

Life & Health

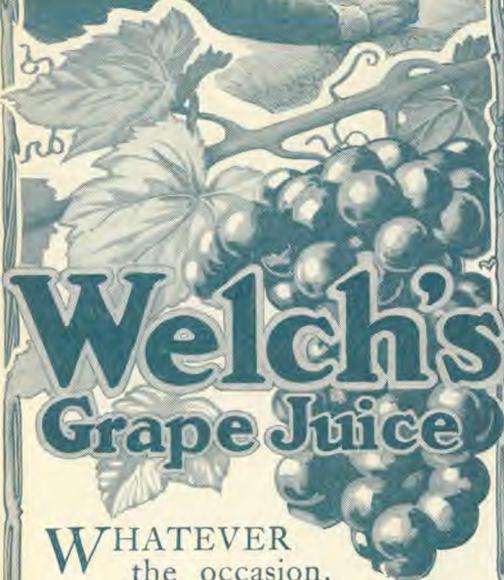
THE NATIONAL HEALTH MAGAZINE



JULY

10 CENTS A COPY ONE DOLLAR A YEAR

"A Grape Juice Anniversary"



Welch's Grape Juice

WHATEVER the occasion, pledge many happy returns in WELCH'S.

The pure juice of richest Concord, always fresh, and tinglingly delicious.

Serve it as it comes to you, or write today for our free book of recipes for punches, sherbets, desserts, etc.

Millions of people find WELCH'S an inexpensive daily luxury.

At your dealers—or trial dozen pints, express free east of Omaha, \$5.00. Sample 4-oz. bottle, mailed, 10c.

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



Weight
30
Pounds

Enterprise Tent Cot

If you have Lung Trouble, sleep in an Enterprise Tent Cot,—on your porch, veranda, roof, or lawn,—protected from storms in winter and mosquitoes and flies in summer. Get the pure air, which is the only cure for weak or diseased lungs. It is also the best house for children in warm weather. Indispensable for campers.

Enterprise Bed Company

Department S

Hammond,

Indiana



Man's belt—front view

The "Storm" Binder

An 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 There Any Hard Texts

In the Bible for You?



Wouldn't you like to see a practical, comprehensive exposition of them?

You should have a copy of

Questions and Answers

Over 250 pages
Almost 300 Questions and Answers
Topical and Textual Indexes
Full cloth binding

You can not purchase a copy

It is a premium with the *Signs of the Times* weekly, a sixteen-page weekly journal, Biblical, Historical, Pastoral. One page each week devoted to the answering of Biblical questions. If you do not find the answer in the book, you, as a subscriber, will be entitled to the use of this department of the journal, and careful attention will be accorded your inquiry in subsequent issues or by a personal letter. Ten cents in postage stamps to the publishers will get you a sample copy of both the weekly journal and the monthly magazine.

The paper one year.....\$1.75
Value of book..... 1.25

Total.....\$3.00

Paper and book special, \$2.00

You will find the book and the paper a great help to you in your study, and well worth the price.

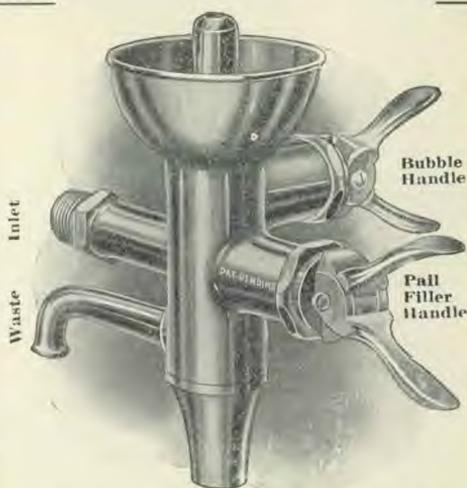
The agent who sold you this magazine will take your subscription, or you may address—

SIGNS OF THE TIMES

Mountain View, California

Death to MICROBES

The Latest and Best
Bubble Fountain Made



Inlet 1-2 in. I. P. Can also be furnished 3-4 in. I. P.

“Puro” A Combination Bubble-Cup and Pail-Filler

No special attachment necessary. Unscrew your present faucet and screw “Puro” on—press the Bubble-self-closing handle and you have a soft, sparkling bubble, making it possible to drink easily and naturally without touching lips or cheeks.

To fill a pail, press the second handle, and the full force of stream, as on old faucet, quickly fills the pail.

Sometimes it is found necessary to use a hose for flushing purposes—in such cases a hose nozzle can be supplied and readily screwed on fountain.

Being self-closing, allows no waste of water.

Positively the most Sanitary cup on the market. Made of red metal; nickel-plated; very heavy pattern; not alone Germ- but Fool-proof; no delicate parts to get out of order—lasts a lifetime.

MANUFACTURED EXCLUSIVELY BY

**Puro Sanitary Drinking Fountain
Company - - - Haydenville, Mass.**



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, saline, 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.

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 - Michigan.



Reduced Facsimile July Watchman

Watchman for July Considers
Wickedness of Cities :: ::

Your list of periodicals is far from complete
unless you are a regular subscriber to

THE WATCHMAN

An Evangelical Magazine Published Monthly
by the Southern Publishing Association

This magazine is devoted to the promulgation of
the truth for the times. It is filled with wide-
awake articles by well-known writers.

It Has Superior Cover Design

Yearly subscription - - - \$1.00

All we ask for sample is your request

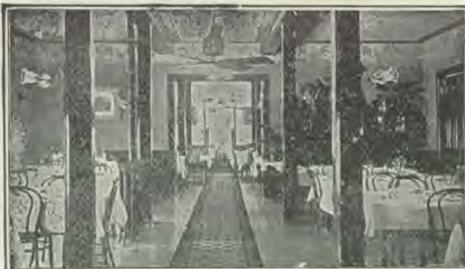
Southern Publishing Association
2123 24th Ave. North Nashville, Tenn.



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.

MAIL THIS COUPON

L&H

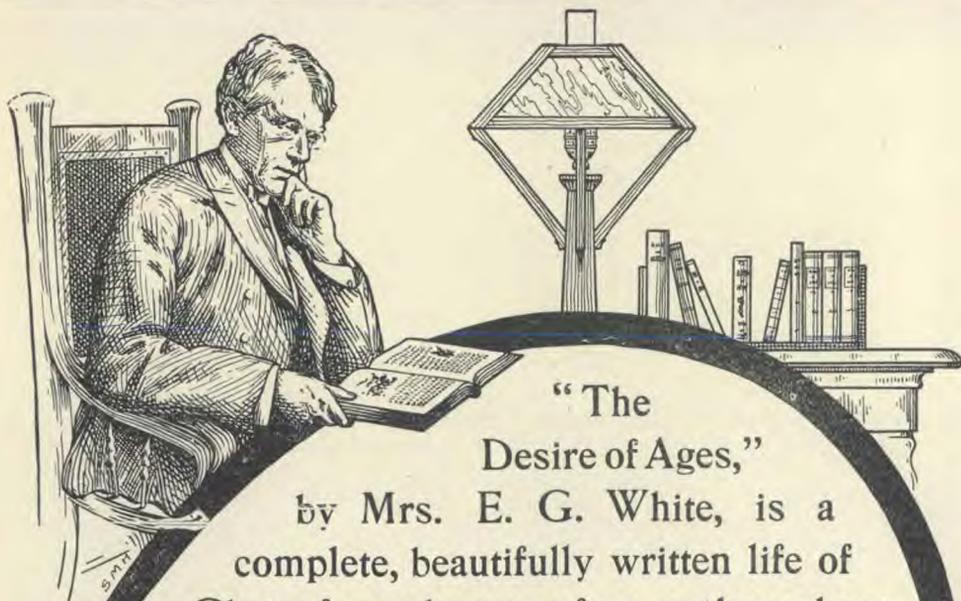
St. Helena Sanitarium,
Sanitarium, Cal.:—

Please send your free illustrated booklet to:—

Name _____

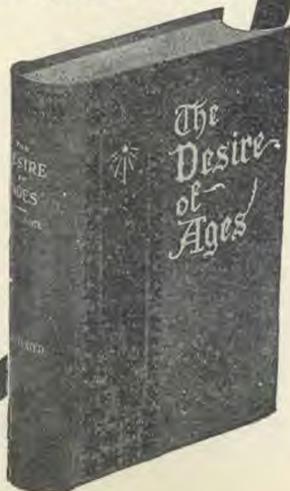
Address _____

This Book is Worth Your Evening Hours



"The
Desire of Ages,"
by Mrs. E. G. White, is a
complete, beautifully written life of
Christ from the pen of an author whose
writings are highly prized in hundreds of
thousands of homes throughout the world.
Once the reader becomes acquainted with
this work, no study of the life of Christ is
complete without it. Contains
900 pages and nearly 400 illus-
trations. In cloth, \$3. Full
morocco - - - \$6.

**Review & Herald Pub.
Assn., Washington,
D. C.**



CONTENTS FOR JULY

GENERAL ARTICLES	PAGE
The Business Woman's Vacation, <i>Anne Guilbert Mahon</i>	424
A Message of Summer and Hygiene, <i>Mary Alden Carver</i>	426
Home Care of Consumptives—Why We Should Tell Patients That They Have Tuberculosis, <i>H. J. Achard, M. D.</i>	429
Ode to the Fly (poem)	432
Where Do We Get Our Meat? <i>The Editor</i>	433
 HEALTHFUL COOKERY	
Berries and Stone Fruits, <i>George E. Cornforth</i>	439
 THE MEDICAL MISSIONARY AT WORK	
An Extended Tour in South Africa, <i>George Thomason, M. D.</i>	444
Medical Work in Tropical Mexico, <i>Carlos Fattebert, M. D.</i>	446
Australia, <i>Franklin Richards, M. D.</i>	447
Medical Missions at the World in Boston, <i>G. B. Starr</i>	448
Argentine Sanitarium, <i>G. B. Replegle, M. D.</i>	448
 EDITORIAL	
The Movement by Mothers—The International Hygiene Congress—Another Cause Suggested for Pellagra.	449
 AS WE SEE IT	
New Theory of Ventilation—International Health Bodies—Medical Practise in the Future—Bakerism—Intelligent Dietetics—Grading Milk.	454
 CURRENT COMMENT	
The Aftermath of the Holiday—A Refrigerator Without Ice—To Keep Free From Flies—The Public Drinking-Cup—Cautions to Campers—Defects of Mem- ory in Inebriety.	457
 ABSTRACTS	
Modern Sanitation—Reeducation in Nervous Troubles—Noise and the Cult of the Vulgar.	461
 SOME BOOKS	
IN THE MAGAZINES	466
 NEWS NOTES	
	468

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.

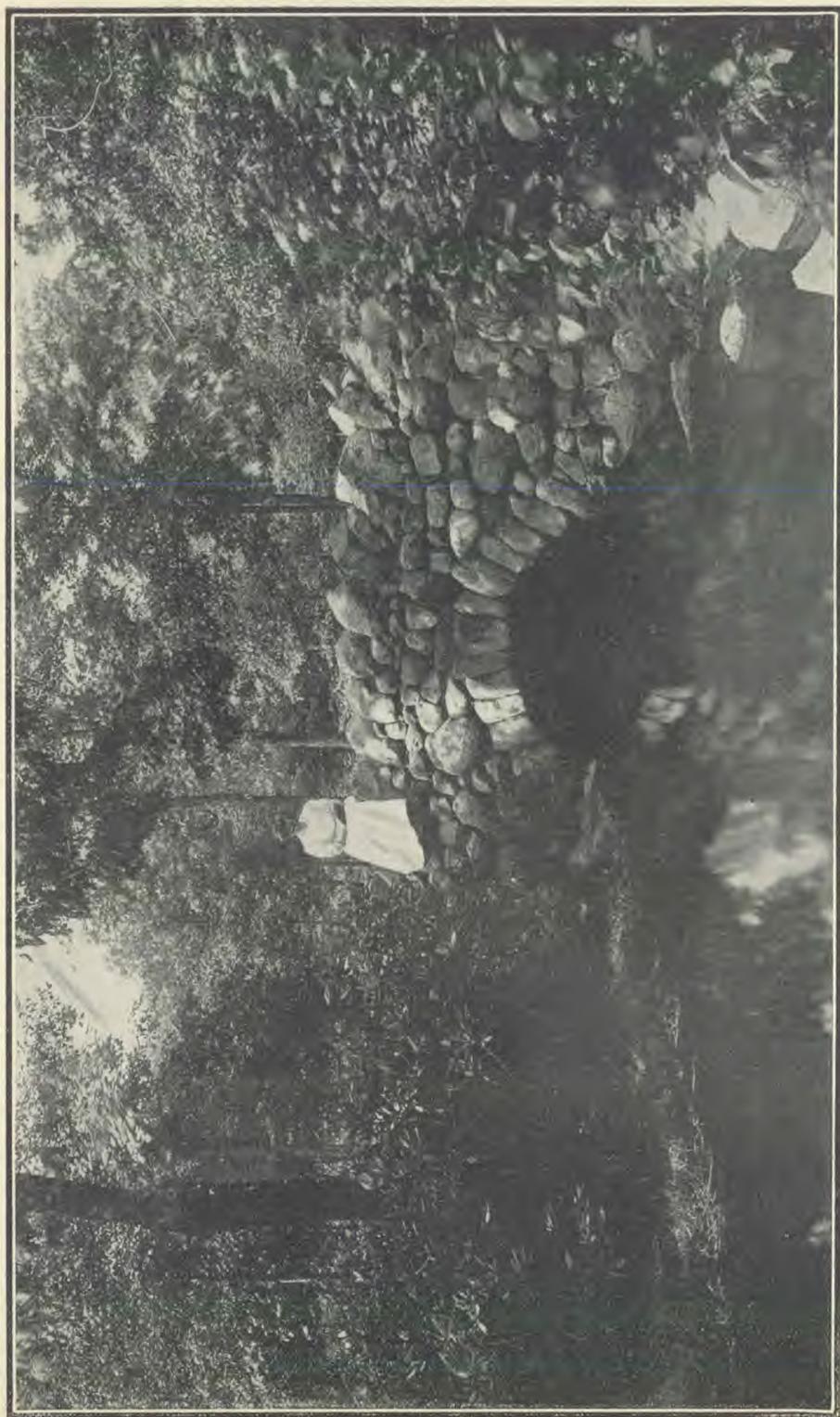
CHANGE OF ADDRESS.—When a change of address is ordered, both the new and the old address must be given.

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.



A BUSINESS WOMAN'S VACATION

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. Abbott, 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.

W. W. Worster, M. D.

A SERMON ON MILK

There is milk and milk.

☺

At least two kinds.

☺

And they look somewhat alike.

☺

But their effect is vastly different.

☺

Clean, pure milk does not come by chance.

☺

Neither is it produced by "any old" dairy.

☺

Two things are required to produce clean milk, intelligence and conscience.

☺

These two commodities have never become a drug on the market.

☺

The requisite intelligence and conscience required to produce clean, healthful milk are not combined in every dairyman, by any means.

☺

If you do not know that your dairyman is of this kind, more likely than not he is of the other kind.

☺

To produce clean milk costs him more than to produce dirty milk.

☺

And he has to charge more for it.

☺

But if you have a baby on artificial food, and also have intelligence and conscience, you will pay the higher price.

☺

And save your baby.

Even if you have no children, you ought to realize that cheap milk is never good milk.

☺

Of all times in the year, it is most important to have good milk in warm weather.

☺

But poor milk does not become good milk because the weather is cold; remember that.

☺

If you get what is coming to you, you will get pure, clean milk.

☺

You will do it summer and winter, but especially in the summer.

☺

Dipped milk is out of date; accept no milk not in bottles, and no milk that does not reach you cold.

☺

Germs grow rapidly in milk that is not cold.

☺

The warmer the milk, the more likely are the disease germs to multiply.

☺

Do not forget that tuberculosis is transmissible from milk to children.

☺

Children should never be given milk from cows not known by test to be free from tuberculosis.

☺

Or if this is not known, the milk should at least be Pasteurized.

☺

But Pasteurization is, after all, only an apology for poor milk.



THE BUSINESS WOMAN'S VACATION

ANNE GUILBERT MAHON

SHE knew how to get the most out of her vacation," was said of a business woman who had but two weeks during the whole busy year in which to recuperate and obtain recreation, but who spent them in such a way that she returned to the office with new strength and vigor — a new woman for her short holiday. By experience she had learned how to spend her vacation to the best advantage and how to get the most out of it.

When a woman works eight hours a day all the year round in a strenuous office, it behooves her to make the most of the short period which is usually given in which to rest and relax and gain new strength for work.

Women are so differently situated and constituted that a mode of spending a vacation which would be most beneficial to one would not suit another at all. Each must study her own individual tastes and desires, and find out what kind of vacation is really of the most good to her; then she should stick to her chosen method, despite advice and suggestions from others who possess different tastes and ideas.

