, asking if he could get one of those books in Spanish like the one he had given his mother. He said that as his mother could not read very well, he had been reading the book to her, and in consequence had become so much interested himself that he would like to get one in Spanish, as he understood the Spanish better than the Italian. The doctor was able to furnish him with a Bible in Spanish, and when the young man paid for it, he also paid for the one that had been given to his mother. As the result of their reading, both mother and son are now keeping the Sabbath, having given their hearts fully to God. They were won to Christ by reading the Bible.



AN INCA INDIAN



Some Books

Social Service and the Art of Healing, by Richard C. Cabot, M. D., Moffat, Yard & Co., New York, \$1.

Dr. Cabot exemplifies three forms of team work tending to ennoble the practise of medicine: the doctor and the social worker; the doctor and the minister; the doctor and the patient.

His analysis of social service is excellent, and his definition, "The study of character under adversity and of the influences that mold it for good and ill," is apt.

He draws an analogy from medicine in which many sciences cluster around two activities,—the diagnosis of disease and the treatment of disease. So the social worker diagnoses the sociological disease (psychical diagnosis, he calls it) and applies the proper treatment.

Dr. Cabot shows how the physician and the social worker and the educator may work together for the betterment of the unfortunate. The interrelation of physical and mental causes are so skilfully pictured throughout the book that physician or social worker or educator or layman might well profit by it. The doctor suggests as a result of his study some fundamental changes in the medical profession, in social work, and in teaching, both medical teaching and non-medical.

Doctors have looked askance at Dr. Cabot because they have supposed that he was making a compromise of his profession with mental healing, in this way perhaps taking dollars and cents from the profession; but he has tried to ennoble the profession and to make it more altruistic, more generally helpful to humanity, and in doing this, he has broken down some of the old artificial professional lines that to the outsider seem to spell trades-unionism.

He has had a vision of medicine, not as a commercial venture, not primarily as a learned profession with a lot of dignity attached, but as a profession of service united with other allied professions to better the condition of the unfortunate.

Not the least valuable section of the doctor's book is the one concerning team work between physician and patient, in which he relates experiences showing that a doctor can tell the truth to the patient and yet not injure the patient by so doing. Many physicians believe this to be impossible.

The Conquest of Consumption, by Dr. Woods Hutchinson; cloth, 138 pages, \$1 net; Houghton, Mifflin Co., Boston, Mass.

A hopeful book, written in the inimitable Woods Hutchinson style, by one who has for a number of years been prominent in the antituberculosis fight. Other writers have said the same things, but not in the same way.

Dr. Hutchinson has always had an antipathy against faddists, possibly because he is one himself. Level-headed in most of his suggestions, he seems to lose his bearings when he thinks a poor man with tuberculosis must have certified milk. And there are a few other things that one may put down with a shrug of the shoulders as "Hutchinsonese;" but on the whole, the book is accurate in its information, practical in its directions, and should prove valuable to victims of tuberculosis and to tuberculosis workers.

Important chapters, giving an idea of the scope of the book, are: Fresh Air and How to Get It; Food the Greatest Foe of Consumption; Sunlight the Real Golden Touch; Work, Rest, and Intelligent Idleness; Climate and Health; Open-Air Treatment.

A Manual of Personal Hygiene: Proper Living Upon a Physiologic Basis, by eminent specialists; edited by Walter L. Pyle, M. D., assistant surgeon to the Wills Eye Hospital, Philadelphia. Fourth revised edition; 12mo, of 472 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1910. Cloth, \$1.50 net.

To this excellent manual of personal hygiene a chapter has been added on posture, and a number of additions have been made to the chapter on domestic hygiene, bringing the whole up to date. The information in the appendixes on the rational treatment of disease (by baths, massage, etc.), on accidents and emergencies, bandaging, treatment of poisoning, etc., in addition to the instruction in the body of the book on personal and domestic hygiene, the prevention of infectious diseases, etc., make this an excellent book of reference for any home.

The Science of Being Well, by Wallace D. Wattles; Elizabeth Towne, publisher, Holyoke, Mass.

Were it not for a signed return postal signifying our willingness to review this book, a glance at the first few pages would complete our acquaintance with it.

To those who are looking for some system of mystic healing, for something that classes the results of the accumulated investigations of generations as unscientific and speaks of the author's vaporings as scientific, or for something that comes as near as possible in some respects to Christian Science without being the real article; to those who want to turn away from clearly observed facts to misty theories,—to those who are looking for any of these, we recommend this book.

* * *

OUTDOOR BOOKS

Greek Athletic Sports and Festivals, E. Norman Gardiner, M. A., 533 pages, cloth, \$2.50 net, \$2.66 by mail, the Macmillan Company, New York.

Those who appreciate the value of physical exercise in the development of both mind and body can not fail to be interested in the athletic history of a nation which, largely as a result of its athletic contests, succeeded in leaving to future generations models of physical development which have scarcely been surpassed.

Professor Gardiner's work, though it is devoted to archeology and based largely on the results of excavations at Olympia and elsewhere, is of interest not only to the archeologist and the student of classic art, but to the physical culturist as well, and to every one who has an interest in the physical development of the race.

The first part of the work is a history of Greek athletics from the time of Homer to 393 A. D. The second part is a careful description of the athletics of the Greeks. The book is copiously illustrated.

* * *

How to Keep Hens for Profit, by C. S. Valentine, 298 pages, \$1.50 net, by mail, \$1.64, the Macmillan Company, New York.

Astounding as it may appear, we are creditably informed that the poultry crop is equal to the hay, the wheat, or the cotton crop, the corn crop only exceeding it in value. The great American hen is one of our most important sources of wealth, and her chief value lies in the fact that she is the poor man's or the poor woman's friend. A large investment is not necessary, neither is a large piece of land requisite. The city back yard (barring nerv-

At nearly every paragraph we were tempted to write a comment, but what's the use? If any one is interested in this kind of literature, he can look it up himself. Here is a sample:—

"There is One Substance, and I am that Substance.

"That Substance is eternal, and it is Life; I am that Substance, and I am Eternal Life.

"That Substance knows no disease; I am that Substance, and I am Health!"

With this New Thought is combined a little of Deweyism, and a little of Fletcherism, and a little of several other isms, so it ought to be a perfect "system."

ous neighbors and pestering laws) may furnish the family of moderate income with all the fresh eggs it needs, at much less than the store prices for eggs of uncertain age.

"How to Keep Hens for Profit" describes the most satisfactory and most profitable breeds, and explains carefully for the novice the details of successful poultry raising.

Mr. Valentine leans toward pure fancy stock; and there is no question that for the fancier, or the one who can give time to the care of poultry, there is most profit in the best strains; but for the farmer's wife, or the family with a small back lot, it is often sufficient that they are "just chickens;" and after all, for home consumption, a mongrel race, with a little intelligent care, will furnish as many eggs during a season as a purer race without such care.

* * *

How to Keep Bees for Profit, D. Everett Lyon, Ph. D., cloth, 329 pages, \$1.50 net, by mail, \$1.64, the Macmillan Company, New York.

The author is so careful in the matter of details that the novice need not go amiss; and there is no reason why many who now remain indoors a large part of the time because they have no sufficient incentive to remain outside, should not take up bee-keeping, at least as a "side line." This book, which is well illustrated by photo-engravings, gives in a simple but comprehensive way the information necessary to success in bee-keeping. A practical application of the teachings of this book should make for profit by establishing a new interest, by improving the health, and by adding to the income.

BOOKS ON AVOIDED SUBJECTS

Never Told Tales, by Wm. J. Robinson, M. D., third edition; cloth, 155 pages, \$1, post-paid. The Altrurians, publishers, New York.

This book contains such stories as are familiar to every physician with a large family practise, but are never related—stories of the wretched results of the social evil and of wrong sexual relations. As Dr. Robinson says, "No one is so familiar with the misery, the tragedies, the barren and wasted lives, the premature graves, the suicides, the neurasthenic sufferings, etc., caused by sexual ignorance, as is the observing and sympathetic physician." And as a rule no physician has the courage to tell what he knows.

Dr. Robinson has had the literary instinct, if I may so call it, to give at the end of the book two chapters having a brighter outlook than the others.