Some women get the most benefit from a stay on a farm, where they can live a sim-

ple life, wear old clothes, and enjoy to the full the pleasures of country life, rise with the chickens and go to bed at sundown, revel in fresh milk, eggs, fruit, and farm products, and come back from their outing as fresh and buoyant and rosy-cheeked as farmers' daughters.

There are other women who would be bored to death by this manner of spending a vacation, to whom the stillness of the country and the quiet and monotony of farm life would, as they express it, "get on their nerves," and who look forward to their two weeks of vacation as the only chance during their whole year to have that social life which girls who possess greater freedom can enjoy. To them it is rest and relaxation, enjoyment and refreshment, to wear fluffy, elaborate



Some women get most benefit from a stay on the farm.

gowns (after spending day after day, year in and year out, attired in the most severely plain tailor-made costumes suitable to their work in the office). To them the gaiety and life of a seashore or mountain resort is not only enjoyable but exhilarating, and they are refreshed and better fitted to do their work afterward for their two weeks of care-free frivolity.

Other women find their vacation spent to best advantage in "roughing it" for the term

of their holiday, camping out, taking a trip in a house-boat, loafing, and living in the open for the time being, in company with other congenial spirits.

There are still others who find their vacations yield them the most pleasure and profit by traveling, by train, boat, or trolley, seeing new places, broadening their views of life — shut in as they are daily between the four walls of their office building, usually tied down to one locality during the twelve months of the year.

A business woman should plan long beforehand and decide for herself which mode of spending her vacation will yield the best results in enjoyment, in recuperation, and in gaining new strength for her work, then she should resolve to make the most of it.

Wherever she goes, in whatever way she arranges to spend her time, she should make some inflexible rules regarding it and live up to them.

The first rule she should make is to put out of her mind as completely as possible her business life, to forget there is such a place as the office and that there is such a thing as work. The worries, the cares of office life, should be left behind utterly when she locks her desk and closes the office door for her holiday. She should not allow herself to think of them once while she is away, if she is to obtain the greatest benefit from her vacation.

The next rule she should make is to do everything as differently as possible from



The gaiety and life at a seashore resort.

the way she does it at home and at work, so as to make the most of the change she is enjoying. The life of the average business woman is very monotonous, and an entire change at

least once a year is absolutely necessary to her health. She should get the most good possible from this change. She should notice and enjoy the differences in the place, in the people, and in everything which comes to her notice, in the spot chosen for her vacation. She should even try not to wear the same clothes which she wears about the office, so there will be nothing to suggest her business life to her. She should read different books — something light, or some book which she has not had time to read during the busy days. The period of her vacation is for rest, for enjoyment, and she should realize this and make the most of it.

Above all things, she should inform her friends that she is taking a holiday, and that she is absolutely not going to take a pen in her hand all the time she is away.

One business woman answered all her correspondents before going, and told every one that she did not expect to write a line while she was away. Even the folks at home were told that post-cards would be all they would receive, and that instead of taking the time and strength to write long letters, she would save it all to tell them when she got home. To a woman whose life is spent over a desk or a typewriter,



Roughing it in camp.

(Concluded on page 428)



A MESSAGE OF SUMMER and HYGIENE

MARY ALDEN CARVER



SUMMER is to the children of nature a time of sturdy development, when all the many growing things outdoors are striving to fulfil the promise of their spring-time unfolding. Nature sends her most convincing messengers to induce each one of her children to "make good." The balmy sun-soaked air is impressed into the service, as are also the morning dew-drops and the soft descending showers, and with infinite solicitude they coax the grain to ripen, help the apple and cherry to swell, urge the vegetable roots deeper and the corn tassels higher, while all of them together sing the great chorus of Life Triumphant.

Among all these summer miracles, unconvinced by the magnificent demonstration of what outdoor air and unhampered living can accomplish, man frequently lives unbeautifully in the glorious summer-time. He complains of lassitude occasioned by the heat; he suffers from ennui; his stomach goes back on him; and his nerves go on a rampage. Headache is not infrequently a constant companion, and summer cholera comes to visit him. He acquires the medicine-taking habit, and listlessly settles back to await the coming of the delightful autumn-time.

All these evils are the result of seemingly petty causes; but it verifies the idea of the magnitude of an accumulation of littles. A little too heavy diet, a trifle too much ice-water, a minimum of exercise, less fresh air than the system demands, and,—well, the abused body bears up and staggers onward for a while, but grows weary as the sun continues to hover about the zenith, and collapses at last or suffers from heat prostration.

All this could be easily avoided were the slightest attempt made toward rational living in the summer season. The diet, the bath, the

correct exercise of mind and body,—all these, if given proper attention and watched over judiciously, will make of summer a period of development and a time of the approximation of physical and psychical perfection.

It would be gross folly to start up the furnace fire at full blast during dog-days and expect to keep the house comfortably cool. But many people there are who feed the body furnace with vast quantities of heat-producing food material, and then wonder why they are unable to keep cool and how they are going to keep on their feet until the first early frost may appear.

In the economy of nature, the very

"O, the golden world !

The stir of life on every blade of grass ;
The motion and the joy on every bough ;
The glad feast everywhere for those that
love

The sunshine and for those that love the
shade !"

things are held out to man that he most needs for his digestive apparatus when the mercury is hovering in the upper reaches of the thermometer tube. Luscious berries, succulent vegetables, early-maturing fruits, all these are ready for him. But their dainty refreshment is spurned. Man turns his back on these viands, and gives his attention to the coarser, heavier foods he grew accustomed to when winter was rampant; or, barring this, he allows himself to become addicted to the ice-water habit, and drenches his long-suffering stomach at frequent intervals with the pernicious beverage.

The system requires more liquids in summer than at other seasons. But the drinking of moderately cool water will assuage the thirst far more effectively than ice-water will, without any danger of the positively evil results that may come from the ice-water.

The devotee of outdoor living fares far better than others when the fierce heat comes. He goes forth into the abundance of air and sunlight and gets enough exercise to toughen his body for endurance, enough oxygen to cleanse his lungs, purify his blood, and stimulate his entire anatomy. Best of all, he hears while outdoors the message of serenity, the tidings of great joy on earth that is everywhere manifest in summer-time. On all sides are —

“Green leaves panting for joy, and the great wind rushing through;
A burst of sun from clouds and a sparkle on valley and hill;

Gold on the corn and red on the poppy,
and on the rill
Silver, and, over all, white clouds afloat in the blue.”

Well, when a person becomes saturated with the feelings these things awaken, the body is buoyed up and enthused, and the weariness and heat and burden of living are forgotten; that is, unless one is hampered in other ways and tantalized by minor matters, as is the case when the clothing is tight or otherwise uncomfortable. In fact, even the very appearance of the garments one

wears may help or hinder in the efforts made to keep cool; for merely to look cool is a long stride in the right direction, and assists in the task of actually being cool.

The bath is a godsend in summer. The unusual flow of perspiration, the abnormal accumulation of dust particles, how aggravating they seem when the weather is warm. Many flee

for relief to the cold bath, and are disappointed that it fails to bring them solace. After the momentary chill to the surface of the body, the blood leaps and surges in reaction, and the temperature is eventually raised rather than lowered. This is the least injurious of all the possible results attendant upon the sudden cold bath to the overheated body.

The hot bath is enervating, to say the least. The thought of a hot bath in hot weather seems abhorrent. It may have serious evil results, most common of which is a severe cold.

A sponge with tepid water usually is



Many people feed the body furnace with vast quantities of heat-producing material.

most effective. It cleanses and refreshes and leaves the body practically normal in most respects.

Outdoor bathing is excellent where an opportunity is convenient, if one does not abuse the privilege afforded, and indulge in a dip beneath a blaze of noontide sunshine or remain in the water too long at a time.

"How shall I ever live through the remainder of the hot weather!" How often this expression is overheard in summer.

Perhaps the best suggestion one can make by way of reply is to hint that a large percentage of the time be spent in the open air. In the country this is an easy matter, comparatively speaking. But the city also has its opportunities along this line for those who seek them out.

Stop and consider what a large portion of Christ's time was spent in the open air, and think how efficient was his work. Now Palestine is a hot, dry re-

gion. To the mountains, across the lakes, on the hillsides, over the highways, through the fields, went the great Teacher, seeing many lessons in all about him. The multitudes followed him then, but nowadays in this respect, as in many others, they follow afar off. At the present day the world sadly needs the example of outdoor living. This is especially true in the summer season.

Out-of-doors one may learn most thoroughly the gospel of the fulness of life. One resolves to live more in unison with the Infinite idea.

Whenever the legion of outdoor enthusiasts gain one more proselyte from the myriads who confine themselves to the houses made with hands, a trifle of the sum total of sickness of mind and body is erased from the slate of life, and a new note is added to the chorus of voices of those who look daily about them upon the earth, and exclaim truthfully —

"It is good to be here!"

THE BUSINESS WOMAN'S VACATION

Anne Guilbert Mahon

(Concluded from page 425)

this entire rest from writing of any kind is a necessity, and means a wonderful amount of relaxation and benefit.

Wherever she goes, whatever she does, if the woman who works in an office or a store will plan for her vacation judiciously, will take every means available to make it the most restful, the most enjoyable, the most beneficial, and

the most suited to her particular case, she will find that it does her ten times as much good as if taken haphazard, filled with duties which could be left undone for the time being, thoughts and worries of office life which could be left behind, and with no effort to get the most in every way from her short period of recreation.





HOME CARE of CONSUMPTIVES

By
H. J. Achard, M.D.

Why We Should Tell Patients That They Have Tuberculosis

WHAT I have said about the necessity of getting the patient to cooperate with physician and nurse, for his own good and for that of his family, will explain to you why we are to-day less willing than formerly to withhold from our patients the diagnosis of tuberculosis. Patients used to be told that they had a bad cold, a persistent bronchitis, anything but pulmonary tuberculosis, until the disease was so far advanced that any one could make a diagnosis. Since we have more fully realized the essential curability of tuberculosis, and still more the importance of the patient's obedience and cooperation, we no longer hesitate to tell him the nature of his disease.

It is not possible to treat a patient properly for tuberculosis who is not fully aware of the nature and gravity of the disease. Rules made for his guidance will not be obeyed unless he knows what is the matter with him, and that their violation will invariably be followed by disastrous results. Again, unless a patient understands the serious nature of his disease, he will stop treatment as soon as he feels a little better, thus greatly reducing his chances of recovery.

No harm can come from telling a patient that he has tuberculosis, and explaining to him that it means a persistent, continuous struggle for his existence for a long period of time, perhaps ranging from two to five years. He will

soon recognize that his welfare depends largely on his efforts, and will become a good patient, where otherwise he would be an indifferent one.

The mode of life of the patient demands unremitting attention. It is easily possible for a patient unwittingly to do himself more damage in half a day than can be repaired in a month.

All these difficulties have led some physicians to deny that there is any healing or cure possible for consumptives outside of the sanatoria where they are under constant observation. While I freely admit that sanatorium treatment offers the best chances, there are not only not nearly enough such institutions to care for all consumptives, but only a small percentage of patients can avail themselves of the sanatorium advantages; the others must be treated at home.

Let us suppose, for the sake of example, a tuberculous patient with active progressive disease, tubercle bacilli in the expectorations, losing weight and not strong enough to work, although he is by no means confined to his bed. The attending physician has made his examination and has ascertained the extent to which the lungs are involved. He has inquired into the conditions of the bodily functions, appetite, digestion, elimination from bowels and kidneys, the presence or absence of fever, of night-sweats, the amount of expectoration, and what-

ever else may guide him in ascertaining and treating the condition.

If fever be present, the patient should be put to bed. Views differ as to the causation of fever in tuberculosis, some attributing it to the formation and absorption of toxins (poisons) from the tuberculous products, others to associated and different infectious micro-organisms. That is, however, an academic question, and need not trouble us. The important point is that a fever patient must be put to bed, and must be kept there strictly. In his care the greatest possible cleanliness should prevail. The oftener the bedclothing and his garments can be changed, the better.

When the fever has been subdued, the patient may gradually be up and about. All this time the greatest care must be taken that pure air is breathed, and a sufficient amount of good and proper food, properly prepared, eaten; also that the bodily functions are kept in good condition.

Not only must the needs of the patient be thus attended to, but the health of those living with him must also be considered. It is incumbent upon every consumptive, and every one who has charge of a consumptive, to be extremely careful with the infectious material discharged, the most important being the sputum. Any number of sputum cups have been recommended, have been prescribed, and are on the market at reasonable cost. The expectoration should never be deposited on the floor or on the walls, or anywhere where it could possibly dry and mingle with the dust; because in that case it will be disturbed by the breeze, and will be inhaled by those living in that room. It should always be deposited in a paper cup, or in old rags that can be burned, or in receptacles that can be made innocuous, so that the expectoration can not dry.

Another point that should be taken

care of is this: I have already explained to you that consumptive patients in coughing scatter little tiny droplets, which contain tubercle bacilli. Physicians are careful in examining consumptives to turn their face away. Any one who has the care of consumptives should do the same; and any patient who is careful should have enough consideration to do this of his own accord. A consumptive can scarcely avoid having his hands contaminated with sputum, and he should be careful to wash them before touching anything that other people must handle or eat. It often happens in poor families that the mother is consumptive. She must care for the baby, and also do the housework. She should be extremely careful to be absolutely clean in everything she does, in everything she touches, because it is only the clean and conscientious consumptive who is not dangerous to his surroundings. That is true. A clean consumptive is not dangerous to touch, is not dangerous to be near; but a careless, uneducated, vicious consumptive, who does not care what he does, who will deposit his sputum anywhere, is of the greatest danger, and should be forced to be careful. For such a careless patient the sanatorium treatment is extremely necessary, and especially the institutional treatment.

There are even in this age people who deny the influence of contact, of infection in the occurrence of tuberculosis, of consumption especially. The instance from Dr. Bernheim's practise, mentioned in a former article, seems to me to be a striking example of the importance of contact infection, of the importance of environment in the occurrence of tuberculosis. It also shows the great importance of protecting the babies in all houses where there are consumptives. And it may also teach the necessity of care on the part of adults, since

one of the babies infected its nurse. Fortunately, such sad examples are clear enough to teach us a lesson; while, on the other hand, they must not move us to shun the patients.

The infection by the tubercle bacillus is only one cause of tuberculosis, it is only the seed. In order that the seed should grow, a favorable soil is required, which in our case means a predisposition for tuberculosis. This predisposition is very apt to be present in a body weakened by overwork, by insufficient or improper food, by late hours and night vigils, or by disease. If the predisposition exists, it should be remedied by proper treatment; if it does not exist, it behooves us to avoid conditions which may create it.

To give briefly the principles of the

home care of consumptives: Let them live as sensible and easy a life as possible, with plenty of fresh air, but without undue exposure; plenty of good food, well prepared and varied, but without stuffing; avoid improper exertion, mental and physical strain; take as much rest as is possible; pay proper attention to the rights of others, by not scattering the infectious material, but by discharging it so that it can be destroyed and made innocuous. The safest guides for a consumptive are a conscientious and able physician and an efficient nurse; but all honor, also, to the faithful wives and husbands, sisters and daughters, brothers and sons, who take care of their dear ones and try to assist them in overcoming the dread disease, and in regaining their health.



AN APPROPRIATE CAMPING DRESS



Ode to the Fly



Most injurious typhoid fly,
Drink with you no more will I.
When you settle on my cup,
I perchance bacteria sup;
After what I've seen to-day,
I would have you chased away.
I dislike those feet of thine,
What they've touched I shall
decline.

Carrier of germ and spore,
Get thee hence! Return no more!
Spreader of disease, begone!
Kindly leave my food alone.

Borrowed.



WHERE DO WE GET OUR MEAT?

By THE EDITOR



NOT so long ago the sensational jungle story appeared; people read it, sickened, and for a while discarded meat. Government investigation ensued, improved government inspection followed; the agitation died out, and people ate meat once more.

But just what was accomplished by the government medical inspection? How many of our readers know that this inspection is enforced only in the large slaughter-houses which ship from one State to another, or which export meats? How many of them realize that there are hundreds of slaughter-houses all over the land over which there is not the slightest inspection or control? Perhaps one third of all meat slaughtered in the United States, and much more than one third of all that is eaten in the United States, has absolutely no inspection of any kind. One might think the example of the larger slaughter-houses coming under the limelight would

cause a general cleaning up in the smaller houses; that is, he might think so if he were entirely unsophisticated.

The law demands the condemnation of diseased cattle which come to interstate slaughter-houses. Do you suppose the stockmen will risk such condemnation if they can help it?—Not if there is an uninspected slaughter-house within their reach. The effect of the law, naturally, is that the better grades of cattle which are pretty certain to stand the test, go into the interstate slaughter-houses, and those pretty certain not to stand the test go to the uninspected slaughter-houses. Are you aware to what extent the meat of our markets is

from these uninspected slaughter-houses?

What are the evils connected with the local slaughter-houses?—These establishments are, to quote from a government bulletin,—

“Usually isolated and scattered about the city or town, either situated on some back street, surrounded by stables and dwelling-houses, or outside of the corporate lim-



Animals which would be condemned under federal inspection are here slaughtered for meat.

its, each butcher apparently trying to avoid observation. In many instances the houses are located on the banks of streams or creeks, and the drainage is toward such streams. Frequently the offal is thrown on the banks to decay or to be devoured by hogs or rats."

These slaughter-houses get the old, worn-out, diseased cows in the later stages of tuberculosis. To show that we are not exaggerating in our statement of the condition of these local slaughter-houses, it is only necessary to quote



Another view of the same slaughter-house. Photographs and descriptions fail to depict the reality.

from the report of inspections in Indiana:—

"At nearly all slaughter-houses inspected, foul, nauseating odors filled the air for yards around. Swarms of flies filled the air and the buildings and covered the carcasses which were hung up to cool. Beneath the houses was to be found a thin mud, or a mixture of blood and earth, churned by hogs, which are kept to feed upon offal. Maggots frequently existed in numbers so great as to cause a visible movement of the mud. Water for washing the meat was frequently drawn from dug wells, which receive seepage of the slaughter-house yards, or the water was taken from the adjoining streams to which the hogs had access. Dilapidated buildings were the usual thing, and always the most repulsive surroundings and odors existed."

In some cities and States there is an attempt at local inspection, but often this

is a mere farce. For instance, in a large Eastern city with two hundred seventy-five slaughter-houses, which do not have federal inspection and in which there are slaughtered two million animals yearly, there is a local inspection conducted by *three* men, none of whom is a veterinarian, but formerly all were butchers. Think of these men inspecting ninety slaughter-houses apiece and examining two thousand animals apiece daily! The rankest kind of disease could easily pass such inspection.

As to the conditions in these places we again quote:—

"The several departments of the establishment are each in a separate building. The killing department, for example, is in a large barn-like wooden structure. It has one floor and a basement. Cattle, sheep, and calves are killed in the basement and on the first floor. The basement is floored with cement, but the flooring in the room above is of wood, **filthy and unsanitary.**

When slaughtering is being done, heads and hides are piled in heaps on the floor, and livers and tails are scattered about. Butchers frequently hold their knives in their mouths, wear grimy clothes, spit on the floor, and wash down carcasses with dirty water carried about in a bucket."

We will not take time to quote further of this unsavory matter, but refer the reader to Circular 154 of the Bureau of Animal Industry.

Illustrations given herewith show some of the conditions found in a government-inspected slaughter-house. Perhaps we should apologize for publishing such gruesome pictures, but we wish our readers to know what people are apt to eat when they eat meat.

As we have already said, conditions are far worse in the uninspected slaugh-

ter-houses. One accustomed to cleanliness and decency would not need a more forcible argument for a non-meat dietary than a visit to some of these uninspected slaughter-houses.

We have photographs of some of these places, but photographs do not give any adequate idea of the indescribable filth and nastiness and stench. One must see and smell for himself in order to be fully convinced that the meat-eater is not living on the most clean and healthful products.

We admit that all meat and all slaughter-houses do not merit this description. It is the tendency to think

that perhaps we shall be fortunate enough to obtain some of the better grades of meat; but when we realize that there is so little undiseased meat that meat guaranteed to be from a healthy animal would be sold at so many dollars instead of so many cents a pound, we can appreciate the fact that at best those who eat inspected meat, eat the meat of diseased animals; and those who eat uninspected meat, eat the product of highly diseased, starved animals prepared without any regard for cleanliness.

These are not the assertions of the writer, but are from the published government bulletins.



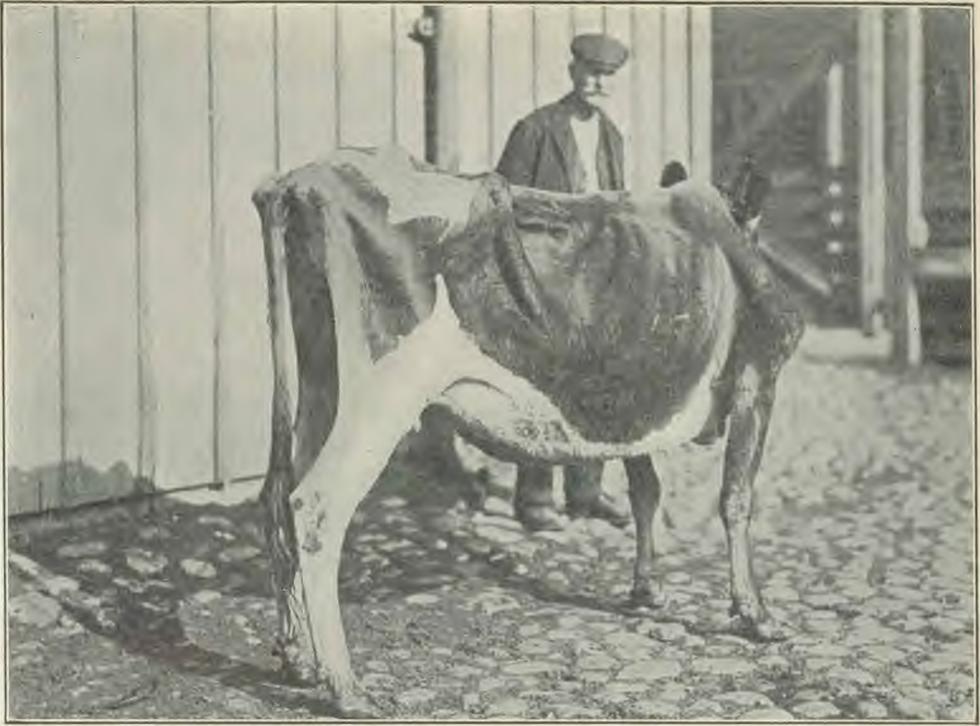
This cow reached the stock-yards too weak to be driven to the abattoir. Of five car-loads of old cows, one hundred ten in number, which arrived one day at the Boston stock-yards, seventeen were condemned because far gone with tuberculosis, and one because of emaciation. The agents of the humane society saw two such badly diseased cows whose carcasses were scraped clean of the masses of tubercles, and then the carcasses passed as fit for food.



Taken from the car in this condition. Had it lived a few hours longer, it would have made good veal.



Starved to death. If any life had been remaining when it reached the inspector, it would have been passed for food.



Technically known as a "canner" or "bologna." The old, worn-out, diseased cows go into canned goods or sausages.



This cow was so lame that the humane society agent ordered her carried immediately to the abattoir in a cart and killed. Though two quarts of pus were taken from the abscess, the rest of the carcass was passed as wholesome food.

The large half-page illustrations on the previous pages represent what occurs at inspected slaughter-houses. There the inspectors are under constant necessity of being untrue to their trust, or of incurring the wrath of the butchers. Does it not look as if the conscience were stretched a point when animals in a dying condition are passed as food? And the inspectors do not see all that goes on. The calf found dead in a car, shown in one of the illustrations, was thrown into one of the yards. It suddenly disappeared. There was no inspector to see what was done with it. In one car-load of eighty-four calves arriving at one time, eight were found dead, and twenty-four dying. The latter were killed Saturday, on reaching the abattoir. The following Monday ten others were killed to end their suffering. When the United States inspectors arrived, forty-two were

left, and of these forty were condemned as unfit for food.

The incidents and illustrations from the Boston stock-yards have been furnished by the Massachusetts Society for the Prevention of Cruelty to Animals, which, in its efforts to prevent unnecessary barbarism in the transportation and slaughter of animals, has incidentally been enabled, by legislation and otherwise, to put a stop to at least some of the iniquitous practise of passing off unfit animals for human food.

When it is realized that even in inspected slaughter-houses the evils are so great, and go on almost in spite of an attempt at careful inspection, what may we not expect from the uninspected slaughter-houses, of which there are hundreds? Those of us who *must* eat meat should ask and answer the query, Where do we get our meat?



Healthy calves.



BERRIES AND STONE FRUITS

George E. Cornforth

The Currant

THE word currant is derived from Corinth, a city in Greece, where formerly grew the small Corinthian grapes, known, when dried, as English or Zante currants. Our fresh currants receive the same name from their resemblance to that fruit. There are several varieties of the currant, the most distinct of which are the red, the white, and the black. Most of these varieties are very tart, and are valued for making jellies. The juice is a refrigerant, and when diluted with water makes a grateful drink for fever patients.

FOOD VALUE PER OUNCE IN CALORIES			
PRO.	FAT	CAR.	TOTAL
1.8	.0	14.8	16.6

Preparation for Serving

Currants may be served in clusters on the stem, after being well washed in cold water and drained. The white and red varieties may be arranged prettily on the same dish. Or the currants may be picked from the stem, and served in sauce-dishes, lightly sprinkled with sugar. Currants and raspberries served together in this way make a pleasant blend of flavors. Or the currants may be mashed, and sweetened with one-third cup of sugar to one pint of fruit, and allowed to stand one hour before serving.

Currants may be stewed in a very little water, sweetened, and served as sauce.

The Gooseberry

FOOD VALUE PER OUNCE IN CALORIES			
PRO.	FAT	CAR.	TOTAL
.5	.0	18.9	19.4

"The gooseberry probably derives the name from *gorse* or *goss*, a prickly shrub that grows wild in thickets and on hillsides in Europe, Asia, and America."

The gooseberry belongs to the same genus as the currant. The wild gooseberry bears a prickly berry, but the fruit of the cultivated variety is smooth. When ripe, the fruit is very delicious eaten raw, but it is generally used green, when it is very sour, for making pies, tarts, and jam.

The Cranberry

FOOD VALUE PER OUNCE IN CALORIES			
PRO.	FAT	CAR.	TOTAL
.4	1.6	11.5	13.5

It is said that this word is a corruption of *craneberry*, a name which was given the fruit because it is eagerly sought by the cranes which frequent the marshy places where it grows. The berry is covered with a thick, waxy skin, which protects it from moisture and the action of germs, and for this reason it will keep for a long time. Freezing does not seem to hurt cranberries if they are kept frozen till they are to be used. The skin is quite hard to digest, therefore it is well to reject it. Cranberries are very acid, and are prized for making jellies, and as sauce for proteid foods.

Cranberry Sauce

Carefully look over and wash the cranberries. Put three cups cranberries to cook in one and one-half cups boiling water. Stew them till the skins burst and the cran-

berries are tender. Care must be taken that they do not boil over. Rub them through a fine colander or strainer to remove the skins and seeds. Then add one cup sugar.

Cranberry Jelly

3 cups cranberries
1 cup boiling water
1½ cups sugar

Cook the cranberries in the water till tender. Rub them through a fine colander. This should make one pint of pulp. Put this pulp on the stove to heat, and put the sugar into the oven to heat. When the fruit boils, add the hot sugar to it. Allow it to boil up. Skim and pour into jelly glasses or molds wet in cold water. A clearer jelly may be made by putting the fruit, after it is cooked, into a jelly bag and allowing the juice to drain out. Measure this juice. Use three fourths as much sugar as you have juice, and proceed as before. The pulp which remains may be rubbed through a fine colander, sweetened, and used as sauce or marmalade.

The Huckleberry and Blueberry

FOOD VALUE PER OUNCE IN CALORIES

PRO.	FAT	CAR.	TOTAL
.7	1.6	19.2	21.5

These are the fruit of a small bush or shrub which grows in the north of Europe and America. There are several species, the two principal ones being the high bush and the low bush. There is not much difference between the fruit of the two kinds. The berry is a very dark blue, sometimes covered with a light-blue bloom. Its flavor is sweet and very mild, therefore it may be eaten by persons who can not eat acid fruits.

To Serve

Huckleberries should be carefully looked over, washed, and dried by spreading on a sieve or colander. They are more healthful eaten without sugar, but sugar and cream are generally considered indispensable.

When stewed in a small quantity of water and sweetened, they make a very palatable sauce.

The Grape

FOOD VALUE PER OUNCE IN CALORIES

PRO.	FAT	CAR.	TOTAL
1.5	4.2	22.3	28.0

Grape Juice —

PRO.	FAT	CAR.	TOTAL
.0	.0	23.8	23.8

"The grape-vine is a native of the southern shore of the Caspian Sea and of America. Its cultivation dates from after the flood: 'Noah began to be a husbandman, and he planted a vineyard.' From Asia, according to Humboldt, the vine passed into Greece, and then to Sicily. It was early carried into France by the Phocæans." Several varieties of the European species are cultivated in California. Other varieties of the grape are cultivated in Michigan, Iowa, Missouri, New York, Delaware, and some other States. It is the source of the most important fruit juice which nature furnishes us, one of nature's medicines as well as an extremely palatable food and drink. The grape and its juice, or wine, are often spoken of in the Scriptures, and they have been valued from the earliest times. Their use, however, has been sadly perverted in all ages in making intoxicating beverages and vinegar. Some particularly sweet varieties of the grape, when dried, are called raisins.

Preparation for Serving

Grapes should be washed in cold water and drained before serving. Imperfect grapes and underripe or overripe ones should be removed. Different-colored grapes may be arranged together on the serving dish and garnished with grape leaves. The skins and seeds are indigestible and should not be eaten.

Grape Sauce

Crush the grapes, then stew them a few minutes in their own juice. Sweeten to taste. Grape marmalade may be made by rubbing the sauce through a colander to remove the skins and seeds.

(Recipes for the making of grape juice will be given in a future lesson on "The Canning of Fruits.")

Raisins

FOOD VALUE PER OUNCE IN CALORIES

PRO.	FAT	CAR.	TOTAL
3.0	8.7	88.3	100.0

Raisins are a very nutritious, wholesome food, when thoroughly masticated or made into marmalade.

Raisins may be made into marmalade by grinding them through a nut-butter mill or through an ordinary food chopper with the fine cutter. Equal parts of raisins and nuts—walnuts, almonds, pecans, or pine nuts—ground through the mill together make a very palatable and nutritious food. After being put through the mill, the marmalade may be pressed or rolled into a cake one-half inch thick and cut into cubes, forming caramels. A sauce may be made of raisins by stewing them till tender in enough water to cover them.

The Peach

FOOD VALUE PER OUNCE IN CALORIES			
PRO.	FAT	CAR.	TOTAL
.8	.3	10.9	12.0

The botanical name of the peach, *Amygdalus persica*, leads to the belief that Persia is its native home. It is grown extensively in the United States.

The peach is remarkable for its small sugar content, which gives it a low nutritive value.

Preparation for Serving

When served whole, the wool should be wiped from peaches.

Peaches and Cream

Prepare the peaches just before serving, because they become discolored by standing. Wash, divide, stone, pare, and slice the peaches. (Notice the order in which the directions are given. It will be found convenient to follow this order in preparing the peaches.) They will discolor less quickly if a silver knife is used. Serve very cold with sugar and cream.

Peach Sauce

Wash, divide, stone, pare, and quarter or slice the peaches. As soon as prepared, put to cook in a small amount of boiling water. Stew gently till tender, then add sugar to sweeten.

Baked Peaches

Wash, divide, stone, and pare peaches. Place in a pan. Fill the cavities with sugar with which a little grated lemon rind has been mixed, adding a few drops of lemon juice. Or use a mixture of sugar and chopped almonds. Bake till tender. Serve

on thin slices of zwieback which have been moistened in hot cream.

The Plum

FOOD VALUE PER OUNCE IN CALORIES			
PRO.	FAT	CAR.	TOTAL
1.2	.0	23.3	24.5

The plum tree is a native of Asia Minor.

Plums are most delicious when eaten raw. There seems to be an acid next the skin, the flavor of which is much more pronounced after cooking. This makes stewed plums taste very sour and require considerable sugar to make them palatable.

Stewed Plums or Plum Sauce

Wash the plums. Stew gently in a small quantity of water till tender, then add sugar to sweeten.

The Prune

FOOD VALUE PER OUNCE IN CALORIES			
Raw—			
PRO.	FAT	CAR.	TOTAL
2.4	.0	85.0	87.4
Cooked—			
PRO.	FAT	CAR.	TOTAL
.6	.3	25.8	26.7

Prunes are dried plums. The larger and sweeter varieties are selected for drying. Prunes are mildly laxative.

While the food value of dried prunes is high, their food value when cooked, on account of the water added, does not differ much from that of fresh plums.

To Stew Prunes

Wash the prunes well. Cover them with cold water to from two to three times the depth of the prunes. Let them stand overnight. In the morning put them to cook in the water in which they soaked, letting them simmer for about three hours. When done, they will be tender, with a thick juice, and will require no sugar.

Prunes "Cooked in Cold Water"

The largest varieties of prunes are excellent prepared in this way. Wash the prunes well. To one pint of prunes add one quart of water. Set them in the refrigerator for forty-eight hours. They will then be plump, soft, and delicious, more like fresh, sweet plums, and more wholesome than the stewed ones.