If these "never-told tales" were put into the hands of every man and woman about to marry, and into the hands of parents of growing-up children, much misery would be prevented; for in practically every case, there is ignorance on the part of one party or the other, and more frequently than not, both parties are ignorant of the consequences of their acts.

New Testament Alphabet in Rhyme for Little Folks, James Pott & Co., New York, \$1.00.

As a work of art this little book is worthy of attention. It contains a rhyme and a full-page illustration for each letter of the alphabet. The pictures are frequently reproductions of noted masterpieces. The printing is of the finest, on heavy enameled paper.

Hygiene and Morality, an Outline of the Medical and Social Aspects of the Venereal Diseases, by Lavina L. Dock, registered nurse, 200 pages, cloth, \$1.25 net, G. P. Putnam's Sons, New York.

This book, though prepared primarily for nurses, is an excellent volume for general distribution, on the dangers of the social evil, from the medical and sociological standpoints.

The question of the control, or the "regulation," of prostitution is ably discussed, the position of the author being decidedly against "regulation," on moral and sanitary grounds. Chapters are devoted to the white slave traffic, and to preventive principles.

In the appendixes are given examples and statistics showing the laxness of our laws for the protection of girls, and the looseness of their administration. For example, in New York City, the maximum punishment for the crime of living on the earnings of a prostitute is six months' imprisonment. The maximum fine for giving away a five-cent street-railway transfer is five hundred dollars! Who helps Tammany to make such laws?

Down Home With Jennie Allen, by Grace Donworth, 336 pages, \$1.50, Small, Maynard & Co., Boston.

A quaintly written diary, in rustic language and original spelling, recounting the visit of Jennie and her folks to their old home. Many of the incidents recounted in Jennie's own way are irrepressibly funny, but through it all there is the touch of genuine unsophisticated simplicity and whole-souled honesty.





Announcement of Articles on Hygiene and Kindred Subjects Which Appear in the Current (December) Issue of the Magazines

The Progress Magazine, Chicago, Ill.

"Exact Eating for Efficiency," T. C. O'Donnell.

The Garden Magazine—Farming, New York.

"Joys and Sorrows of a Trial Garden."
"Children's Gardens Everywhere."

Signs of the Times Monthly, Mountain View, Cal.

"Narcotics and the Gospel," D. H. Kress, M. D.

The Housekeeper, Minneapolis, Minn.

"Dosing Children With Fresh Air," Dr. Kate Lindsay.
"German Cookery To-day," Dora Bacheller.

Country Life in America, New York.

"The New Florida," A. W. Dimock.
"Snow-shoeing for Women," Edith Clark Chadwick.
"Cutting Loose From the City," Harlean James.

The Mothers' Magazine, Elgin, Ill.

"The Habit of Cheerfulness; Its Relation to Health, Efficiency, and Progress," Prof. A. L. Larkin.
"Assuring the Happiness of Children," Rose Wood-Allen Chapman.
"Saving the Eyes," Cecil Thomas.
"Happiness as a Health Promoter," Jeannette N. Phillips.
"Massage Treatment for Serious Illness," Kate Davis.

Pearson's Magazine, New York.

"Pasteurized Milk, or Clean Milk?" Commercially Pasteurized milk merely affords opportunity for bad practises. How clean milk may be obtained, and what that means to parents.

National Food Magazine, Chicago, Ill.

"Unhealthful Practises in German Life," Rutledge Rutherford.
"Food and Health Topics."
"The Great Pure Food and Domestic Science Exhibition at Madison Square Garden."

Good Housekeeping Magazine, Springfield, Mass.

"The Popular Misconception of Neuralgia," Louise Scudday.
"The Training Table," Prof. John R. Murlin, Columbia University Medical College.
"A Square Deal for the Baby," Mrs. Lucy Wood Collier.

The Designer, New York.

"Prevention and Cure of Common Colds," W. S. Sadler, M. D.
"Saving Minutes and Muscles," Evelyn Hildreth. Contains suggestions for preserving the housewife from fatigue.
"The Nurse Maid; a Menace," Mary Newell Youtz. Deals with the inculcation of foolish ideas regarding the laws of health and ethics.
"Helps Along the Way." How to keep floors warm in the absence of weather strips.





Foods Should Be Screened.—The New Orleans Medical Society has asked for an ordinance requiring the screening of all markets where food is offered for sale.

Eradication of Hookworm Disease in Louisiana.—Louisiana now has a State inspector and a commission entrusted with the work of stamping out the hookworm disease in that State.

Expel Cocain Venders.—The Philadelphia retail druggists expel from their association druggists who sell cocain illegally, and they have resolved to remove all "dope" drugs from their shelves.

A Roof Garden for Babies.—One of the New York hospitals has opened up a roof garden for feeble babies, which will be in operation twenty-four hours in the day when the weather permits. There will be music, entertainments, and the like, to make the little lives happier.

Consumption of Meat Decreasing in Austria.—Last year there was a marked decrease in the consumption of meat in Austria. Previously there had been a gradual increase from year to year. The recent decrease is said to be due to the increase in the price of other foods that the people regard as absolutely necessary.

Massachusetts Has Abolished the Public Drinking Cup.—Massachusetts has been added to the list of States making war against the public drinking cup, and has prohibited the use of such cups in schools, theaters, hotels, railway stations, and other public places, and parks and highways, also in railway cars, boats, and other public conveyances.

Infantile Spinal Paralysis.—This disease is becoming more and more a public menace. In some places it seems to be endemic, that is, it has a permanent foothold; and epidemics are constantly being reported in new places. There is a mortality of from five to twenty per cent, and of those that recover, three fourths are permanently crippled, so that it is one of our very serious diseases. The worst of it is, though it appears to be mildly communicable, and is evidently an infection, we do not as yet know just how it is transmitted. It is giving physicians much concern.

Department of Public Recreation.—The city of Columbus, Ohio, has recently established a city department of public recreation, which is given the responsibility of studying the needs of the city for public recreation, playgrounds, recreation centers, baths, and like matters.

Soda-Water Dangerous.—Of sixty-six samples of soda-water examined in Chicago, eighteen, or more than one fourth, contained lead. The investigation was undertaken on the complaint of a physician, who observed that children were often taken ill after drinking carbonated water.

Work of the Rochester Public Health Association.—This association recently planned and conducted a field-day program, at Baseball Park, which was attended by more than five thousand persons. The receipts, five thousand dollars, will be used for the benefit of the Children's Free Dispensary. The program included games, races, acrobatic feats, flag drill, folk dances, fencing drill, and music, with some good things for the inner man.

Uncle Sam Kind to His Prisoners.—At Atlanta, the tuberculous federal prisoners are given the advantage of all the expert knowledge gained in the antituberculosis fight. They live a fresh-air life in tents, they have an abundance of the most nourishing food, and are not required to work. Many of them will come out well and strong, who, under their home conditions of life, would undoubtedly have died consumptives. There are some compensations in this life.

The Antialcohol Movement in Europe.—They mean business over there. Germany has prohibited the sale of spirits to North Sea fishermen while engaged at their trade. Finland proposes to make antialcohol instruction obligatory in all schools, high and low, and all teachers must take a special course in "alcoholology." The Scottish department of education is preparing a temperance syllabus for use in the Scotch schools. The Swedish government has made an appropriation of more than five thousand dollars for alcohol investigations. The Belgian government gives free postage on all temperance papers.

History of "Malicious Animal Magnetism."—That "malicious animal magnetism," the "hoodoo" of Christian Science, originated with Mrs. Mary Baker G. Eddy, is a fact brought out in an article on the subject by Prof. Joseph Jastrow, in the October number of *Hampton's Magazine*. Professor Jastrow also shows that malicious animal magnetism, which figured in the controversy between the leaders of the Christian Science Church and Mrs. Augusta E. Stetson in the fall of 1909, is simply a modern parallel of medieval witchcraft.