Prune Marmalade

Stone stewed prunes and rub them through a colander. No sugar need be added.

Stuffed Prunes

Select large-sized prunes. Wash well, soak overnight. Cook till tender, but they need not be cooked as long as for stewed prunes (or use prunes "cooked in cold water"), remove the stones by cutting a slit in the side of each prune, and replace the stone by a blanched almond. Serve with whipped cream or plain cream. To blanch almonds, pour boiling water over them, allow them to stand a moment, drain off the water, then by pinching the almond it may be slipped out of its skin. Spread them out on a tin and dry in the oven.

The prune juice which is left makes an excellent laxative. Prune juice and chopped nuts make a tasty dressing for cereals, either the dry cereals and flake foods or mushes.

The Apricot

FOOD VALUE PER OUNCE IN CALORIES			
PRO.	FAT	CAR.	TOTAL
1.3	.0	15.5	16.8

This fruit belongs to the same family as the plum, and is a native of Asia. Like the plum, it has a sweeter taste when raw than when cooked. It is extensively used as a dried fruit.

Stewed Dried Apricots

Wash the fruit, rubbing it well with the fingers to remove the down. To one pound of dried apricots add one pint cold water and one cup sugar. Soak overnight. In the morning put them on the stove and bring to a boil slowly, stewing gently till just tender, but no longer. Dried peaches should be treated in the same manner, using one-half cup sugar to one pound of fruit. Dried apricots and peaches are very nice "cooked in cold water." After adding the cold water and sugar, set them in the refrigerator for forty-eight hours. They are then more like fresh fruit.

The Cherry

FOOD VALUE PER OUNCE IN CALORIES			
PRO.	FAT	CAR.	TOTAL
1.2	2.1	19.3	22.6

The cherry is a native of Asia Minor, and its name is derived from Cerassus, a town in Pontus, where it was found. Wild cherries are of two kinds, and from

these the cultivated cherries are derived. The cherry is peculiar in that it contains a minute quantity of hydrocyanic, or prussic acid, which has caused it to be prized for flavoring liquors. The same acid is contained in bitter almonds, the kernels of plum- and peach-stones, and in apple-seeds, which derive their peculiar odor from it.

To Serve

Serve raw cherries on the stem, well washed, of course. Different-colored cherries arranged together make a pretty dish. They may be stewed in a small amount of water, sweetened, and served as sauce. The sauce is better if the cherries are stoned before stewing.

The Olive

FOOD VALUE PER OUNCE IN CALORIES			
Ripe olives—			
PRO.	FAT	CAR.	TOTAL
2.0	68.4	5.0	75.4

The olive is supposed to be a native of Syria. It has figured in history from the very earliest times. We find frequent reference to it in sacred history. The olive branch is a symbol of peace. It was an olive leaf which the dove brought to Noah in the ark, after the flood, as a sign that the water was subsiding.

It has been and is cultivated for its oil, which is considered the most valuable food oil that nature produces. The fruit resembles the plum in appearance and size. When ripe, it is almost black, and has a very bitter, astringent taste. "The bitterness may be removed by soaking for some time in a weak alkaline solution, or in salt and water, or by exposing for several weeks to the action of running water. Ripe olives are, at the present time, prepared by this method in California, and may be obtained at moderate prices." Ripe olives are a very wholesome food for supplying the body with fat in an easily digestible form. Olives differ from all other

fruits in that they contain fat instead of sugar.

In cooking, olives are used, stoned and sliced or chopped, in vegetable salads and in gravies, and whole as a garnish.

The Date

FOOD VALUE PER OUNCE IN CALORIES			
PRO.	FAT	CAR.	TOTAL
2.4	7.4	91.0	100.8

The date-palm is a native of the northern part of Africa and the southwestern part of Asia. It is most extensively cultivated in Arabia. It is also cultivated in France, and to some extent in California and in the southern part of the United States. The tree grows from thirty to sixty feet high, and bears a head of leaves which are from eight to ten feet long. It thrives best where the climate is hot and sunny. The date-palm is dioecious; that is, the fruit is borne on some trees, while other trees do not bear fruit. But the flowers of the trees which bear fruit must be fertilized from the flowers of the trees which do not bear fruit. Our willow is an example of this kind of tree. The fertilization of the flowers of the date-palm is a very interesting process. When the flowers have reached the right stage of growth, a man climbs the male palm and cuts off the blossoms, then these

blossoms are fastened among the clusters of blossoms on the female tree. The wind and the bees then complete the process of fertilization. In a few days the young dates begin to appear. The root of the date-palm extends straight downward into the ground. This enables the tree to live in a dry climate because its roots go deep enough into the ground to obtain water.

The fruit is eaten both fresh and dried, and forms a staple article of diet in Egypt, Persia, and Arabia, not only for the people, but frequently for their horses, dogs, and camels. But in this country it is known mostly as a luxury. It deserves to be more extensively used.

Steamed Dates

Carefully look over and wash the dates. Put them into a steamer and steam ten or fifteen minutes. Serve hot or cold.

Stuffed Dates

Carefully look over, wash, and stone the dates. Fill the cavities with walnut meats or almonds, or with peanut butter which has been salted to taste, or with nicely seasoned cottage-cheese. The dates may then be rolled in sugar.

Date and Coconut Caramels

Mix two parts seeded dates and one part shredded coconut. Run the mixture through a nut-butter mill or a food chopper, using the finest cutter. Press into a flat cake and cut into caramels.



THE MEDICAL MISSIONARY AT WORK



AN EXTENDED TOUR IN SOUTH AFRICA

George Thomason, M. D.

[In the May number of LIFE AND HEALTH an account of a medical missionary tour in South Africa was given by a member of the party, traveling through Kafirland in a covered wagon drawn by ox-teams. We now have a report from Dr. George Thomason, superintendent of a large sanitarium at Plumstead, near Cape Town, who was the attending physician on this gospel tour, and as the doctor includes visits at other places our readers will be interested in the entire report. Although the first of his article laps a little onto the experience among the Kafirs, it brings out other features.—ED.]

IT has been a great privilege and blessing to me to tour the various provinces and visit most of the important centers of our work in this country. I have long looked forward to such an opportunity, but it has only now become possible through the association of Dr. H. J. Williams in the medical work. His help and cooperation are greatly appreciated.

The personnel of the party has already been given in LIFE AND HEALTH. The first portion of the field visited was Kafirland, by means of ox-carts, which added greatly to the interest and novelty of the trip. Everything that could contribute to the comfort and enjoyment of the journey was arranged by the thoughtful planning of Pastor W. S. Hyatt and his good wife. Ten days were spent in Kafrraria, within a radius of a few miles from Alice. The beauty of this district far exceeded our greatest expectations; it must be seen to be appreciated.

As the result of the good influence exerted by previous visits of the "little wagon" through this district, we were everywhere given a cordial welcome. Brethren Burton and Moko have done excellent work in ministering to the natives, both physically and spiritually, and

are evidently held in high regard by the natives, as well as by the white people in this district. We were not long in finding work to do. During six days of this trip, we examined, and prescribed and dispensed for, one hundred ninety-seven patients. Every evening a lantern lecture was given by some member of the party, thus making a real gospel medical missionary trip.

I believe Kafirland, with its million and a half people, will prove to be one of the most favorable fields in the world for evangelistic effort, and gospel medical missionary work will certainly be the method that will yield the greatest results. With a little further preliminary work in the districts of Kafirland, and later a central training-school for natives, combining gospel and medical missionary training with a hospital, a minister, a doctor, and nurses, there will be a magnificent work done for the glory of God and the good of humanity.

It was a great privilege to visit the Lovedale Institution, and to see one of the wonderful monuments established in Africa by that great missionary, Dr. Stewart.

It was with genuine regret that our party disbanded at Alice, and left for

various parts of the field. Pastor Porter and I next visited Bloemfontein. Mr. and Mrs. Groenewald have made a splendid beginning with their treatment-rooms in this place. Several influential persons are taking treatment, with excellent results. While at Bloemfontein I received a letter from a lady, asking me to visit her home on the outskirts of the city, and see if it would be a suitable site for a sanitarium. I found a magnificent home, which could certainly be converted into a very desirable sanitarium. I was thankful for the spirit that prompted this woman to write to me, as it shows that our work in Bloemfontein starts under auspicious circumstances. This lady had previously come in contact with our work at Plumstead. As we expected to be in Bloemfontein again at the time of the camp-meeting, we spent but a few hours there, and proceeded on our way the same evening to Johannesburg.

Here we received a most cordial welcome from Pastor Edmed and his corps of workers. It was a real treat to be connected with the mission for a few days, and to drink in the spirit of enthusiasm and consecration of these devoted workers. They are doing a grand work, and God, who is never unmindful of a labor of love, will certainly give them a rich harvest of souls. God's Spirit was greatly manifested in the services held in Johannesburg, and we were all refreshed and blessed and drawn nearer to God and to one another.

The call for medical missionary work in Johannesburg is very urgent. The needs of this field demand that a representative center be established. There are a number of locations that would make beautiful and natural sanitarium sites, and the interest in this branch of work is so great on the part of those who have come in contact with the principles

of our sanitarium work that a place could no doubt be secured on very favorable terms when we are able and ready to occupy this field, which we should all hope and pray may be very soon.

Pastor Porter and I separated at Johannesburg, and I next visited Maritzburg. I spent but a few hours there, feeling that they had Dr. Bell in that field, and needed much less from me than some other places. They have done very well at Maritzburg in paying off their indebtedness, and they will now turn their attention to much-needed improved appliances.

At Bellair I found the workers, Mr. and Mrs. Baumann and Nurse Hamilton, carrying on an excellent work. They have struggled through difficulties, and are beginning to reap fruit of their sowing. They are well situated at Bellair, but are not located ideally for patronage. The workers there are considering the advisability of moving nearer Durban.

Mr. and Mrs. Blaine, in Durban, have been working very hard to keep pace with their work. At times they have had as many as forty patients for board and treatment. Their work is creating a most favorable impression. Being there on their missionary meeting night, I had the privilege of speaking to the Durban church. From Durban I embarked on the "Saxon."

Spending a few days at East London, I looked this field over with our friends, Mr. and Mrs. Armer. These workers had come to East London a week before, and had found a place well adapted for treatment-rooms. Plans are now being developed, and very shortly our medical missionary principles will be represented in still another important center of the South African field.

The Sabbath was spent at Port Elizabeth. I spoke at the morning service at

the church. Here Brother and Sister Jubber have beautiful treatment-rooms, which are a model of neatness and good taste. Their work is showing a steady and healthy growth from week to week, and the results of treatment are most gratifying.

The treatment-rooms at Kimberley I had necessarily to omit visiting on this trip.

With the work at Plumstead making such excellent headway, and with all these other branches established and constantly growing in efficiency and influence, we feel that our cup of blessing is indeed running over, and we worship God, gratefully acknowledging his manifold blessings upon us, and reverently say, "See what God hath wrought."

MEDICAL WORK IN TROPICAL MEXICO

Carlos Fattebert, M. D.



AM working on a sugar plantation at Rascon, San Luis Potosi, Mexico. The plantation has an elevation of fifteen hundred feet above sea-level. Vegetation here keeps green all the year round. The hot months are from March to June, when the rains begin, lasting until October, although there are rains occasionally all through the year. Frost is rare, though it nipped the cane last year in January, stopping its growth.

The hacienda, or ranch, employs from three hundred fifty to seven hundred men, according to the season. There is a resident population of eight hundred. Large numbers come for from two to four weeks, and then go away. This makes it difficult to estimate the number of persons actually on the place during the year, probably twenty-five hundred.

I was here all last year, and in the twelve months gave 12,500 treatments. This number represents only the principal ailment in each case, secondary ones not being reported, although several often needed attention. Most of these cases were seen at the office, although 1,680 visits were made, including fifty trips at a distance averaging five miles. None of these figures include private work on other haciendas, of which there was considerable, as there are but two other physicians within thirty miles.

During the year there were thirty-three deaths reported by me, but there were some of which I knew nothing, as the law does not require notification.

The principal diseases treated were as follows: Malaria, 2,438; enlarged spleen, 97; dyspepsia, 324; diarrhea, 186; constipation, 309; dysentery, 132; worms, 97; bronchitis, 746; catarrh, 222; tonsillitis, 40; pneumonia, 35; otitis (mostly media), 177; toothache, 160; stomatitis, 75; skin diseases, 197; wounds and ulcers, 2,075; venereal disease, 171; pelvic disease, 81; neuralgia, 286; rheumatism, 77; vaccinations, 77.

Other diseases varied in number from one to sixty. I had four cases of tuberculosis, and five of appendicitis, one of which required operation. Operations under general anesthesia are done only in cases of absolute necessity, owing to lack of assistants and conveniences, as I have to return patients to their huts after operation. There was no case of smallpox, measles, scarlet fever, or other epidemic disease, during the year.

Anemia is common, but seems to be due mainly to malaria and malnutrition, and yields readily to good food and tonic treatments. Some believe it to be due to hookworm; but I have not found any of this parasite, though the careless habits of the people would lead one to look for it.

Obstetrical work is entirely in the hands of ignorant and untrained women. The physician is called only in case of trouble. The law does not protect physicians and registered midwives, so in many places these women reign supreme, and do much harm, as there is no disease they will not undertake to treat. They usually collect good fees for their work, too.

Each man employed here on the ranch pays one day's wages a month for medical treatment. This amounts to from thirty-one cents to \$2.50 (gold), and includes treatment for their families. When the medical department was first organized, it was necessary to treat some of the sick almost by force, as they had

no idea what a physician was for. It is easier now, and I have been able to teach many the value of the bath, fresh air, and certain foods, and how to care for themselves. This is slow work, however, and the instruction has to be repeated many times. But those who do learn teach others, who often value more the opinion of one of their kind than that of one above them.

More than twenty families here, including all of the better class and the majority of those who can read, are reading one or another of our papers. Many converse about the Bible, but few dare to read it. This is the best we can do for them at present, as the management is not friendly to evangelical work.

AUSTRALIA

Franklin Richards, M. D.

FOR many weeks our sanitarium at Wahroonga, Australia, has been filled with patients, and the outlook for continued patronage is good. The Lord is blessing in this institution, and for this the workers thank him and take courage. Both old and new patients speak kindly of the sanitarium, and many write appreciative letters. One former patient, a Sabbath-keeping sister, writes as follows:—

"I am sending a small donation for the sanitarium, with my best wishes for its future good work. May God, bless you. I am keeping well. We all have much to thank him for."

A gentleman not of our faith remarked, as he was leaving:—

"I want to thank you for your kindness. My bad knee is as sound as ever, and I am perfectly well. Of course, I know the Lord has done the healing, but you have been the instrument in his hands. I feel very thankful to you all, and shall always look back upon my

visit with feelings of gratitude and pleasure."

A Queensland judge and his wife, who have been with us for several weeks, are highly pleased with the treatment, diet, and general conduct of our health institution. During a recent consultation, the judge remarked:—

"Before coming to your institution, I had always associated vegetarianism with cabbage, turnips, and the like. I have been agreeably surprised. You have so many nice dishes, and such an abundant supply of what I call good ordinary food,—milk, cream, eggs, bread and butter, fresh vegetables, and fruits. I am also surprised at the progress I have made."

This widely known and much esteemed judge and his wife are regular and interested attendants at the daily morning song and praise service and other religious exercises. Among many other remembrances received during the holidays was one from an aged New

Zealand patient who was with us several years ago. He never fails to wish us a "Happy New-year," and on this occasion his letter runs:—

"A happy New-year to you and your staff. I suppose there are not many

there now of those I remember; but if there should be any, please let them know that I have not forgotten their kindness. I look back to the few weeks spent among you as the happiest in my life."

MEDICAL MISSIONS AT THE WORLD IN BOSTON

G. B. Starr

MEDICAL mission work had an honored place in the great World in Boston exhibition of the world mission field and work. Placed in the forefront of successful mission effort, where it rightfully belongs, is the medical missionary department, honored by such names as Dr. Livingstone of Africa, Dr. Duff of India, and scores of other physicians, accompanied by the faithful Christian nurse. To these and their

work thousands of closed doors have opened; to-day, as of yore, it is the door opener for further Christian effort; and not only in foreign lands, but in the great cities of the United States of America and of England and Europe is it needed. No work appeals so strongly, so quickly, so directly to the heart of humanity. The educated and the ignorant, the refined and the uncultured, alike see in it the gospel in action.

ARGENTINE SANITARIUM

G. B. Replogle, M. D.

THE work here is making good progress. Our patronage both inside and outside the institution, is constant; if anything, increasing. We have a daily clinic, in which operations of both major and minor classes are of common occurrence.

The wing to provide our treatment-room is nearly finished. This will add much to our facilities for giving treat-

ments. Our next great need is a dining-room, with larger kitchen facilities. Preparations are now being made to build the wing which will contain the dining-room, kitchen, parlor, operating-room, and surgical ward.

The nurses of this year's class are just taking their examinations, and are doing very well. We expect soon to start another class of about ten.





THE MOVEMENT BY MOTHERS

IN accordance with one's viewpoint, man is becoming progressively worse or progressively better. According to some there was never an age in which there was so much corruption, so much demoralization, so much misery, so much disregard of human rights as now. Never was divorce more common, vice more open, the strong more grasping and utterly heartless, the poor more hopeless and vindictive. But if that is a true picture, it represents only one side of the shield.

Never were there so many unselfish activities operating in the world. Never before have nations felt called to relieve the distress and famine of nations on opposite sides of the earth. Never before have those of large means given so liberally for movements of general uplift. Never before has there been such an attempt to make of the masses of the people free men and women. Never before have there been so many organizations for the betterment of humanity.

But there is one society before which we may well stand and lift our hats. Perhaps there are few who, if asked what has been the highest uplifting influence in his life, would not say "mother." About fourteen years ago some mothers realized that there are children who do not have the advantage of good mothers; some have no mothers, others have mothers who do not know what to do for their children; still others are hard pressed financially and can not do.

As a result of this realization, the Congress of Mothers was organized, and for fourteen years it has worked ear-

nestly for the welfare of the child. It is the principle actuating this congress that every child has a right to health, a good home, a good education, and an inspiration in right ideals.

By persistent education and agitation, and by securing adequate legislation and efficient administration of laws, this society has accomplished much good for the child, and yet it realizes that its work is just begun.

Among the urgent recommendations of the recent national congress, for which the members will work the coming year, are:—

The organization, in connection with all schools, of parent-teacher associations for child study; the instruction of children in physiology and sex hygiene by the parents, and when necessary by the school; the improvement of the probation system and juvenile court procedure; the establishment of a department of child hygiene on every board of health; the establishment of state probation commissions; the assumption of responsibility and the care of wayward and defective children by the regular schools. It was also earnestly recommended that parents, by example and precept, teach reverence for God and his divine law; that mental, domestic, and moral training be embodied in the school curriculum; that there be supervised playgrounds in all municipalities; and that the kindergarten be a recognized part of the public-school course.

There were also resolutions looking to the abolition of white slavery, of the use of cigarettes by minors, of the use of

the public drinking-cup, and of the sale of habit-forming drugs except for medical use; and others favoring the establishment of a national children's bureau, of a more thorough censorship of moving-picture shows, of a higher standard for the colored Sunday supplements, and others that might be mentioned.

It must be understood that in so condensed a report as will be necessary the various topics treated at this congress, which lasted a week, can be only briefly touched.

Thursday the topic under discussion was "Relation of the Home to Child-Welfare."

Dr. Tom A. Williams, neurologist of Washington, D. C., made an apology for bringing before the congress facts and principles which he supposed must be old to them. But it was worthy of note that his observations, resulting from a study of those who had gone astray, confirmed the results of the study of children. Children go wrong, according to Dr. Williams, and form wrong habits, because their activities are not properly directed; there is no adequate outlet for their active little minds. Especially is this so in the city flat, where often the only alternative is the street. It is the parent's duty to make the home attractive, to furnish useful and interesting employment to the child, and to be his companion. Parents can not influence the child for good except they are linked to him by feelings in common. Among the activities suggested by Dr. Williams as suitable for children were home gardening and outdoor games.

Mrs. George K. Johnson, president of the Pennsylvania Congress of Mothers, spoke on "The Father's Need for Child-Study." She urged that fathers become better acquainted with their children, and join more in their occupations. This, she said, would be the best form of relaxation for the business man, and the com-

panionship formed in early life would strengthen as the child grows older, giving the father a much greater opportunity to influence the child for good. Our school work should be directed to the preparation of boys as well as girls for the most important work of parenthood.

Edith Kingman Kern, of Washington, D. C., spoke of the work being done for the improvement of the Sunday colored supplement. In the District of Columbia forty clubs and many teachers, ministers, and mothers have protested against the colored supplement. Editors in general are averse to the present demoralizing supplement, but the people want it. When one editor attempted to purify his supplement, he immediately met with a falling off in circulation, and had to resume the objectionable features.

The attitude of the Washington workers is to let the supplement be funny and entertaining, but wholesome, though avoiding the attempt to moralize. Artists are capable of getting out high-grade work if the people want it. One paper in Washington publishes no supplement, and one—the *Star*—has been issuing a clean supplement, but it is not supported in this attempt at decency. Our campaign must be with the parents, to enable them to see the importance of doing away with these supplements which teach irreverence, trickery, disobedience, low ideals of morals and art, and which have no redeeming feature.

Mrs. J. R. Little, president of the Georgia Congress of Mothers, made an earnest plea for child-study by mothers. "Do we realize," said Mrs. Little, "that our children's questions are worth while?" It requires earnest study of the child nature to enable us so to answer their questions as to give them the greatest benefit. *Delinquency on the part of the children is due to ignorance in the home,—ignorance of the child,*

child nature and its needs. We must know the anatomy of the child, and the changes it undergoes, especially the changes and the dangers and the needs of puberty. The higher we advance in the scale of life from lower to higher animals and from savage to cultured races, the longer is the young in a dependent or formative stage, and the longer this formative or plastic stage, the greater the possibility of development. Few of us have realized what opportunities for child development are open to those who make an enthusiastic study of the child nature.

Mrs. B. F. Carroll, president of the Iowa Congress of Mothers, gave a stirring talk on "The Home's Responsibility in Preventing Immorality." Referring to the fact that some of the congress presidents object to the teaching of sex, she asked, "Do you realize the conditions that are present even in our high schools?" to which some in the audience replied in the affirmative.

Mrs. Carroll said, in part: "Is it not our duty to remedy the existing conditions? We may go from house to house and teach each mother to instruct her child at the earliest opportunity, but even such a house-to-house canvass would be met with repulse. I would rather begin with the schoolgirls of the seventh and eighth grades and teach them, so that when they become mothers, they will teach their children to be pure. It is too late to reach a large proportion of the present mothers whose minds are molded in the old way.

"We should begin very early with nature's teaching, and let the children know that all creation is reproducing by the same law, and have them understand how pure and sacred the body must be. We can not delay this teaching, for often we find the children begin impure practices very young."

One session was devoted to the con-

sideration of the general topic, "The Relation of the State to the Child," another session to "The Relation of the School to the Child," and another to "The Health of the Child."



The International Hygiene Congress

FOLLOWING somewhat closely on the International Hygiene Exhibit in Dresden, will come the Fifteenth International Congress on Hygiene and Demography, to be held in Washington, D. C., Sept. 23-28, 1912.

At no period of the earth's history has there been such a universal manifest interest in the scientific development and preservation of health as now. It is coming to be the business not only of specialists, but of associations, congresses, and of municipal, state, and national governments.

We are learning to appreciate as never before that health is the one essential fundamental requirement, without which life is scarcely worth living. Given health—sound health in the real sense of that term—and happiness and other essentials to life will come fast enough.

The United States Congress has appropriated twenty thousand dollars toward the expenses of the great health congress, and will doubtless appropriate more this year; but it will be necessary, through membership fees and otherwise, to raise at least one hundred thousand dollars in order to make the congress a success.

Hygienic congresses are no new thing in Europe. This fifteenth international congress is the first that we Americans have had the honor to house within our borders, and it is hoped that those who are interested in the success of a propaganda of hygiene will do all in their power to make this congress a credit to our nation.

The official languages of the congress

will be English, French, and German, but it is probable that nearly all the papers and discussions will be in English.

Any person engaged in the study or practise of hygiene or demography may become a member of the congress, entitled to participate in the proceedings and to receive a copy of the transactions on payment of the membership fee, five dollars.

There will be nine sections: (1) Hygienic microbiology and parasitology; (2) dietetic hygiene and hygienic physiology; (3) hygiene of infancy and childhood, and school hygiene; (4) industrial and occupational hygiene; (5) control of infectious diseases; (6) state and municipal hygiene; (7) hygiene of traffic and transportation; (8) tropical, military, and naval hygiene; (9) demography (statistics).

In connection with the congress will be held an exhibition showing the recent progress and the present condition of the public health movement in the twenty odd countries making up the congress.



Another Cause Suggested for Pellagra

A NEW theory of the causation of pellagra, connecting it with the use of maize as a food, has been recently presented in the Public Health Reports (Feb. 24, 1911), by Past Assistant Surgeon C. H. Lavinder, U. S. Public Health and Marine Hospital Service.

He reviews the works of Raubitschek which appeared in the *Vienna Clinical Weekly* in June, 1910. After making certain experiments, which, in his mind, disproved the bacterial and the toxin theories of the causation of pellagra, Raubitschek points out the fact that the pellagrous skin trouble is usually confined to the exposed surfaces of the body, and infers that either there is a reduced resistance of the surface of the entire

body, and hence exposed surfaces are unduly sensitive to the influence of light, or that under the influence of a maize diet there is developed in those parts exposed to sunlight a noxious substance, which not only produces local changes, but affects the entire organization.

This supposition seems to be borne out by the fact that skin changes usually occur at the season when field laborers are most exposed to the sun. The natural inference is that there is some relationship between a maize diet, sunlight, and pellagra.

He calls attention to an analogous condition — buckwheat poisoning — from which white or spotted animals fed on buckwheat and exposed to sunlight suffer, while dark-colored animals or animals kept in the dark escape, though they have had the same food. The buckwheat has a fat-like substance which in the body exposed to light seems to become noxious.

Reasoning that pellagra might have a similar cause, he performed a series of experiments seeming to indicate that maize, whether good or bad, contains a substance soluble in alcohol, which, fed to white animals exposed to sunlight, produces symptoms analogous to pellagra.

He does not consider that he has conclusively proved the connection between maize and pellagra, and suggests the possibility that other grains or plant-stuffs may have a similar influence. This, in his mind, would explain the fact that not infrequently pellagra occurs in those who have not eaten maize.

Dr. Lavinder refers to the fact that there are a large number of photodynamic substances, that is, fluorescent bodies, both animal and vegetable, which are harmless in the dark, but which in light, especially direct sunlight, develop toxic properties.

Poisoning from buckwheat and allied plants caused by the presence of such substances, affects animals with comparative frequency, but buckwheat poisoning in man is extremely rare.

For several weeks after the animal has ceased to eat buckwheat, the symptoms, a severe affection of the skin, with disturbance of respiration and other constitutional troubles, may return if the animal is exposed to strong sunlight. Experiments indicate that there is a toxic substance produced in the animal from some substance in the buckwheat, under the influence of sunlight.

That pellagra is a disease analogous to this buckwheat disease in animals, but caused principally by some photodynamic substance in corn and possibly in other grains, is suggested by Raubitschek's experiments, but can not be said to be proved.

The Italians, who have for many years connected pellagra with the use of corn as a food, regard white corn as far more likely to produce the disease than

yellow corn, largely owing to the fact that the yellow varieties are less likely to spoil.

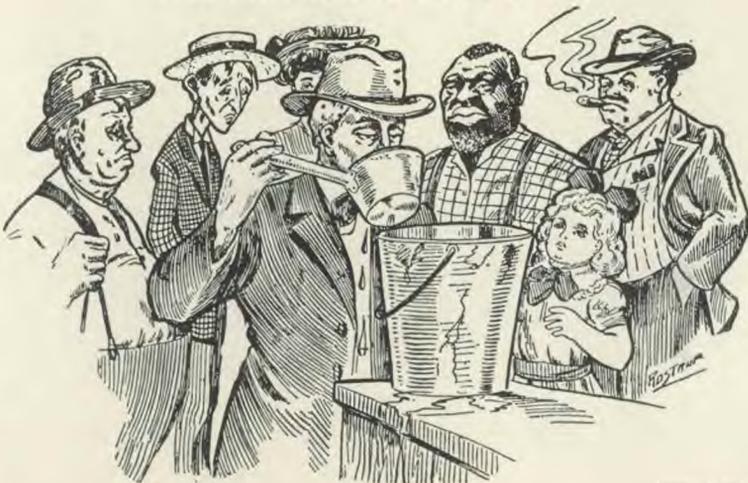
In *Public Health Reports*, May 5, is a brief account of a series of experiments continuing for a period of two months, in order to determine whether animals which have been fed on maize and kept in diffuse sunlight will develop pellagra-like symptoms.

The corn used was a fairly good quality of yellow corn, given for a few days uncooked, but afterward given cooked in the form of cakes.

There were white animals and dark animals. Some white and some dark were given the corn diet and exposed to diffuse sunlight. Other animals, both dark and white, were fed similarly, that is, part on corn, and part without corn, but were kept in the dark.

The experiments failed to show any appreciable effect, from either the corn or the sunlight or from the combination of the two, in producing pellagrous symptoms.

THE COMMON DRINKING CUP



Iowa Health Bulletin

Beware of the public dipper and the public drinking cup. They carry the germs of consumption and of other diseases.

AS WE SEE IT

New Theory of Ventilation

LEONARD HILL, an eminent physiologist, as a result of careful investigation presents a theory of ventilation that is, to say the least, revolutionary. For instance, to quote the London letter in the *Journal of the American Medical Association*, April 8,—

"It does not matter if there is one per cent more of carbon dioxide and one per cent less of oxygen. In the worst ventilated rooms there is not one per cent less of oxygen. The only effect of an excess of carbon dioxide is to make one breathe a little more deeply. A much higher amount has to be attained to have any toxic effect. As to organic impurities derived from respiration there is no physiologic evidence of their toxicity, or that they are of any importance except as an indication of the number of bacteria in air."

The experiments recounted by Hill are astounding. For instance, eight students were shut into an air-tight space of three cubic meters' capacity, almost packed in like sardines. Joking and jolly as they went in, they were in a short time quiet, with congested faces. By means of electric fans within the enclosure the air was stirred, and the effect was like magic. They immediately felt comfortable. When the fans stopped, they were as uncomfortable as ever.

In one case a man was confined and made to breathe through a substance which removed all the carbon dioxide, yet he had all the symptoms of suffocation when the humidity arose to eighty-five per cent. The fans gave relief. Remember there was no outside air, it was simply the stirring of the air in the air-tight enclosure.

Again, a lot of carbon dioxide was ad-

mitted into the chamber, raising it to two per cent without producing any ill effects whatever. So Mr. Hill asserts that all the discomfort from breathing air in a confined space is due to heat and moisture, and not to carbon dioxide.

He believes that the open-air treatment is not so much a matter of fresh air as of cooling the body by the circulation of air, which makes us eat more and live a more active life.

One hardly knows how to take this new theory of ventilation, for all teaching in the past, or practically all, has been to the effect that the amount of carbon dioxide in the air is an important matter, especially when this carbon dioxide is accompanied by organic matter. If it serves the same purpose to have an electric fan in the room as to open the windows, we ought to know it; but it seems strange that the open-air schools in the middle of winter kept down to forty degrees or lower, and especially those which are strictly outdoor schools, have such a beneficial effect on the patients. If Mr. Hill's contention is correct, it ought to be as well to have no heat in the rooms and apply electric fans in midwinter, instead of opening the windows.

We have never been satisfied with the present theories of ventilation, and they have never seemed to us to be on a strictly scientific foundation, but the practical effects of fresh air in the treatment of certain diseases are marked, and it is difficult to understand how this could be so on Mr. Hill's theory. We shall wait patiently for the confirmation of his theory before discontinuing our older beliefs.

International Health Bodies THOUGH America has not before been favored with a visit of the International Hygiene Congress, it has some international health bodies of its own.

In the first place, there is the American Public Health Association, now more than a quarter of a century old, representing the United States, Canada, Mexico, and Cuba.

This body and its members have been connected with some of the most important hygienic advances of the present generation.

Another important sanitary movement is the series of conferences, of which there have been four, representing the American republics. The last of these conferences was held at San Jose, Costa Rica, December, 1909, and January, 1910.

These conferences have in view the securing of national and international legislation for the prevention of disease. They do not undertake to consider matters of personal hygiene, as do the American Public Health Association and the International Hygiene Congress.

The sanitary conferences are composed largely or entirely of representative medical men, representing the highest grade of achievement in sanitary lines in their respective countries.

The transactions of the Fourth International Sanitary Conference of the American Republic have been recently published by the Pan-American Union, Washington, D. C.

✧

Medical Practise in the Future SEVERAL medical journals have recently commented on the gloomy outlook for the doctors in coming years. Physicians are increasing in numbers. Disease is becoming more scarce. People live longer, and are learning to take care of themselves. Increase of physicians,

dispensaries, and hospitals, and decrease of work are lowering the income to the danger-point.