Lower Death-Rate.—The death-rate in the registration cities and States of the United States dropped to fifteen per thousand of provisionally estimated population last year, according to the forthcoming United States Census Bureau's bulletin on mortality statistics for 1909. In 1908 the death-rate in the Census Bureau's registration area was 15.4 per thousand, and in the bureau's annual report for that year, issued last spring, it was stated that it is evident an era of low mortality has begun. The death-rate for 1909 is, the bulletin states, lower than that for any previous year of registration, and probably is the lowest that ever occurred in the history of the United States.

Educational Campaign Against the Hookworm.—The State of Virginia has a number of district inspectors, graduate physicians, who receive no fees outside of their salaries. Each inspector has a district of several counties located convenient to some central point. His first procedure in taking up work in a locality is to go to the local physician with his microscope, diagnose a few cases of hookworm disease, and treat them in conjunction with the local physician, in order to be assured that the latter is thoroughly familiar with the details; then the two together visit one by one the different farms. The inspector picks out the children who are probably infected, leaves some printed matter regarding the disease, suggests that the children be given treatment, and refers them to the local physician. In a short time there is such a remarkable improvement in the children as a result of treatment that others flock to the physician. The inspector visits schools, and there gives lectures on the nature of hookworm disease, and how it may be prevented. It is thought that in the course of five years, with the present force of inspectors, the State of Virginia can be thoroughly canvassed, and the people educated so as to prevent the occurrence of the hookworm disease.

LISTERINE

To promote and maintain personal hygiene

In all matters of personal hygiene Listerine is not only the best and safest, but the most agreeable antiseptic solution that is available for the purpose.

The sterilization of the teeth may be most nearly accomplished by using Listerine as a mouth wash. The success of Listerine is based upon merit: the best advertisement of Listerine is—**Listerine.**

Listerine Tooth Powder.—An innovation, in that it contains neither fermentative nor harshly abrasive ingredients. It is not intended to supplant Listerine in the daily toilet of the teeth, but is offered as a frictionary dentifrice to be used in conjunction with this well-known and time-tried antiseptic.

Listerine Dermatic Soap.—A bland, unirritating and remarkably efficient soap designed to meet the most exacting requirements of a saponaceous detergent. It is of especial value in preventing cutaneous affections.

Listerine Talcum Powder.—An excellent absorbent and deodorant, particularly adapted for use after shaving, and indispensable in the nursery to prevent soreness and chafing.

Interesting pamphlets on dental and general hygiene may be had upon request
Lambert Pharmacal Company, St. Louis, Mo.

Pellagra in Austria.—On the theory that pellagra is caused by eating corn-meal, the Austrian government has established in southern Tyrol, where pellagra is very prevalent, six modern bakeries producing rye bread, at a price within the reach of the people, and has passed a law forbidding the sale of corn products unless properly labeled.

Tuberculosis, Typhoid Fever, and Cancer Mortality.—The work of the Census Bureau shows that in the registration area, comprising about fifty-five per cent of the population of the United States, deaths from tuberculosis and typhoid fever are decreasing, and deaths from cancer are increasing. One reason for this increase is that a larger percentage of people escape other diseases and live to the cancer age.

Campaign Against Dirty Milk Causes Unforeseen Results.—The recent campaign in New York against impure milk, caused a large number of tenement mothers, in order to avoid the bad effects of the milk on babies, to drop milk and substitute tea and coffee in its place. This practise has spread to such an extent that the New York Milk Commission has issued a pamphlet warning mothers against the use of tea and coffee and showing the nutritive value of milk.

Result of Mosquito War.—Dr. Howard, of the Bureau of Entomology, reports that as a result of the campaign against mosquitoes in Italy, there is now to be seen numbers of fat, healthy children in place of the miserable yellow-skinned fellows of mosquito times. As a result of draining the Campagna marshes, which were practically uninhabitable on account of the prevalence of malignant malaria, the marsh land is now being extensively farmed, and will probably in time support a large population.

Bad Effects of Paraffin Injections.—Paraffin injections have been in vogue as a means of increasing personal attractiveness, but it seems to have been very disappointing, in some cases, at least. One young Parisian lady had an unsightly depression on her nose obliterated by means of paraffin, and was so pleased with the result that she had similar work done all over her face. A year later there was an inflammatory swelling over the different paraffin deposits, which caused disfigurement of the face. All other methods of relief having proved unavailing, it was finally decided to operate and remove the paraffin. Sadder and wiser, perhaps! In another case, cancer developed in a breast which had been injected with paraffin.

A New Germicide.—The New York *Herald* states that Prof. C. H. Carel, for many years head of the department of medical toxicology in the University of Minneapolis, and chemist of the Minnesota State board of health, has discovered a new chemical which he names "benetol," and which he says is eight times as strong as carbolic acid, and yet is no poison. He is so confident as to the efficacy of this new germicide that he asserts his willingness to submit himself to cholera infection in order to prove it can be successfully treated by the new discovery.

Information Regarding Infantile Spinal Paralysis.—The monthly bulletin of the Massachusetts State board of health for June, 1910, has more than one hundred pages devoted to infantile spinal paralysis, as it has occurred in Massachusetts, with directions for treatment and diagnosis. None of the text-books contain the latest information regarding this disease, and it would be of value to physicians to secure a copy of the bulletin. We would suggest that those who live out of the State of Massachusetts send ten cents to the State board (Boston, Mass.), accompanying their request for a copy of the bulletin.

Food Preservatives in England.—The London medical officer of health, in a recent report urges that in all cases where preservatives are used in food, the purchaser should be informed of the nature of the drug used and the amount; and he would make the use of the preservative in milk a penal offense. The departmental committee, in 1901, reported in favor of a law regulating the use of preservatives, which the government did not pay any heed to, some say because the report was not forcible enough. Dr. Collingsworth, the health officer, finds the worst feature to be the use of preservatives in working off tainted meats.

The International Pure Milk League.—A number of women in New York recently incorporated an association with this name. The objects of the league are: "To foster and encourage the production, distribution, and consumption of pure milk and pure food generally; to foster and promote the common interests of producers, dealers, and consumers of milk and all other articles of food; to foster and promote methods of cleanliness in the handling of milk and all other articles of food from the producer to the consumer throughout the civilized world; to foster and promote local and foreign organizations of similar purpose." This is a large program, but a worthy one.



I. X. L. Cooking Oil

Discriminating housewives and successful bakers of high-grade bread, cake and pastry use this Cooking Oil in preference to any other cooking fat in shortening and for general cooking.

There are three facts about "I. X. L." Cooking Oil which mark it an article of sterling merit: **Wholesomeness, Purity and Cheapness:**

Wholesomeness "I. X. L." Cooking Oil is an absolutely neutral, odorless cooking fat. Eminent physicians and authorities on dietetic subjects maintain that the use of pure vegetable oils for cooking and edible purposes generally aids digestion and makes a more healthful body.

Cheapness "I. X. L." Cooking Oil requires less than other cooking fats. The oil may be used repeatedly as it does not absorb any odor from the articles cooked therein.

Purity "I. X. L." Cooking Oil is pure refined cotton seed oil, manufactured under the highest standards of cleanliness.

Ask your grocer for it—insist on getting it. Once acquainted with it, you will want no other. That's the reason "I. X. L." Cooking Oil is found to-day in the majority of the best kitchens and bakeries in the United States. THAT'S WHY IT SHOULD ALSO BE IN YOURS!

Write for "I. X. L." booklet of recipes for making bread, pastry, cakes and other kitchen dainties. It will be mailed free of charge.



NEW YORK = CHICAGO = CINCINNATI = ST. LOUIS = NEW ORLEANS = MEMPHIS

UNION OIL COMPANY Providence PURE SALAD OIL



The standard of the world for over half a century.
Unsurpassed for Salad and Table Use.

Absolutely pure, sweet cotton-seed
oil of the highest quality.

Sold in cans and bottles by all first-class dealers.

UNION OIL COMPANY

27 BEAVER STREET

Providence, R. I.

New York

New Orleans



WHY NOT WIN YOUR WAY

To the hearts of children by having *Our Little Friend* sent to them for a year? The gift and giver will long be remembered. A better paper for children can not be found. Its eight illustrated pages of interesting, helpful moral stories and lessons have had a molding influence for good on the lives of tens of thousands of children. "Uncle Ben" is now running a serial in its columns known as his "Cloverfield" series. To know "Uncle Ben" is to love him, for he is an unusually good story-teller.



In his "Cloverfield" series he tells of bees, butterflies, and other habitants of the woods.

Sixty cents a year only. Think of it, 11-5 cents a week is all it costs. The subscription price is not a consideration when the happiness afforded your little friends is taken into account.

A SUGGESTION. It will soon be Christmas. A subscription favoring that little son, daughter, nephew, niece, or other young relative or friend would be just the thing. Their paper would continue to come to them long after their Christmas toys have been forgotten. In ordering, request that subscription begin with the Holiday number.

Subscriptions should be sent through your tract society, if you know the address, otherwise to us direct.

OUR LITTLE FRIEND, Mountain View, California

CHRISTMAS GIFT BOOKS

FOR YOUNG PEOPLE



Uncle Ben's Cobblestones tells, in simple narrative style, the origin of the common things of life, such as coal, glass, salt, matches, paper, fire, air, and water. Very interesting to children. Fully illustrated. 221 pages. \$1.00.



Elo the Eagle contains ten stories of birds, animals, etc.—life histories of the author's boyhood acquaintances in the woods and fields. Every boy will be eager to read these stories of the wild. Beautifully illustrated. About 200 pages. \$1.00.



The House We Live In describes in language that children may understand the wonders of our physical house. In a most interesting way each part of the body is compared to some part of a house. Numerous illustrations. 218 pages. \$1.00.

PACIFIC PRESS PUBLISHING ASSOCIATION

Portland, Oregon

Mountain View, California

Kansas City, Missouri



Part of Main Building



A View on the Lawn



The Dining-Room



A Group of Nurses



Some of the Tents

Where Health
Is Contagious

Saint Helena

Thirty years ago the St. Helena Sanitarium was founded on the sunny slope of one of the foothills of the Howell Mountain. For thirty years, nestled in the sheltered nook selected by its founders, it has grown and prospered. Today it is the best-known sanitarium on the Pacific Coast.

Located 750 feet above sea-level, with an unsurpassed view over the beautiful Napa Valley, 500 feet below, surrounded by a wealth of Californian verdure, and sparkling crystal springs, the St. Helena Sanitarium has been favored by a fortunate combination of conditions conducive to health-building.

Sick People Get Well at St. Helena

They go away and tell others of the delightful climate, the beautiful scenery, the pleasant, homelike accommodations and appetite-creating cuisine, and — what is not of least importance — the excellent medical attention and health training which each patient receives. This has been for thirty years our best advertising — satisfied patrons.

We can not tell you very much about the sanitarium in this small space. Let us send you our illustrated booklet. This will give you a better idea of the place, its surroundings, and its advantages.

Ambulance will meet all trains when required.

St. Helena-California Sanitarium
Sanitarium Napa County California

THIS COUPON, filled out, detached, and mailed to us, will bring you a free illustrated booklet.

L&H

MAIL THIS COUPON

St. Helena Sanitarium,
Sanitarium, Cal.: —

Please send your free illustrated booklet to:—

Name _____

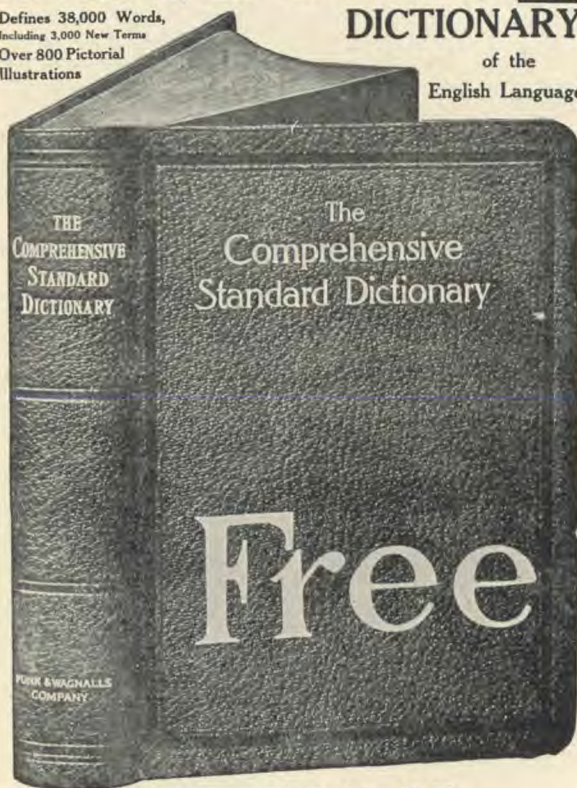
Address _____

YOURS—

The Latest, the Greatest, the Best DICTIONARY

Defines 38,000 Words,
Including 3,000 New Terms
Over 800 Pictorial
Illustrations

of the
English Language



De Luxe Limp Leather Edition
Denison Thumb-Index Price, \$4.00

SIZE 8½ x 6¼

WEIGHT 2 LBS.

OFFER

In order to make you acquainted with THE COLUMBIAN MAGAZINE, the best all-round family magazine published, for the next thirty days we will give away absolutely FREE a copy of the above-described flexible leather, thumb indexed dictionary (the list price of which is \$4.00), to any person sending us \$2.25, which includes a year's subscription to THE COLUMBIAN MAGAZINE, also charges for packing and shipping Dictionary.

COLUMBIAN MAGAZINE PUBLISHING CO.,
1 Madison Avenue,
NEW YORK CITY.

Gentlemen:

Please send for my examination the Standard Comprehensive Dictionary described in this advertisement, also enter my subscription to THE COLUMBIAN MAGAZINE for one year, for which I enclose you \$2.25. It is understood that if I am not satisfied with my purchase you will refund the amount paid.

Name.....

Address.....

FREE

THE COMPREHENSIVE STANDARD DICTIONARY is especially designed for convenient use, in the office and the home, by busy people of all classes who desire quick reference to a reliable dictionary. It contains over 38,000 words and phrases in common use among the English-speaking peoples, and more than 800 instructive pictorial illustrations, definitive aids to the comprehension of words, scientifically accurate and artistically exact, which were made especially for the work.

The high standing of the Editor, JAMES CHAMPLIN FERNALD, L.H.D., is a sufficient guaranty for the accuracy, comprehensiveness, and general excellence of the work. In his treatment the Editor has kept constantly in mind the necessity of giving in the simplest form the Orthography, Pronunciation, Definition, and Derivation of all words that are not self-defining.

What some noted authorities say about it.

President Martin Kellogg, M.A., LL.D., University of California, Berkeley, Cal.: "An enterprise which can not fail to meet with wide acceptance. I approve especially the full account of derivations."

Gen. James Grant Wilson, President of the American Authors' Guild, and well-known Author-Editor: "Superior to any similar volume that has yet come under my notice. I fail to see any feature of the work that can not be commended."

The St. Louis Globe-Democrat, St. Louis, Mo.: "For its size the work is very complete and inclusive; the definitions are vital and inspiring to new thought."

The Philadelphia Times, Philadelphia, Pa.: "The pronunciation is clearly marked, and there is much condensed information in etymology. The illustrations, also, are remarkably good."

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."

New Method of Cleaning Clothes

*Cleans Family Wash in 30 to 50 Minutes—
Woman's Hardest Work Made Easy—
No Rubbing, No Motors,
No Chemicals.*

NOT A WASHING-MACHINE

DOES IN ONE OPERATION THE WORK OF WASH-BOARD, WASHING-MACHINE AND WASH-BOILER.

SEE HOW SIMPLE — DIFFERENT, EASY. Put on any stove—add water, then soap, then clothes—move knob occasionally. In 5 to 8 minutes first batch clean—next batch same way, same water—in 30 to 50 minutes family wash clean. No labor, no injury to clothes.

Cleans woolens, flannels, blankets, or colored clothes, as well as white goods, finest laces, curtains, bed clothes. Saves time, fuel, labor.

Saves Money, Saves Clothes

EASY WAY in 30 to 50 minutes cleans washing which before took entire day. All metal, strong, durable, sanitary, light in weight. Easily used, cleaned, handled—always ready. Child or weakly woman can use it. Saves wash-day drudgery.