An effort having been made to raise the standard for medical degrees, and thus limit the output, Dr. T. D. Crothers in the *New York Medical Journal* states his belief that the raising of entrance requirements and the more thorough preparation in laboratory work do not necessarily make the better physician. The opposite is often the case. Dr. Crothers thinks the medical man of the future will be a medical adviser in every sense of the word,—a man prepared to know the heredity and the habits of the individual and the family so thoroughly as to prevent most of the diseases. He says:—

“Men in the profession are sadly failing because their motives are not above that of trade and personal gain. They should be growing scholars, continuously studying facts and their meanings. . . . Wherever physicians of that kind appear, the quacks move out, and the 'pathies disappear.'”

Dr. Crothers believes that the onward march of progress will eliminate the “unfit” healers inside and outside of the profession, and leave a body of men who will in every sense be an honor to the profession of healing.

✧

Bakerism IN a book on “England and the English” there appears this amusing sentence in a description of a Christian Science meeting which the author was attending: “It was with a start of surprise that I heard among these sickless ones coughing and hawking, indicating that they had failed to Bakerize the then-prevalent epidemic of influenza.” We must thank the author for adding another needed word to our overloaded language; for with our hundreds of thousands of words we had none to fitly describe the process by which the Eddyite exorcises disease.

Why he did not apply the term "Eddyize" to the form of enchantment given vogue by Mrs. Mary Baker Eddy may not at first be apparent, but a little reflection suggests a relationship. If "Fletcherize" means to reduce food to the intangible, why not "Bakerize," to reduce disease to the intangible? There are alliterative possibilities in both words: we may Fletcherize our food and Bakerize our backache.

What a splendid addition to our modern language! In place of asking, when meeting a friend, "How are you?" or "How do you do?" or some other ridiculous question, we may substitute the euphonistic query, "Have you Bakerized this morning?" It is rhythmical; it is suggestive of health; it is uplifting; it of itself possesses healing virtue; and like Portia's "mercy," it is "twice blessed," blessing both the questioner and the questionee.

How crude have been the healing processes of mankind as compared with Bakerism! and how inadequate as compared with the simple denial of disease! As says the mortal poet(aster):—

"I Bakerized my headache;
I Bakerized my cough;
And when I got a jag on,
I Bakerized it off!"

Let us give all due credit to Mr. Fletcher and Mrs. Eddy, but let us not ungratefully forget the magnificent minds that have handed down to us and posterity this brace of words so simple, so significant, so sublime—Fletcherize and Bakerize!

✽

Intelligent Dietetics

THE mistake is often made of supposing that food values run parallel with prices. For years the Department of Agriculture, in the interest of economy and good living among the laboring classes, has

attempted to show the fallacy of this belief.

Recently the *Bulletin of the Chicago School of Sanitary Instruction* has very tersely stated the fact for its readers:—

"The cost of an article of food is no true guide as to its real nutritive value. For example, a glass of pure milk, with bread and butter, an egg, and a dish of fruit, costing, all told, twenty-five cents, is a much better meal for the average person than a big sirloin steak, which with 'trimmings' will cost five times as much. The trouble with many people is they are willing to pay high prices for food that, while it tickles or pleases their palates, is yet of no more value than that costing much less."

Expensive living is not necessarily good living, and economical living is not necessarily starvation or impoverished living. By intelligent thought one can live sumptuously and bountifully and healthfully on a comparatively small outlay. It is worth the thought.

✽

Grading Milk

THE New York department of health has adopted resolutions for the grading of milk. Grade A, for infants and children, includes certified milk, guaranteed milk, and milk Pasteurized under certain established regulations. It must be sold in bottles. Grade B, for adults, includes grade A and Pasteurized milk produced under the department regulations, which can be sold in bottles or other containers, but not dipped. Grade C, for cooking, any milk complying with the regulations of the department, but not complying with the regulations for A and B. Only grade A is recommended for feeding to children, and only A and B for drinking purposes for adults. It is to be hoped that by some similar system of grading, all cities will soon be in a position where they can guarantee the purchaser as to the kind of milk he is obtaining.

CURRENT COMMENT



THE AFTERMATH OF THE HOLIDAY

IT is within the experience of a large proportion of those who take holidays, that when the vacation is over the holiday-maker feels none of that exhilaration, none of that increase of energy, which he expected, and had a right to look for, as the outcome of his freedom from work.

In place of these pleasant sensations he feels exhausted, disinclined to exercise, and lacking in energy; in fact, very much as he felt before his holiday. In some cases the change is definitely for the worse: the subject feels less apt for work, less capable of undertaking any exercise mentally or bodily,—in a comprehensive and popular word, he is less “fit,”—than he was before he left off work. Such a result is frequently seen—so frequently that it can not be regarded as a casual occurrence, but rather as a natural result that might have been predicted from the conditions under which the holiday is often taken. . . .

There is a real necessity for rest among all classes whose labor, when they are at work, is not of the intermittent sort. Why, then, do so many holiday-makers fail to derive that benefit from their holidays which they might reasonably expect? The answer is obvious. The holiday, as too often taken nowadays, is not a rest at all. The man who has been chained to a desk for eleven months of the year, and who has taken no more exercise than suffices to carry him to his office day by day, suddenly commences a violent, outdoor exercise; he walks or boats or cycles for many hours every day; he travels by

train immense distances, remaining cramped in a crowded and ill-ventilated railway coach for long spells at a time. He climbs mountains, who has, for the rest of the year, had no more practise in climbing than is implied in negotiating the stairs of his house or the steps of his railway station. When a man makes such a sudden change in his life, and exercises himself so intensely with so little interval for the transition, can there be any room for surprise that this mode of holiday-making does not send him back refreshed?

We would not for a moment suggest that exercise, even violent exercise, is in itself harmful at times for a sedentary man. It has been well said that the best rest is change of occupation, and this opinion we indorse fully. Therefore, he does well who, having been accustomed to little exercise during the working months of the year, spends his holiday in outdoor exercise, but he only too often loses the essential point. All changes should be gradual. The body must have time to adapt itself to changed conditions, and a few days will not be misspent if they are devoted to a gradual increase in the amount of exercise undergone day by day. The amount of exercise may increase in quantity until it becomes really great; and if this precaution is taken, the result will be far superior to that which would have followed if no preparation had been made, and not only will the sensation of well-being be more clearly marked, but the physical exercise which can be accomplished will be markedly greater. . . .

It is equally important that the return to sedentary life shall be gradual also; then the reaction which often results from the holiday will not occur. . . . The natural tendency is to utilize every possible moment of the holiday, and to such an extent is this carried that often the arrival home is timed for the morning of recommencement of work. Far better is it to allow a day or two at home before work begins again.

Long journeys must be taken with discretion. Protracted sitting in railway carriages is actually mischievous in many cases, and especially is it harmful to let a long and wearisome journey precede the return to work. Long journeys, moreover, generally mean great expense, and we are certain that anxiety as to money actually interferes with the pleasures of many holidays. The man who is tormented with the necessity of strict economy while he has placed himself in an environment where that strict economy can not be practised, is not extracting value from leaving off work. He is only exchanging one set of worries for another.—*London Lancet*.



The Refrigerator Without Ice

IF there is no refrigerator in the home, and ice can not be afforded, milk can be kept cool for twenty-four hours in a home-constructed "cooler," which will cost only twenty-five or thirty cents, and will last the entire season. To make such a cooler buy a butter tub with lid at the grocer's. It should cost ten cents. Purchase ten cents' worth of sawdust (or your butcher or grocer may be willing to give you the small amount required). Make a bag of denim or other material of a size that will fit the top of the tub closely, and fill this with sufficient sawdust to make a cushion about an inch thick. Sew up the open end of the pillow, so that no sawdust can leak

out. Fill the tub with sawdust to within an inch of the top. As soon as the milk arrives in the morning, sink the bottle into the center of the sawdust, leaving some sawdust underneath, and the rim of the bottle above, so that it may be pulled forth easily. Place the sawdust cushion on top and shut the lid on tightly.

Sawdust is a non-conductor of heat, and will not allow the cold of the bottle to escape or the heat of the atmosphere to penetrate to it. However, whenever the milk is used, the bottle should be drawn forth, the amount desired poured out, and the bottle returned at once to the sawdust. Sawdust will not cool milk which has been allowed to get warm in the air.

When one or two cents' worth of ice can be afforded, a good little refrigerator can be constructed with the butter tub and a lard can. Place a thick layer of the sawdust on the bottom of the tub, then put in the lard can and pack sawdust all around it, as high up as the can lid. A little piece of ice, wrapped in newspaper and placed in the bottom of the can, will keep all day, if the can is covered with the sawdust cushion and the lid of the tub is kept tight. Butter and milk can be placed in the can with the ice, and kept good and cold.—*The Fresh Air Magazine*.



To Keep Free From Flies

KILL the first fly." Considering that one female fly can bring into being several millions of the pest in one summer, it would seem a good job to kill that first one.

If the first and its immediate followers are let live and the house becomes overrun, there are several suggestions for ridding the rooms of them. One course, taken from the South, where mosquitoes are a public menace, is to

burn pyrethrum powder in a room. This benumbs the flies, and they fall to the floor and can be swept out. The trouble with this is that pyrethrum powder is not sold at many drug-stores in the North.

From the American Civic Association at Washington comes this hint: Drop twenty drops of carbolic acid on a hot iron; the vapor kills the flies. Sticky fly-paper has both good and bad qualities. It does trap some flies. But those that get their feet coated with the adhesive matter are likely to return to their filth heaps prepared to carry back to the house added quantities of disease-bearing matter sticking to their feet. Fly traps do their part, but Dr. C. St. Clair Drake, of the Chicago health department, says the insects are cautious.

"The flies soon learn to be wary of traps," Dr. Drake says. "Those that have had any experience with them can not be caught, and shortly a tribe of flies too shrewd to be trapped might be evolved. The insects also avoid the sticky fly-paper after one experience. They are crafty little fellows, and the instinct of life is as strong as in superior beings."

Various poisons are suggested, the best of which, the doctors say, is formalin in water. Put a spoonful of the chemical into half a cup of water and leave it exposed in the room, and the flies will do the rest.

In passing, it is worthy of note that this insect, with its love for odors that offend the nostrils of man, has a strong aversion for scents which the human likes. This has given a hint for still another prevention, of minor worth. Aromatic plants in rooms and at windows act as repulsives. Such plants, then, have a double value in sick-rooms: they are pleasing to the sufferer and discourage the fly that, with evil purpose, looks through the open window.—*Technical World Magazine.*

The Public Drinking-Cup

DURING the past two weeks the laboratory has been engaged in the examination of drinking-cups collected in various places in the city of Chicago. In view of the fact that this problem has been handled by numerous competent bacteriologists and that the consensus of opinion among scientific workers has condemned the public drinking-cup as dangerous to health, it seems almost superfluous at this time to go further into the subject. Yet, as the problem is now of considerable local interest with pending legislation, it seemed advisable that the investigation here reported be undertaken.

Twenty cups in all were examined, of which nine were from schools, three from down-town hotels, five from railroad depots, two from department stores, and one from a children's home. A summary of the bacterial results is as follows: Pavement-epithelium, the cells which form the lining of the mouth, were found adhering to the lip of the cup in eighteen instances. Diphtheria-like organisms were found in two instances. One of these organisms proved to be true diphtheria and caused the death of a guinea-pig in seventy-two hours after subcutaneous inoculation. Influenza bacilli, the cause of la grippe, were present in two cups; pneumococci were demonstrated six times; streptococci, five times; staphylococci, fifteen times, and micrococci catarrhalis, once. Pus was found upon the rim of a drinking-glass taken from one of the large down-town hotels.

The fact that large numbers of mouth organisms and portions of mucous membrane from the lips and mouth were present in numerous instances leads us to the conclusion that any of the diseases in which the mouth secretions are infectious may be transmitted through the medium of the drinking-cup. These

would include diphtheria, tuberculosis, syphilis, scarlet fever, measles, la grippe, and ordinary colds.—*State of Chicago's Health.*

✧

Cautions to Campers

THOSE who anticipate a camping trip should acquaint themselves with the principles which underlie camp sanitation. Great care must be taken to see that human excreta, kitchen slops, and dry garbage are properly disposed of. A reiteration of advice on this subject, which has already appeared in the *Bulletin*, may not be out of place.

For the disposal of human excreta "the 'dry-earth' closet is the safest and often the most convenient method. It consists of a seat so arranged that a bucket may be placed under it, and a powdered-earth tank placed above it with a slide-door to permit dry earth to fall into the bucket." Old mother earth is one of our best sanitarians. The soil bacteria which dry earth contains break up the bowel discharges into their inorganic constituents, and also absorb the moisture and odors. Each day the bucket contents may be spaded into the ground, where these bacteria continue the process of disintegration. Kitchen refuse if not handled properly is a source of attracting and breeding innumerable flies and mosquitoes. A most satisfactory method is to throw this refuse each day into a pit, which has been dug for the purpose. The pit should be covered with cheese-cloth, and loose earth and pine-needles thrown in daily. The coarser leavings from the table should be burned in the camp-fire. The destruc-

tion by fire of dry garbage will be found to be a most efficient method of disposal.—*Bulletin California State Board of Health.*

✧

Defects of Memory in Inebriety

THE excessive or continuous drinker shows faults of the senses and uncertainty of memory. The question is asked if memory is more seriously affected by the use of alcohol than the senses. Experience indicates that it is. Often moderate drinkers will assert that they are in no way different, and that no faculty is weakened by the use of alcohol, and yet when examined carefully, or tested by the usual card methods, their percentage of errors will be very high.

In the ordinary accustomed work they may exhibit few if any defects, but let the mind be turned to some matters foreign to their every-day thought, and this defect becomes apparent.

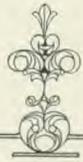
A physician who drinks beer regularly is unable to follow any new range of ideas and retain the facts. The impressions made at the time seem to be very transient, and quickly disappear.

Two men, one an abstainer and the other a moderate drinker, were sent on a commission to examine and report on the watershed of a large lake. The abstainer saw many things, and gave a minute, accurate report. The moderate drinker's report was very imperfect, omitted important facts, and failed to contain several data that were necessary. Both wrote the reports the day after the examination. The difference was the fault of memory.—*Editorial in Journal of Inebriety, winter of 1910.*





ABSTRACTS



MODERN SANITATION

IN order fully to understand what is meant by modern sanitation it is necessary to understand earlier sanitary methods. Throughout the ages cleanliness has been regarded as an agent in the prevention of disease, but connected with this were worthless practises which have given way to more reasonable measures. Even as late as the eighteenth century, houses were burned and vessels sunk to destroy contagion. Such were some of the means used to prevent the spread of cholera and the plague to Europe.

In 1880, with the work of Pasteur and Koch showing the influence of germs on the causation of disease, sanitation was placed on a scientific basis. We know now the specific cause of cholera, typhoid, diphtheria, plague, tuberculosis, and other infectious diseases. A knowledge of these organisms gives us means that are quite sure to be successful in dealing with outbreaks of infectious disease.

The next point was to determine the means of transmission of these germs. In the past no belief has been more generally accepted than that infectious diseases are transmitted by clothing,—not of the sick only, but also of the well,—baggage, rags, cargoes, money, etc. This belief, which has come down from the earliest times, is known as the fomites (fo-mi-tēs) theory. It is not supported by scientific proof, and practical sanitarians have slowly but surely obtained evi-

dence that it is fallacious, and that except in rare instances infection is carried directly from one person to another, by food and drink and by means of insects. We also know that mild unrecognized cases constitute a most common and dangerous means of transmission. Moreover, apparently well persons may act as “carriers” of the living germ for long periods.

In modern times perhaps no other diseases have caused greater loss of life than malaria and yellow fever. Malaria was, until recently, supposed to be contracted from the miasma of swamps, and yellow fever by fomites. To-day we know that the only relation swamps have to malaria is in furnishing breeding-places for mosquitoes, and that yellow fever is not transmitted by clothing, bedding, etc., of patients, or even by the discharges of patients, but by a variety of the mosquito. In yellow fever it is the *stegomyia*, in malaria the *anopheles*. Plague, formerly supposed to be transmitted by clothing, etc., is now known to be transmitted chiefly by infected rats, through the medium of their fleas. And evidence has accumulated that fomites have little to do with the transmission of the disease.

No belief has contributed more to the extension of infectious disease than the fomites theory, for it has been employed to explain outbreaks of disease when the true cause might have been ascertained if recourse had not been had to this theory. I am not advancing theory, but

am giving the results of careful investigation. A careful inquiry at various banks and at the Treasury Department in Washington shows that those who are constantly handling old, filthy, offensive money forwarded for destruction are no more subject to infectious disease than those in other occupations. Those who are timid about handling money or the strap hangers of street-cars should know that though these contain many germs, they are usually of a harmless character.

The mosquito not only transmits malaria and yellow fever, but other diseases as well, and there are other insects which transmit disease.

Regarding the mosquito, the lesson we are to learn is that we are not to exterminate it merely on account of the annoyance, but as a means of self-protection; and we should further realize from the results obtained in Cuba and Panama that its extermination is entirely practicable.

Of other means of infection water and milk are perhaps the most important. It is through water that the cholera infection from the Orient is spread to civilized countries, and around the world.