Users Praise "Easy Way"

J. McGee, Tenn., writes: "One young lady cleaned day's washing in one hour with Easy Way—another in 45 minutes." Mrs. T. Bullen, Canada, writes: "I washed bedding, heavy quilts, curtains, etc., without rubbing." Lauretta Mitchell, Ohio, writes: "Done a big washing in 45 minutes." A. D. Poppleton, N. Y.: "Gives perfect satisfaction. Washed bed quilts, greasy overalls, and fine clothes. Greatest thing on earth." F. E. Post, Ga., writes:—

"TWO WEEK'S WASHING IN 45 MINUTES"

Clothes cleaned without rubbing." J. H. Barrett, Ark., after ordering 38 Easy Ways, says: "You have the grandest invention I ever heard of." J. W. Myers, Ga., says: "Find check for 12 Easy Ways. Greatest invention to womanhood, forever abolishing miserable wash-days. Sells itself."

Price only \$6.00, ready for use. Sent anywhere. Not sold in stores. Send in your order at once; why not? You're paying out its price right now—paying it many times over in those hours of dreadful drudgery at wash-tub or washing-machine—paying it again and again in the damage which wash-board, washing-machine, or laundry does to your wash garments and to yourself. Order one now—you're paying for it anyway. Your money refunded if not satisfactory. Costs nothing to investigate. Send name and address, anyway, for full description and free sample offer. Write to-day.

HARRISON MFG. COMPANY

1489 Harrison Bldg., CINCINNATI, OHIO

STARTLING



Watch Offer

The Great
Burlington
Special at an
Anti-Trust Price!

The world's masterpiece of watch manufacture now sold direct!—

The most amazing offer ever made in the whole history of the watch industry — an offer which has absolutely PARALYZED competition — the offer of the genuine Burlington Special direct to the public at the rock-bottom ANTI-TRUST PRICE, without middlemen's profits.

The Fight is On!

We will not be bound by any system of price-boosting contracts with dealers. We will not submit to any "high profit" selling scheme. We will not be dictated to by ANY Trust.

NO MATTER WHAT IT COSTS, we are determined to push our independent line even if we should have to fight a combination of all the Watch Manufacturers of the country!

And so we are making this offer—the most sweeping, astounding offer ever made on a high-grade watch. The famous BURLINGTONS direct and at the same price **WHOLESALE Jewelers must pay**.

And in order to make the proposition doubly easy for the public we will even allow this rock-bottom price, if desired, on terms of **\$2.50 a Month** Don't miss this wonderfully liberal offer. Sign and mail coupon now. Rock-bottom, anti-trust price, whether you buy for cash or time.

POST YOURSELF!

Be sure to get posted on watches and watch values, trust-method prices and anti-trust prices before you buy a watch. Learn to judge watch values!

Get the Burlington Watch Company's

FREE WATCH BOOK

Read our startling exposure of the amazing conditions which exist in the watch trade today. Read about the anti-trust fight. Read about our great \$1,000.00 Challenge. Learn how you can judge watch values.

Send your name and address for this valuable **FREE BOOK** now—**TODAY**. Sign & mail coupon.

BURLINGTON WATCH CO.
Dept. 3009
19th & Marshall Blvd.,
Chicago, Ill.

Please send me without obligation and prepaid, your free book on watches and copy of our \$1,000.00 challenge, with full explanations of your cash or swap a month order on the superb **ANTI-TRUST** Burlington Watch.

Some.....
Address.....
No letter necessary, coupon will do.

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."



THE NASHVILLE SANITARIUM

The Nashville Sanitarium offers to the sick, the invalid, and those desiring rest and relief from business cares, a beautiful country home with all modern conveniences, situated on a high, dry eminence overlooking Nashville. The "Sanitarium Idea" is faithfully carried out in applying nature's simple but sure remedies in all kinds of baths, electricity, massage, physical culture, and diet, scientifically applied to each case. A well-equipped surgical ward and corps of trained nurses are prepared to care for all kinds of surgical and obstetrical cases. No objectionable or infectious cases taken. Rates for board, room, and regular treatment, \$12.50 to \$25.00 per week. Write for catalogue and further information. Address—

NASHVILLE SANITARIUM, STATION 5, NASHVILLE, TENNESSEE

Books Containing Practical Tips on Health

The Cause and Cure of Colds

By William S. Sadler, M. D.

Dr. Sadler clearly distinguishes between the different kinds of colds, shows that, in spite of their general name, low temperature is not the agency of their being, describes the course of the various colds, distinguishes them from grip, and gives most comprehensive directions for their cure and for guarding oneself against them. This little book may be made of inestimable value by all who are willing to follow a physician's sensible advice.

Illustrated

8 vo.

\$1.00 net

The Science of Living or the Art of Keeping Well

By William S. Sadler, M. D.

In twenty-three well-illustrated chapters, Dr. Sadler describes the body and its mechanism, the processes and value of correct breathing and exercise, and assimilation, choice of food, the latest verdict of science regarding nutrition, how the body resists disease, the circulation, rest, and the proper mental attitude. The cause and cure of worry is fully treated from a broad and scientific standpoint.

Substantially bound in cloth. Illustrated. Price, \$1.50 net. Postage, 15 cents.
For Sale at Bookstores

A. C. McClurg & Company, Publishers

New York

CHICAGO

San Francisco

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."

ROCKWOOD'S
TRADE MARK



Standard Knit Underwear

A Vital Point in Preserv- ing Your Health

The selection of proper fabrics is no longer a matter of guesswork, after the thorough scientific investigations in which the different hygroscopic and heat properties have been measured with mathematical accuracy.

When linen, silk, or cotton undergarments get thoroughly moistened, a little cool air will immediately chill the body.

Literature Issued by the State Board of Health, Circular No. 8, states, "Woolen clothing should always be worn next the body."

The Rockwood Standard Underwear conforms to this recommendation. It is made of pure stock, and retains the natural warmth of the body, and of a quality and weight that repels the inclement weather.

Prices; \$1.00 - \$1.25 - \$1.50 - \$1.75
\$2.00 - \$2.25 - \$2.50

Awarded First Prize, Gold Medal at the Alaska-Yukon-Pacific Exposition, as well as at the Lewis & Clark Exposition, Portland, Ore., for excellence and merit.

Manufactured by
GEO. ROCKWOOD & CO.
Bennington, Vt.

Mfrs. of the celebrated Rockwood Anti-Tuberculosis Underwear (the "White Plague Armor") Recommended by eminent medical authorities.

Drink Dole's Pure Hawaiian Pineapple Juice



The latest and best fruit juice. "Wholesome?" Ask physicians. "Delightful?" Try it and see. Drink as much as you please — you'll enjoy every drop. Serve it chilled. It is pressed from "Picked Ripe" Hawaiian Pineapples, and is refined and bottled in Honolulu.

Try it hot — 3-5 Dole's Juice and 2-5 boiling water poured over a little sugar is better than hot lemonade and easier to prepare.

It's Pure — nothing whatever has been added. Drink it pure.

It's Hawaiian — grown and bottled in a Tropical Paradise — and tastes it. The Drink Delightful.

It's Pineapple — the most healthful and refreshing of all juicy fruits.

When grocers and druggists haven't Dole's Pure Hawaiian Pineapple Juice, write us for booklet.

James Dole
BE SURE THIS NAME IN
RED IS ON THE LABEL

Hawaiian Pineapple Products Co., Ltd.
112 Market St., San Francisco, Cal.

Walla Walla Sanitarium, College Place, Wash.



LOCATED in the fruit belt of the Walla Walla Valley, on the Pacific Coast.

The quiet restfulness of this modern Sanitarium appeals to every visitor. Its skilful methods and pleasing environment, as well as its common-sense treatments, bring confidence to every patient. Its equipment for effective treatment and efficient service are most complete.

The surgical work done has been remarkably successful.

Abundant Water-Supply

The institution is supplied with artesian water throughout the entire buildings, with a fifty-two-pound pressure for fire protection.

For terms and further information, address the Superintendent.

WALLA WALLA SANITARIUM, College Place, Wash.



Flowers Bloom
all the Year
Round at Par-
adise Valley

THE name suggests the indescribable beauty and charm of this Southern California health resort. All conditions here aid in healing the sick and in building better health. Experienced travelers tell us that in all the world there is no place where the climate and natural advantages surpass those of Paradise Valley. The climate is equable — nearly the same winter and summer, never oppressively warm, always cool enough to be invigorating, but never chilly; no frosts. Every convenience of home, and the best of medical care and attention for the sick. Write for illustrated prospectus.

Paradise Valley Sanitarium

National City, California

New Invention

A DUSTLESS HOME AIR DOES THE WORK

New Home Vacuum Cleaner

Powerful machine. Double action. Constant suction. Cleans carpets, rugs, matting on floor. Takes place of brooms, brushes, dust-cloths. Cleans without sweeping. Raises no dust. Constant, powerful suction draws dust, dirt, grit, and germs through body and fiber of carpet into cleaner. No electricity, motor, power, or operating expense. Child or delicate

woman operates easily. Mrs. M. V. Buckingham, Neb.: "Home Cleaner certainly takes fine dirt out of carpets." Prof. Geo. S. McDowell, Pa.: "Took 8½ ounces fine dirt from carpet 10 x 13 ft." So they go. Hundreds of letters of praise and satisfaction. Saves taking up and beating carpets. Weighs 9 lbs. Think of it! A dustless home-cleaner than ever before—without sweeping, dusting, house cleaning. New Home Vacuum Cleaner, Price, \$8.50. Does same work as high priced machines. This great blessing heretofore possible only for the rich,



8.50

now within the reach of all—rich or poor—village, city, or country. Sent anywhere.

Not sold in stores. Order now. You're paying for it anyway—paying for it many times over in the hard labor of your daily sweeping and dusting, which the New Home makes unnecessary—Paying for it in your twice-a-year house cleaning alone—Paying for it again and again in the damage which dust does to your carpets, your furniture, your draperies, and yourself. Costs nothing to investigate. Send name and address for full description and free sample offer. Don't delay.

R. ARMSTRONG MFG. CO.

1203 Alms Bldg., CINCINNATI, OHIO

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."

When You Buy a Piano

you want to know you are getting the best for your money

Cornish

When you buy a "CORNISH" you get full piano value—nothing added for the protection of dealers.

Sent To You For A Year's Free Trial

Cornish Pianos, for real merit, are unexcelled by any other, whatever the price, or name, or reputation.



Three Years' Credit, if Needed, On This BABY GRAND

Send For The New CORNISH BOOK

The most beautiful piano catalogue issued—it explains things that you ought to know whether you buy from us or elsewhere. The book is yours for the asking. Write for it now.



Save One-third—Buy On The CORNISH PLAN—Easy Terms
Cornish Co. Washington, New Jersey
Established Over 50 Years

Read the Report of the Convention of the American Association for the Study and Prevention of Infant Mortality to appear in the January number of LIFE AND HEALTH.

Hygienic Cooking Oil

The Shortening Used By Vegetarians

A Choice Salad Oil A perfect vegetable food fat, that keeps indefinitely. Always sweet and wholesome, never rancid. Guaranteed under the Pure Food Laws. Shipped in crated cans direct from the refinery to your station. 5 gallon can, \$4.00; two 5 gallon cans in one crate, \$8.00; one-half barrel (about 32 gallons), 72 cents per gallon. Cash with order.

Send stamp for cook-booklet, circulars, and prices on other quantities. Satisfaction guaranteed. Prices subject to market change. Address—

Dr. O. C. Godsmark - Chattanooga, Tenn.

Washington (D. C.) Sanitarium



An attractive health resort, seven miles from the capitol. Diseases treated: Digestive disorders, rheumatic and gouty conditions, nervous and circulatory disturbances. The methods employed are the most modern and approved. The appliances are up to date. Baths, electricity, and diet are largely depended upon. In the surgical line we are well prepared, having a good operating-room and equipment. Competent physicians and nurses are employed to care for cases.

Send for Prospectus to the
Washington (D. C.) Sanitarium
Phone Takoma 127 Takoma Park, WASHINGTON, D. C.

The Science of Healthful Living

Taught in Twelve
Lessons

By D. O. TEASLEY
Food Scientist

Costs You Only 75
Cents

THE Missionary Herald is an aggressive missionary journal. One of its special features for 1911 will be a series of twelve lessons in the science of healthful living. These lessons will be of interest to business men, clergymen, missionaries, and all who are interested in being well, living long, and doing good in the world. The subjects covered in these lessons will be:—

Foods and Feeding; Respiration and Ventilation; Exercise and Recreation; Baths and Bathing; Rest and Sleep.

The author of the lessons has no hobbies to ride, no patent foods, or expensive apparatus to sell, no fads and fancies to advocate, does not prescribe long fasts nor starvation diets, but teaches the scientific laws of health and longevity

in simple language. He reduces these scientific laws to simple, usable principles.

One may read ordinary articles on the subject of health for a lifetime and pay much attention to some particular features of health, but unless this knowledge is reduced to practical laws, and unless these laws cover every feature of health, he can not expect the greatest efficiency of body and mind.

These lessons published as a correspondence course would be worth \$25.00. By subscribing for the Missionary Herald for 1911 you obtain them for only 75 cents. Send in your subscription at once, and you will receive the December number of the magazine free.

Missionary Herald

Anderson, Indiana



Welch's Grape Juice

There is no other product that can compare with this pure, unfermented juice, put up in hermetically sealed bottles bearing the Welch label.

The Welch process takes the fresh, full-ripe grapes, washes and stems them by machinery, extracts the juice under pressure and bottles it. Nothing is added ; none of the freshness, flavor and food properties of the growing grapes is lost.

Make sure the grape juice you buy bears the Welch label.

If your dealer doesn't keep Welch's, send \$3.00 for trial dozen pints, express prepaid east of Omaha. Sample 3-oz. bottle by mail, 10 cents. Booklet of forty delicious ways of using Welch's Grape Juice free.

The Welch Grape Juice Co., Westfield, N. Y.

There is No Real Winter

AT GLENDALE

All the delights of the ripe, mellow summer season are enjoyed the year round at this beautiful Southern California health resort. An equable, but invigorating, climate, strongly conducive to health development ; within the sanitarium a pleasant, homelike, Christian atmosphere, and the best of modern facilities for the treatment of sickness. A secluded spot only a few minutes ride from busy Los Angeles.

Drop a Postal To-day for Our Book of Views "E" in Natural Colors

Glendale Sanitarium (S. D. A.), Glendale, Los Angeles, Cal.
City Office : Broadway Central Bldg., Los Angeles

Main Building



When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."

In Sunny Long Beach Sanitarium California



At beautiful LONG BEACH, SOUTHERN CALIFORNIA'S FAMOUS WINTER RESORT, WHERE IT IS ALWAYS SUMMER-TIME. New pressed brick building. Every modern convenience. The finest and best equipped institution west of Michigan. VERY LATEST SANITARIUM METHODS. Patients enjoy long walks, riding, driving, and motoring on beautiful macadamized streets. Also boating, and the most delightful WINTER surf bathing in the world. Tennis, golf, etc. Our handsome FREE booklet tells the rest.

W. Ray Simpson, Mgr., LONG BEACH, CAL.
Tell your friends where to go.

AMONG THE MOUNTAINS Of Tennessee

THE GRAYSVILLE SANITARIUM

Healthful climate, delightful surroundings the year round, bracing mountain air and pure spring water. Unusual natural advantages are combined with a thorough health régime under the oversight of experienced physicians and attendants.

Treatments include Electricity in all forms, Massage, Swedish Movements, Hydriatric treatments, and the general line of Sanitarium measures.

Surgery when required.

Regulated dietary. Send for catalogue

Grayville Sanitarium. - Grayville, Tenn



TRI-CITY SANITARIUM - MOLINE, ILL.



AN institution of physiological therapeutics equipped with every appliance that modern science can provide for the treatment of the sick; including Galvanic, Static, Sinusoidal, and Faradic electricity, X-ray, Violet ray, and radiant heat of all kinds. A gymnasium and a Swedish mechanical movement and massage department are at the disposal of the patient. These are fully equipped, and include vibration of every kind beneficial to invalids.