Visiting a Central American town, I noticed that the chief source of drinking-water was a large well, from which water was being drawn in pails and other receptacles. The buildings were of modern style; and on expressing surprise at such a primitive water-supply which could be easily infected, I was told that the government had appropriated quite a large sum of money for a modern water-supply, but the inhabitants, preferring a new opera-house, had secured the transfer of the appropriation for this purpose. This may appear to you a relic of the middle ages, but we have the same condition. Expensive buildings, speedways, parks, available as a rule for only

a part of the population, are constantly being constructed, when perhaps the water-supply of the place is a disgrace, because of insufficient appropriation.

Evidence of contaminated milk-supplies is constantly before us, but not often are they effectively dealt with. This would not be the case if there were public demand for action.

Knowledge of the true means of infection, with the rejection of the fomite theory, has reduced disinfection to narrow limits. Now it is confined largely to treatment of discharges and material in the sick department. Even here disinfection of clothing is far less important than destruction of the discharges of the patient.

Disinfection should be performed under the direction of the physician. Household disinfection — saucers of carbolic acid under the bed, and the like — are worthless.

Prevention is the key-note of modern sanitation. When proper sanitary methods are enforced, any outbreak can be successfully controlled. But in order to be successful, disinfection and other sanitary precautions must be in the hands of competent medical officers. Unfortunately this fact is not understood by the public, and often the protection of the public health is in the hands of laymen or of medical men who are not trained in the subject.

It is imperative that each community have proper water- and milk-supplies, and that it have means for isolating and treating infectious diseases. When the public takes active interest in matters pertaining to the public health, the value of modern sanitation will be fully realized.—*Alvah H. Doty, M. D., Health Officer of the Port of New York. Paper read before the Association of Life Insurance Presidents, Chicago, December, 1910.*

Reeducation in Nervous Troubles

REEDUCATION implies the possession of an education which is unsatisfactory. The more closely we study nervous people, the more surely are we impelled to the conclusion that their acute suffering and chronic misery, which go by the name of nervousness, are largely traceable to faulty education, taking education in its broadest sense. Every bit of experience, even that seemingly most insignificant, educates for good or ill, depending upon our reaction to it. This is why the boy is father to the man.

Our beliefs and our conduct are growths, and it is in redirecting this growth that psychotherapy finds its highest usefulness. If bad education, whose outward manifestation is sometimes called nervous disease, has led to abnormalities of thought, conduct, and feeling, right education may at least help to restore some measure of harmony. To remove the present conflict and, more important, to prevent future conflicts is the work of psychotherapy. Prevention should be the watchword.

The vast majority of people are striving to bring their lives to some sort of successful issue. These will welcome psychotherapy, or reeducation, because they wish to escape from the entanglement resulting from their ignorance or fault or misfortune. Only such as really desire relief can be permanently benefited. Cooperation on the part of the patient is the first essential to a successful cure. Patients come to us for cure, and are surprised when we reply that the cure lies within themselves. All cases are not amenable to the methods of reeducation.

The physician has to deal with two distinct classes of phenomena; the patients' symptoms, and the interpretation

the patients place upon them. And doubtless the actual discomforts, great as they are, cause less suffering than the meanings which they think these pains convey.

Fear and introspection are the evil geniuses of nervous people. It is not the loss of memory itself, but the approaching insanity which they believe it to announce, that they dread; not the pain in the back, but the supposed Bright's disease; not the numbness in the legs, but the supposed locomotor ataxia; not the indigestion, but the supposed cancer. It is in the case of such fears and a thousand similar that reeducation accomplishes best results. A curious fact is that the average patient will not willingly disclose these fears. Sometimes it is only obtained by the physician after persistent effort.

When these fears have been discovered and removed, we cross the threshold into the patient's personality, and unearth many surprising things. Especially we discover that the patient is not nervous for the fun of the thing. We see that the headaches, insomnia, and what-not are but the smoke pointing to a flame, still blazing, or smouldering among its ashes. Something has gone amiss: poverty, evil habits with their results, disappointed ambitions, shattered ideals, or disasters from sex relation,—the result in any case is depression and weariness of spirit.

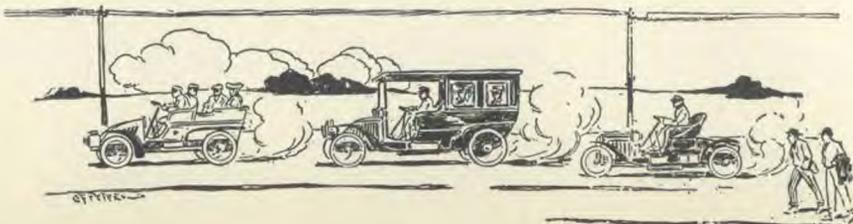
To say, "Don't worry," "Cheer up," and the like, does little or no good. The patient knows he should not worry. What he needs is a new philosophy of life, a new outlook, a new way of looking upon his failures and disappointments with composure. This is the work of the physician who attempts to relieve by reeducation.—*John E. Donley, M. D., Journal of Abnormal Psychology.*

Noise and the Cult of the Vulgar

WHILE this is without doubt the age of the greatest luxury this country has ever known, it is also an age of vulgarity. We allow agents of the news companies to annoy us repeatedly during every railroad journey with loud recommendations of their wares. We encourage our children in boisterous conduct in public places. We allow stamping, whistling, shouting, jostling crowds of schoolboys to crush through our public conveyances as if they were on the football field. We especially cherish the tradition that the college student shall be noisy, slangy, and vulgar. Thus we contribute to the cult of the vulgar.

Several years ago there appeared in a New York magazine an article on "The City Beautiful." Suggestions were made that certain buildings be demolished to create small parks; that harmonious architecture replace the random types that disfigure the finest avenues of the metropolis; that public buildings be altered in order that proper ornament and correct taste in construction be taught the children and the wayfarer. But who raised his voice or used his pen in those days in advocacy of "The City Comfortable and Habitable"? Who before the organization of this society secured any mitigation of the useless and unnecessary noise of our great cities? The injury to nervous people and to ill people can not be stated in the form of liquidated damages, but all physicians recognize and deplore the reduction of general resistive power, the nerve waste, the early general

fatigue, the incentive to the use of stimulants, the debilitating and wrecking influences resulting from the din of a city in proportion to the swiftness of its pace. The suffering of a nervous, sleepless patient from a tolling bell, a clanging street-car gong, a thundering truck loose in every joint, is not only cruel, but absolutely unnecessary. There is no personal right to produce noise carelessly or wilfully, and such action should constitute a misdemeanor punishable by the law, and arrests should be frequent, although discriminating, till the abuse is remedied. Those who can not control themselves must be controlled by others. One of the small factors which unite with others of magnitude to produce insanity, in contributing to the general stress and strain of city life, is undoubtedly the wear and tear of unnecessary noise. Therefore, in the campaign, already begun, for the prevention of insanity, we attack not only the greater causes,—alcohol, which produces thirty per cent of our male insane; syphilis, which produces about fifteen per cent of our insane population, including most of the general paretics; drugs, such as chloral, morphin, and cocain,—but also the lesser yet important agency, stress and strain, resulting in part from noise. —*Synopsis of address before the Society for the Suppression of Unnecessary Noise, at its fourth annual meeting, at the Ansonia Hotel, New York City, 8 P. M., Feb. 14, 1911, by Dr. Albert Warren Ferris, President, N. Y. State Commission in Lunacy.*



SOME BOOKS

What to Eat and Why, by G. Carroll Smith, M. D., of Boston, Mass. Octavo, 310 pages. Published by W. B. Saunders Company, Philadelphia and London, 1911. Cloth, \$2.50 net.

This volume makes no attempt to cover the entire subject of dietetics. The aim is rather to place before the physician a book giving working directions for the dietetic treatment of various disorders, with the principles underlying the same, in order that the ordinary physician may no longer be under the necessity, except in rare instances, of sending his patients to the diet specialist.

The author has not overrated the importance of his topic when he says: "The food problem, in chronic disease, is now considered much more important than all the other factors combined."

He, however, recognizes the fact that "good air, favorable climate, sunshine, healthful occupation, congenial companionship, good thinking (mental and moral), refreshing sleep, proper exercise, sufficient relaxation, rest and amusement, are required to relieve distressing symptoms and to secure the best results from the proper diet. Very few drugs are necessary."

We can not help feeling, however, that he places too much emphasis on flesh foods; and his attitude toward the administration of alcohol—considering the recent work showing that as good results are obtained without alcohol as with it, if not better, and considering that some patients can trace their downfall to an alcoholic prescription—seems to us decidedly reactionary; and while we appreciate the painstaking and conscientious work of the author and the excellence of the book in general, we can not recommend it without reservation.

We must take serious exception to such expressions as that on page 127 where he says that in certain conditions "it is pre-eminently necessary to give alcohol." He recommends it as "a rapidly oxidized food," and after thirty years' experience desires

"to go on record as a believer in the proper use of alcohol in pneumonia." In other words, he had his training back in the days when alcohol was given freely for almost everything, and he has not absorbed the newer teaching.

Health Hints, by E. R. Pritchard, secretary of the Chicago department of health. Published by the Reilly & Britton Co., Chicago. Cloth, 153 pages, 50 cents net.

This admirable little book, written by a man of large experience, gives information, in plain, simple language, on how to avoid needless sickness.

It is a book that can be slipped into the coat pocket and read at odd moments,—and wherever one opens, an interest is immediately awakened,—or it can be read through by course. Even those who have given some attention to hygiene and sanitary science will find it interesting and profitable to refresh their minds by means of this little volume.

Busy mothers who have no time to devote to a study of more pretentious works might by means of this book prevent sickness, and perhaps death, among the little ones.

Tuberculosis as a Disease of the Masses; and How to Combat It, international prize essay, by S. Adolphus Knopf, M. D. Seventh American edition, thoroughly revised and greatly enlarged. The Survey, 105 East Twenty-second St., New York. Post-paid, paper, 25 cents; cloth, 50 cents. Special rates by the quantity.

Very little need be said regarding this volume, which has been found so useful that it has been translated into more than twenty languages, save to state that Dr. Knopf has in this edition made many additions, in both the text and the illustrations, and has brought the subject up to date.

On account of its cheapness and its small size, and its great value as a popular work on tuberculosis, this book should be spread broadcast among the tuberculous and their families, who need just such information.



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

Pearson's Magazine

If your children eat candy or ice-cream or drink soda-water, you should read "Fake Sweets and Soft Drinks to Be Dodged."* Some sweets are wholesome; cheap sweets, the kind children buy with their pennies, are usually bad—or worse. Mary and Lewis Theiss tell an astounding story, backed up by the findings of food inspectors, chemists, and health officers regarding the harmfulness of many of the articles eaten by children. The intention is not to discourage the use of sweets, but to urge that parents have an oversight of the purchases of their children, at least until they have learned to distinguish between bulk and real value. Governor Hadley, of Missouri, who thinks the farm holds great opportunity for city people, has, in "Farm Opportunity for City Poor,"* given an account of the work being done in Missouri and other Western States to make successful farmers of those who desire to leave the cities. The plan outlined takes into consideration the necessity of educating the city man in successful farm methods, and of socializing the farm.

Good Housekeeping Magazine

"Hello, is that you, doctor?—Doctor I have a headache. What shall I take for it?—Yes; please send me over something, for it is very bad." "In this way," says Dr. Richard Cabot in "The Insidious Drug Habit in the Home,"* "many a physician is lured into complicity for the beginning of a drug habit." Dr. Cabot has some censure for the physicians who thus yield to the entreaties of patients, and more for druggists who constantly sell habit-forming drugs to unwary customers. The article explains the harmful-

ness of these drugs and their uselessness for the purpose intended, and gives instruction which should encourage and help many unfortunate addicts to free themselves from their entanglement. Dr. Thomas L. Stedman, editor of *Medical Record*, has an article on "Health Exhaustion and Sunstroke," giving relief measures.

New Idea Woman's Magazine

"Camping in a Street-Car,"* by Helen Christine Bennett, tells how girls can get an outdoor vacation, full of vigor and health, for a minimum of cost. This was accomplished by establishing a camp near New York, which consists of a row of discarded horse-cars. Miss Bennett describes quaintly and minutely the domestic economy of the scheme, and gives a vivid word-picture of the free and easy life the girls lead. Louise Eberle relates how one woman gave herself and her family a happy, healthful summer by "Keeping Boarders on a House-Boat."* It sounds like a risky venture and a strenuous undertaking, but it proved to be the happiest of vacations.

"Carlotta's Dinners,"* by Ruth Curran, offers some novelties for those interested in hygienic and attractive cookery.

In "An Outdoor Dining-Room," by Bertha Bellows Streeter, some novel ideas for keeping cool in the summer are suggested.

The whole magazine is full of summer suggestions for making outdoor life possible.

World's Work

"If any one thing is more essential to health than another, it is joy itself, including the joy of eating—what Tennyson has miscalled 'that wretched business of meat and drink.'" So writes Herbert W. Fisher in "Making Life Worth While—Eating for Pleasure."* But pleasure must be coupled with reason in order to be a safe companion for a reasoning creature. The article considers the significance of

*The articles designated by the asterisk have been read by the editor of LIFE AND HEALTH.

the great variety of foods, considers the ordinary classification of foods, protests against the prevalent excess of eating, especially of proteids, and suggests the necessity of some more subtle guide than reason in discriminating between the various proteids, or the various carbohydrates; and this suggests the great value of our mentor *taste*, which when properly utilized, after the manner of Fletcher, is an infallible guide to the particular food needed at any one time by the system. And when the appetite is in doubt, when there is not a craving for some particular food, it is better not to eat. The article is an excellent brief exposition of Mr. Fletcher's teachings.

Country Life in America

The July 1st number of *Country Life in America* will contain two articles on the general subject of finding health in outdoor life close to the soil. "The Joys of Being a Farmer," by A. P. Hitchcock, includes the joy of abounding health which he elaborates in an interesting manner. The eighth article in the series "Cutting Loose From the City," is by Ray McIntyre King. It tells how a ten-acre fruit and poultry farm in California solved the problem for a professional man of small means, bankrupt in health, and with a growing family to support.

Plague in Washington.—It is reported that there have been a few deaths and a number of cases of plague in Spokane, Wash.

International Medical Congress.—The Seventeenth International Congress of Medicine will be held in London in the summer of 1913.

Cost of a Coryza.—The Boston Chamber of Commerce, as the result of an investigation, has concluded that each cold costs the community about forty-five dollars in loss of wages, doctor's bill, etc.

Legal Control of Venereal Disease.—The American Society of Sanitary and Moral Prophylaxis has urged that venereal disease be made reportable, in order that, if necessary, the sufferer may be isolated.

Opium Pedlers Captured.—Recently twelve opium pedlers were arrested in one night in Chinatown, New York. They had the opium concealed in walnut shells. Another method of selling opium in cheap restaurants is to do it up in a "sandwich."

Longevity Increasing in Berlin.—The average length of life in Berlin has increased nine years since 1880, over one year in four. At this rate of increase, what would the average length of life be in two hundred years? The general average was increased by the reduction in infant mortality.

Prohibit Exposed Food.—The New York department of health has determined to enforce the provisions of the law respecting the exposure of foods for sale, in such a way that foods may not be contaminated by dust and flies. The police department has been requested to aid in breaking up this unsanitary practise.

New Quarters for Dental Clinic.—The Strassburg dental clinic, established in 1888, the first in the world to give free dental examinations and treatment to schoolchildren, has recently been located in new and more commodious quarters. This clinic was the beginning of a movement to save the teeth of children, which is spreading over the civilized world.

Saccharin Condemned.—President Remsen, the discoverer of saccharin, together with other members of the "Referee Board," has, after careful investigation, declared saccharin to be unwholesome, in that it causes indigestion, and lowers the food value of the food to which it is added. The Secretary of Agriculture accordingly issued a notice that after July 1 food containing saccharin will be considered adulterated within the meaning of the pure food law. There are thirty classes of food—various forms of "sweets," jams, etc.—in which saccharin is now used.

Health Officers' Association of New Jersey.—At a meeting of executive officers of boards of health of New Jersey, held at Newark, N. J., April 17, a permanent organization to be known as the "Health Officers' Association of New Jersey," was formed. The membership at present includes all health officials holding State board of health licenses, and doubtless will be extended to other health board officers and employees and members of local boards of health. It is designed to hold five meetings a year for the presentation and discussion of papers. Most of the prominent health board officials of the State have expressed themselves as strongly in favor of the association, which promises to gain rapidly in membership and influence.



A Plea for Cheese.—A British physician, Major R. J. Blackham, D. P. H., R. A. M. C., has delivered a lecture in which he favors the use of cheese in the daily diet. Asserting that cheese is nutritious, wholesome, and cheap, he appeals to physicians to join in the crusade against the overeating of meat, and to induce their patients to substitute, in part, at least, good cheese.