Besides the above, the splendidly equipped treatment-rooms provide for the use of all forms of hydrotherapy, such as electric-light baths, hydro-electric baths, Nauheim baths, shampoos, salt glows, and packs of all kinds. Contagious and infectious diseases not received. A postal will bring a beautifully illustrated booklet free.

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."

A Charming Christmas Gift

What could be more heartily appreciated by Father or Mother, Brother or Sister, Husband or Wife — any member of the family — than a handsome and complete Shower Bath?

Refreshing, Invigorating, Sanitary; the Ideal Form of Bathing!

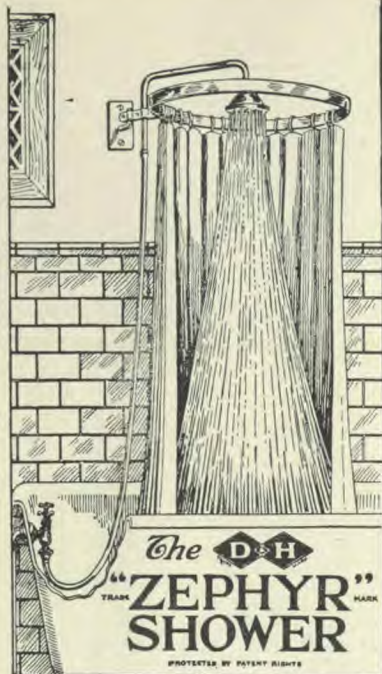
THE ZEPHYR SHOWER

can be attached by *any one* to *any bath-tub*. Cut shows its simplicity; but gives only a slight idea of its beauty and perfection.

At all dealers, or sent prepaid on receipt of \$6.50 by

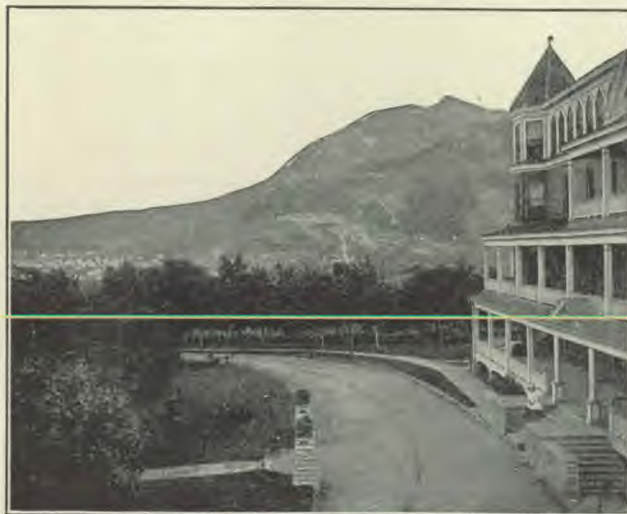
The D. & H. Mfg. Co.
1114 Chestnut St., Philadelphia

Money refunded if you are dissatisfied



Boulder-Colorado Sanitarium

Boulder, Colorado



microscopical investigations; experienced Physicians and well-trained Nurses of both sexes. No contagious or offensive diseases are received in the institution. Write for catalogue and card of rates.

The Boulder-Colorado Sanitarium is a well-equipped and well-regulated institution for the treatment of all chronic disorders. It is the only Sanitarium in the Rocky Mountain region intelligently employing the same system of rational treatment and conducted on the same general health principles as the Battle Creek (Mich.) Sanitarium.

The Buildings are equipped with all modern conveniences, including Steam Heating, Electric Lights, Elevators, Gymnasium; Baths of every description, including the Electric-Light Bath, Massage, and Manual Swedish Movements; Electricity in every form. Classified Dietary, Laboratory of Hygiene for bacteriological, chemical, and

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."



Atlanta Sanitarium

243 South Boulevard, Atlanta, Georgia

Patients who have obtained definite results are sounding the praises of the Atlanta Sanitarium.

Write Before Coming, so as to Be Sure of Accommodations

The Atlanta Sanitarium is not a place where fads or cure-alls are exploited. It is a place for serious men and women who want to get well and who desire relief from that which makes life miserable.

The physicians and attendants will give you every attention.

New England Sanitarium, Melrose (Boston), Mass.



Is the largest and best equipped institution in the Eastern States employing a rational system of physiological therapeutics.

Is situated six miles from Boston, in the midst of a State Park of 3,500 acres.

Is well equipped with modern conveniences, and with every appliance for the successful treatment of disease, including the Hydro-electric Bath, Electric-light Bath, Russian Bath, Massage, Manual Swedish Movements, Electricity, and X-Ray.

Special attention given to surgical cases.

Experienced physicians and well-trained nurses of both sexes are in charge.

Send for booklet.

This Winter—Try Nut-Cero Roast

Nut-Cero

A successful new meat-substitute made from nuts and wheat.

As appetizing as any meat, and much more wholesome and nutritious. Wholly free from poisons and disease germs. Put up in sealed cans, in which condition it keeps indefinitely. Can be used for making dozens of tempting dishes.

SANITARIUM HEALTH FOODS

contain no lard, no soda, no baking-powder. They are pure, wholesome, and delicious. The products of old, reliable firms. Complete price-list and order-blanks on request.

OUR SPECIAL OFFER:

To introduce these foods we will ship \$5.00 worth of any of the foods in the accompanying list to any address, for

\$4.50

SANITARIUM FOOD CO.

Boulder, Colo. College Place, Wash. College View, Neb.
Des Moines, Iowa. Portland, Oregon. St. Helena, Cal.

PRICE-LIST

	PACKAGE
Graham Crackers, sweetened	-.10
White Crackers	-.10
Ideal Soup Crackers	-.10
Oatmeal Crackers, 15 cents; 2 for	.25
Fruit Crackers	-.20
Zwieback or Toast	-.15
Caramel Cereal or Cereal Blend	-.15
Wheat Flakes (Toasted)	-.10
Wheat Flakes Biscuit (Toasted)	-.10
Fruit Nuts (Malted)	-.10
Sanitarium Gluten Meal, about 20%	.20
Sanitarium Gluten Meal, about 40%	.40
Sanitarium Gluten Sticks, about 40%	.20
Charcoal Tablets	-.25
	CAN
Baked Beans, 15 cents; 2 for	-.25
Peanut Butter	-.25
Malted Nuts	-.60
Nut-Cero, ½ lb. 15 cents; 1 lb.	.25
Nut Loaf, ½ lb. 15 cents; 1 lb.	-.25

Special Rates to the Trade and Institutions

Order from the Factory nearest you

The Otter Lake Sanitarium

Location

Michigan, the home of the Sanitarium idea, abounds in natural advantages, pleasant scenery, and invigorating climate.

At Otter Lake the climate is at its best. The location is between Detroit and Saginaw on one of the highest points of the lower peninsula. There is an abundance of fresh air and pure water, and the sanitarium is located on the shores of a beautiful lake.

Equipment

The institution provides its guests with every comfort, and employs the most modern scientific methods in the treatment of disease. Rheumatism, stomach trouble, nervousness, and mental cases receive special attention.

Conveniences

Otter Lake is easily accessible from the principal points in Michigan. Eight trains daily. Telegraph, telephones, livery express, etc.

Rates

Rates are very moderate. Room, board, and treatment, \$14 a week. Examinations and special nursing charged for extra at moderate terms.

Otter Lake Sanitarium
Otter Lake - Mich'gan.

SCHOOL OF CORRESPONDENCE

Learn practical dress-cutting at home. Benefit of thirty-five years' experience given to pupils. Healthful garments made to order. Write for circulars.

Healthful Garment Co., Flint - Mich.



FOLDING
PATENT PENDING

BATH TUB

WEIGHT, 14 POUNDS COSTS LITTLE

Requires little water

Write for special offer

N. Y. L. Bath Mfg. Co., Mfgs. Vapor
Bath Cabinets
103 Chamber St., New York City

15 CENTS 13 WEEKS
Illustrated Magazine for
BUSY WOMEN and the
home. Every week from
the Nation's Capital; Bright, Enter-
taining, Truthful—the paper you'll enjoy. Cream of the news; new's con-
ditions; odd sketches from other lands; some diversions for children;
many unique features of rare interest. Takes place of \$3 to \$4 papers.
Send 15c. now for 13 weeks to Pathfinder, Wash., D. C.

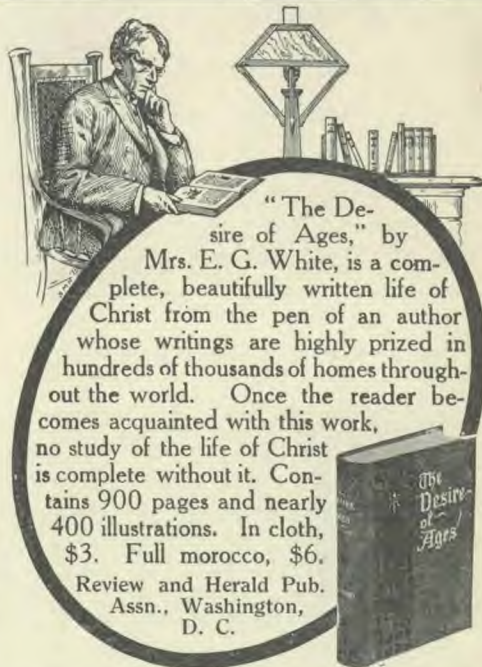
The Pathfinder \$1 A YEAR
EVERY WEEK
THE NATIONAL NEWS REVIEW

GUIN GLUTEN FLOUR

GUARANTEED UNDER THE FOOD AND DRUGS
ACT, JUNE 30th 1906. SERIAL No. 5715
FOR SALE BY ONE LEADING GROCER IN
EACH CITY—WRITE FOR HIS NAME AND
BOOK OF RECIPES—MENTION PUBLICATION

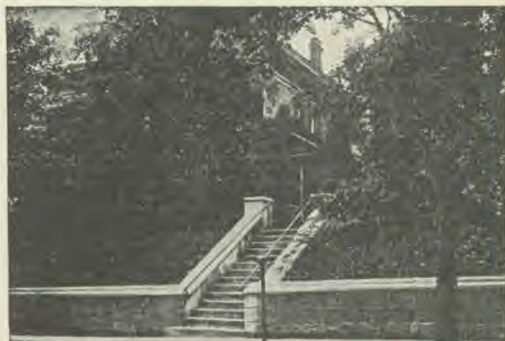
The Pure Gluten Food Co.
90 WEST BROADWAY, NEW YORK.

THIS BOOK IS WORTH YOUR EVENING HOURS



"The De-
sire of Ages," by
Mrs. E. G. White, is a com-
plete, beautifully written life of
Christ from the pen of an author
whose writings are highly prized in
hundreds of thousands of homes through-
out the world. Once the reader be-
comes acquainted with this work,
no study of the life of Christ
is complete without it. Con-
tains 900 pages and nearly
400 illustrations. In cloth,
\$3. Full morocco, \$6.

Review and Herald Pub.
Assn., Washington,
D. C.



Mt. Vernon Medical and Surgical Sanitarium

*An Institution Centrally Located in the Most
Healthful Portion of the State*

☑ Equipped with modern appliances for surgical work and
the treatment of chronic disorders. ☑ Latest improved
apparatus for Hydrotherapy, Electrotherapy, Phototherapy,
Mechanotherapy, Massotherapy. ☑ Physiologic System
of Treatment and Diet fully carried out in the institution.
☑ Pleasant Rooms; Elevator; Hot Water Heating System;
Natural Gas; Quiet, Secluded Grounds; Christian Attend-
ants of both sexes. ☑ Noted Medicinal Springs in the im-
mediate vicinity. ☑ Offensive patients not received in the
building. ☑ Write for information.

MT. VERNON, OHIO

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."

IF COLLIER'S THINKS

"My Personal Experience with Tuberculosis"

by Will M. Ross, is worthy of generous editorial comment (issue of June 11); if *Collier's* says: "His book is the sort of brief, clearly written, sane document that should be of practical use to anybody threatened with consumption"—DON'T YOU THINK IT IS WORTHY OF YOUR ATTENTION?

PRICE, 50 CENTS, POST-PAID. RATE FOR QUANTITIES

Address, Will M. Ross, 208 Herald Bldg., Stevens Point, Wis.

*Many business men have found that a few copies of this book provide an inexpensive and effectual means of helping worthy tubercular cases. Circulars on request.



TRY ARIZONA

ural climatic advantages and encouraging environment are combined with modern facilities for treatment, under the supervision of skilled and experienced attendants. The institution is new throughout. Main building and cottages offer all the advantages and comforts of home. Write to-day for terms.

E. C. Bond, Supt., THE ARIZONA SANITARIUM, Phoenix, Arizona

TRADE MARK

EVERSTICK

REG. U.S. PAT. OFF. MAR. 24, 1903

INVISIBLE RUBBERS

Insure feet comfort, health, protection and neat appearance. They keep your feet warm in cold weather and dry in wet weather, and can be worn all day long without injury or discomfort.

EVERYBODY NEEDS EVERSTICKS.
Always for sale where good shoes are sold.

ACCEPT NO SUBSTITUTES.

THE ADAMS & FORD CO.
CLEVELAND, O

None genuine without THIS cord.

MAKE YOUR OWN INK

You can make it in a jiffy—any color—with hot water and

**CHRISTIANSON'S
INK POWDER**

A 10-cent package makes a large bottle full. Colors: Black, Violet, Blue, Green, and Red.

3 Packages, Post-paid, for 25 Cents

(A year's supply for the average person.)

Send 10 cents for a liberal sample of **Blue Bird Bluing**. The best sheet bluing made.

R. J. Christianson, St. Helena, Cal.

These trade-mark crisscross lines on every package

SPECIAL DIETETIC FOOD ~~four for cases of KIDNEY AND LIVER TROUBLES REQUIRING RATHER STRICT DIET~~

Unlike other foods. Ask grocers. For book or sample, write

FARWELL & RHINES, Watertown, N. Y., U.S.A.



I will send as long as they last my 25c Book
STRONG ARMS
for 10c in stamps or coin.

Illustrated with 20 full-page half-tone cuts, showing exercises that will quickly develop, beautify, and gain great strength in your shoulders, arms, and hands, without any apparatus.

PROF. ANTHONY BARKER
62 Barker Bldg., 110 West 42nd St., New York

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."

COOPER'S

REG. U. S. PAT. OFF.

Spring Needle Knit UNDERWEAR

My Christmas Present

There isn't one red-blooded man in a hundred who wouldn't appreciate a box of the genuine Cooper's "Spring Needle" knit underwear as a holiday gift. Cooper's is so original and exclusive, so radically different from the other kinds that it interests a man at once. And when he wears it and sees for himself its wonderful elasticity—its unique wearing qualities, he is going to be forever grateful to the friend who gave him the introduction.

A GREAT FAVORITE

Cooper's is a great favorite with particular men all over the world. They write to us from Panama and the Philippines, asking where they can get it. They pin ten-dollar bills to their letters, mailed from the wilds of Alaska, Arizona, Colorado, and say, "Send me some Cooper's quick! I don't care what it costs, so long as it's the real Cooper's *with the stretch.*"

The flawless "Spring Needle" fabric with its rebounding elasticity is the foundation of Cooper character and quality. Then come expert designing and thorough workmanship. *We take time to do things right.* Made in union and two-piece suits in all sizes and in all popular weights and colors. Write us and we will send you booklet and liberal sample of the famous "Spring Needle" fabric.



BENNINGTON, VT.

COOPER MFG. COMPANY

33 Main Street - - Bennington, Vt.

Sole Mfgs. of Davis Kleans E-Z Mops and Dusters

When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."



Mother, Guess You'll
Have to open the other
Package of

Kellogg's

TOASTED CORN FLAKES

The Kind with the Flavor —
Made of the Best White Corn

THE GENUINE ALWAYS HAS THIS SIGNATURE

W. K. Kellogg

KELLOGG TOASTED CORN FLAKE CO. Battle Creek, Mich.



When you write to our advertisers, please say, "I saw your 'ad.' in LIFE AND HEALTH."