Euphemistic Causes of Death.—Investigation shows that a very large proportion of cases of death recorded as from pneumonia, gastritis, apoplexy, consumption, and rheumatism, should have been recorded as due to alcoholism. Eighty per cent of the pneumonia cases had pneumonia symptoms only a few hours before death. The pneumonia was entirely secondary to the real trouble. So with the other diseases.

A New Remedy for Whooping-Cough.—A laboratory worker with whooping-cough, who happened to be generating hydrogen, noticed that a whiff of the gas relieved his symptoms. Preparing an apparatus, he generated pure hydrogen, and by inhaling it just before the coughing stage, could prevent the cough every time. The remedy was also effectual with his sister, who had whooping-cough in a severe form.

School Dentistry in Austria.—In Austria, which has a compulsory education system, a careful examination of a large number of children showed that eighty per cent of them had defective teeth. A society has been formed, as a result, for the care of the teeth of schoolchildren. The children will be examined, and those with defective teeth will be recommended for dental treatment. Where necessary, this will be furnished free.

To Amend Illinois Marriage Laws.—It is proposed to incorporate in the marriage laws of Illinois an amendment providing that every application for a marriage license shall state under oath whether either of the parties is an imbecile, epileptic, of unsound mind, and whether either applicant has been within five years an inmate of any insane asylum or poorhouse, whether either is afflicted with tuberculosis, syphilis, or other transmissible diseases. No licenses are to be granted without this declaration and a physician's certificate.

Punishment of Street Venders.—A section of the New York sanitary code forbids the display of uncovered foods for sale, and, after a fair warning, a squad of food inspectors made a raid on a large number of cheap candy shops, and condemned and destroyed a large quantity of exposed candy and other confectionery. The commission announces that the crusade will be kept up and the careless venders punished if necessary.

Anniversary Meeting.—The Society for the Study of Inebriety—now the Association for the Study of Alcohol and Other Narcotics—celebrated its fortieth anniversary at Baltimore, April 19, 20. Of the organizers only one man, Dr. L. D. Mason, is still alive. Three years after its organization, Dr. T. D. Crothers joined the society. Drs. Mason and Crothers are the only pioneers in this movement who are now living.

Another Fake Nailed.—Benetol, a "new germicidal antiseptic marvel," which it is claimed was invented by a professor of the University of Minnesota, has gulled the newspapers, gulled the people, and doubtless has filled the pockets of the ingenious inventor, a man once connected with the university, but said to have been turned out for his devious ways. Benetol is a well-known substance (alpha naphthol), dissolved in water, glycerin, and soap. Who buys this substance helps to pay this man's heavy advertising bills, and helps to perpetuate a scandalous fraud.

Ivy Poisoning.—The following is taken from the *New York Medical Times*: No scratching; no ointments in the acute stage; no bandages (which would tend to spread the poison to adjacent surfaces); any protector, if necessary, should be a loosely applied dressing of absorbent cotton, kept moist at all times and changed frequently; frequent and copious washings with luke-warm water and an unirritating soap; the inflamed surface is best handled by means of rubber gloves; after washing the parts, apply a 2-4 per cent warm solution of potassium permanganate, which completely neutralizes any poison with which it comes in contact. After the acute stage is past, ointments are permissible.

Drinking-Cups Abolished.—On May 1 Vermont was added to the States that have abolished the public drinking-cup.

An Excellent Label.—Babies in Central Park are tagged with the request, "Please do not kiss me, I do not like it. It is harmful." Such tags may prevent the transmission of much disease.

Cremation Bill Fails in Germany.—A bill for the permission of cremation has been rejected in committee in the German parliament. The objection of the conservatives against the passage of such a bill is too strong.

Status of Salvarsan.—The following expressions were uttered in the Medical Society of the Missouri Valley: "It is premature and risky to let a patient with syphilis go with one or only a few treatments with this agent." "Salvarsan has not yet been proved greatly superior to mercury." "Only time will tell whether the results will be more permanent." "There has been a tendency to promise a syphilitic that one injection of salvarsan would practically cure him. This is unfortunate." "While salvarsan may not be as good as mercury, when it is used, the acute symptoms are relieved quickly. . . . This is the principal advantage in using the agent."

Cost of Plague.—The effort to stamp out plague on the Pacific Coast has cost the federal government \$800,000, and the California government \$500,000. Up to March 4 nearly a million rodents had been collected, of which one thousand were found to be plague-infected.

Protecting the Army.—Profiting by the experiences of the Spanish war, our military men were prepared for the installation of better sanitary measures in the mobilization of troops along the Mexican border. The entire force were inoculated with antityphoid serum (which had been thoroughly tested in 20,000 inoculations in the regular army), it is said, with a promptness unequaled in military history. A new system of waste-disposal—thoroughly tested—will diminish the danger of camp epidemics.

Distribution of Hookworm.—A recent report of the Rockefeller Commission states that the disease has been demonstrated in Alabama, Arkansas, California, Florida, Georgia, Kentucky, Louisiana, Mississippi, Nevada, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. It is most extensive in North Carolina, South Carolina, and Georgia. In Georgia of less than eighteen thousand children examined, six thousand, or more than one-third, were treated for hookworm.

The best antiseptic for purposes of personal hygiene

LISTERINE

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

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

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

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

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

LAMBERT PHARMACAL COMPANY
LOCUST AND TWENTY-FIRST STREETS :: ST. LOUIS, MO.

Infantile Paralysis.—It has been predicted that with the warm weather there will be another outbreak of infantile paralysis.

Dr. Evans Retired.—Dr. Wm. A. Evans, the efficient Chicago commissioner of health, has retired.

Fruit Must Be Protected.—The board of health of Lynn, Mass., has passed an ordinance requiring that fruits and berries exposed for sale must be protected from dust and flies.

Tuberculosis Day.—In many churches the last Sunday of April was observed as Tuberculosis day. As far as possible, addresses on the prevention of tuberculosis were given by physicians and others familiar with the subject.

No More Malta Fever.—It has been decided finally, so it seems, to rechristen this disease, Mediterranean fever. As a matter of fact, it is not so prevalent in Malta as in some other places, and the name gave the island a bad reputation.

Occupational Diseases Reportable.—California has passed the first law in America requiring the attending physician to report certain occupational diseases, such as phosphorus, arsenic, or lead poisoning, anthrax disease, etc. Other States are considering similar legislation.

Hotel Proprietors in Dresden.—The hotel proprietors of Dresden have decided that during the International Hygiene Exhibit, they will *not* increase their prices, as is generally the custom in a city which is temporarily attracting a very large outside patronage.

Motion Pictures in Medical Lectures.—Motion pictures have been used in Philadelphia to illustrate the gait and other symptoms of patients having various forms of nervous disease. It is probable that this method of illustrating lectures will be greatly developed.

Officers of Alcohol-Study Society.—The following officers were elected by the Society for the Study of Alcohol and Drug Narcotics: President, Dr. Winifield S. Hall; vice-president, Dr. L. D. Mason; corresponding secretary, Dr. T. D. Crothers; recording secretary, Dr. G. H. Benton.

Restriction of Opium Traffic.—Negotiations are now in progress between England and China looking toward the restriction and eventual cessation of opium exportation from India to China. This movement will doubtless be greatly advanced by the International Opium Conference at The Hague this summer.

A New Owen Bill.—Senator Owen began his work for a national health department early this session, and his bill providing for such a department is Senate bill No. 1. It has been attempted in this bill to meet all the criticisms made against the former bill. The changes in the bill should remove objection on the part of all persons who offered such objections in sincerity.

Public Health Museum.—It has been fittingly proposed that the memorial to King Edward be a museum of public health, to be a model for provincial collections and a loan center for the distribution of educational material on sanitation and hygiene to schools and institutions. In connection with the museum, it is proposed to have halls, lecture-rooms, committee-rooms, etc.

The Stigma of Wilful Sterility.—Mr. Roosevelt, the advocate of large families, recently asserted that the new nationalism demands that every household shall have at least four children. Families that can not do that will fall under the "curse of wilful sterility," whatever that may be. What shall be done with those who, through fear or inability, or lack of inclination, or otherwise, fail to get married?

Cup Kills Pigs.—Some guinea-pigs recently gave up their lives in order to demonstrate the deadly nature of some of the germs on public drinking-cups. This was in Chicago. It has perhaps occurred elsewhere as well, but in Chicago some of the germs taken from a drinking-cup in a public school were cultivated, shown to be diphtheria germs, and when injected into a guinea-pig caused its death in a few hours.

Recent Opinions of Salvarsan.—"Salvarsan is valuable in certain cases as an additional weapon in our armamentariums, but it does not accomplish the marvels attributed to it. It does not cure, any more than does mercury." "To those who imagined that syphilis was to be forever cured by one dose of Salvarsan, and that thereafter mercury would be of value on account of its historic interest, the disappointment has been severe."

Cane-Sugar in Heart-Disease.—In the *British Medical Journal*, March 18, Dr. A. Gouldston states that cane-sugar is capable of nourishing the heart muscle in a remarkable manner. In dilated heart in advanced age, valvular heart-disease, dilatation after influenza, heart strain, heart failure in consumption, a régime of cane-sugar produced surprising results. Though he gave immense quantities of sugar, none was excreted by the kidneys.



Summer Months
Are Delightful

AT GLENDALE

Is there a more beautiful spot in the world than Glendale? Doubtless there is, but it will be hard to find. There is inspiration to get well amid the California fruits and flowers, and this, coupled with all modern sanitarium advantages, homelike surroundings, and intelligent care, does accomplish effectual results.

Only a few minutes from the heart of busy Los Angeles, but peaceful, quiet, and comparatively secluded. All known rational means for combating disease are employed here.

We will be glad to send you a booklet of colored views of this beautiful Southern California health resort, in natural colors. Ask for Booklet E. Send for it whether you plan to visit us or not, and show it to your friends.

Glendale Sanitarium (S. D. A.), -- -- Glendale, Los Angeles, California

WANTED: A Man Who Can Speak English

One who has a thorough speaking acquaintanceship with the English language, who can converse on current topics correctly, who can speak with proper emphasis and enunciation, with no peculiarities of speech which attract attention to him rather than to what he is saying.

Men possessed of the above qualifications are wanted every day, everywhere, to fill positions of importance, to wield an influence in public affairs and TO DO BIG THINGS. Men who can speak English clearly and forcibly are wanted to take positions as teachers, lecturers, ministers, and leaders in important enterprises. If YOU are such a man, positions like these are open to you. Study your speech carefully and closely and see whether you possess these necessary qualifications for large undertakings.

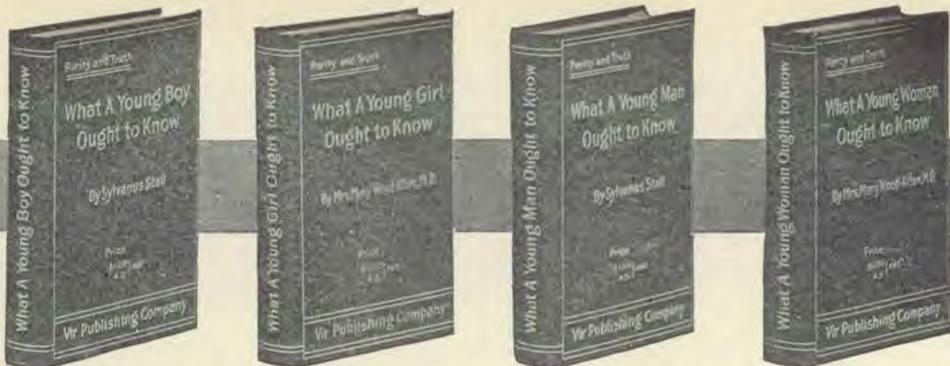


If not, fit yourself for the position the world offers you. Carry in your pocket a copy of the **SPEAKER'S MANUAL OF PRONUNCIATION**. Study it carefully in your spare time and apply its teachings. Learn to pronounce your words correctly, to use them in their proper relationship, to avoid peculiarities of speech common to the ignorant and uncultured, and to express your ideas clearly and concisely. **THE SPEAKER'S MANUAL** will help you become an efficient public speaker.

Compiled by Fannie Dickerson Chase, editor of the **YOUTH'S INSTRUCTOR**, formerly teacher of Natural Sciences in South Lancaster Academy.

128 Pages; in Cloth, 25c; Flexible Leather, 50c

REVIEW AND HERALD PUB. ASSN., Washington, D. C.



Pure Books on Avoided Subjects

What a Young Girl Ought to Know

BY MRS. MARY WOOD-ALLEN, M. D.

Endorsed by Frances E. Willard, Frances S. Bolton, Mrs. Grannis, Ira D. Sankey, and others. Mothers can do no better service for their girls than to provide for them a copy of this book. It will be a valuable friend. 194 pages. Substantially bound in cloth.

Price, post-paid . . . \$1.00

What a Young Boy Ought to Know

BY SYLVANUS STALL

Tells plainly, but with purity, the facts a young boy should know about the creative organs, for his physical and moral self-protection. Personal indorsements from Judge Ben Lindsey, Editor Bok of the *Ladies' Home Journal*, Bishop Vincent, Lady Somerset, Anthony Comstock, and others. Parents will make no mistake in placing this highly instructive book in the hands of their boys. 193 pages. Well bound in cloth.

Price, post-paid . . . \$1.00

What a Young Man Ought to Know

BY SYLVANUS STALL

In that transitory stage just between boyhood and young manhood, there comes a time when the young man's mind needs sober instruction on the problems of approaching manhood more than at any other. The subject is handled in this excellent work in a manner which can not fail to hold the interest of any self-respecting youth. Strongly indorsed. 269 pages. Well bound.

Price, post-paid . . . \$1.00

What a Young Woman Ought to Know

BY MRS. MARY WOOD-ALLEN, M. D.

If anything, the problems and perplexities facing the girl as she approaches womanhood, are more exacting than any others that come in the natural development of human life. To avoid a life of invalidism, the girl must be armed with the reliable weapons of truth which this book provides. 272 pages. Bound in cloth.

Price, post-paid . . . \$1.00

Review and Herald Publishing Association
Washington, D. C.

AVOID THE FILTHY GERM-BREEDING DEATH-DEALING DRINKING-CUP CARRY YOUR OWN CUP—HERE IT IS—10cts.

The public drinking-cup is a menace to your health and happiness. It is a germ-breeder and disease-distributor. In one public cup ten million typhus, seven million diphtheria, and many other dangerous germs were found. The whole country is awakened to this public danger. The United States Congress has passed a bill abolishing the public drinking-cup in Washington, and other States are following.

Protect yourself, your wife, and particularly the schoolchildren. Use a Sandrico collapsible drinking-cup. Always ready for instant use, whether on a vacation, at home, or traveling. Light, self-draining, seamless. Made in a sanitary factory. No paste used. Fits in the vest pocket, shopping-bag, or school-bag. Takes no more room than a watch, and is far more necessary. The Chicago board of health has publicly indorsed the individual drinking-cup. Physicians recommend it. Don't lay yourself open to disease and infection. Here is constant economical insurance. Handy, convenient, practical. Single cup, 10 cents; \$1 a dozen.

Dealer agents wanted for this absolutely necessary specialty and our French crepe-paper towels. Send for a cup to-day. Don't expose yourself needlessly.

MARSHALL STONE CO., DEPT. L. H. - - - 22 QUINCY ST., CHICAGO, ILL.

Drink Doles Pure Hawaiian Pineapple Juice
At Druggists Grocers & Soda Fountains
D=Aids Digestion

GUM GLUTEN FLOUR
GUARANTEED UNDER THE FOOD AND DRUGS ACT. JUNE 30th 1908. SERIAL No. 5715
FOR SALE BY ONE LEADING GROCER IN EACH CITY - WRITE FOR HIS NAME AND BOOK OF RECIPES - MENTOR PUBLICATION
The Pure Gluten Food Co.
90 WEST BROADWAY, NEW YORK.



IDEAL FOLDING BATH TUB

Pat. Pending

For houses without tubs. Campers, Sportsmen, cold-water flats. Use in any room. Light. Lasts years. Write for low introductory offer. N. Y. L. BATH MFG. CO., 103 Chambers St., New York



WHEEL CHAIRS WE MAKE OVER 70 STYLES

Catalogue "B" illustrates—describes—(free).

SARGENT CO. 304 Fourth Ave. New York

FOODS THAT BUILD THE BODY

Whether you are sick or well, your food should have your first attention. If your health is not the best, the selection of your food is doubly important. A well-balanced ration will go a long way toward rebuilding your health.

It is a mistaken notion that foods to be healthful must be unpalatable.

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 COMPANY

Boulder, Colo.
Portland, Oregon

College View, Neb.
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

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.

A Friend in the Kitchen

MRS. ANNA L. COLCORD

400 Carefully Tested Recipes
20 General Departments

16th EDITION, 160th THOUSAND



Marion Harland says: "The foundation of a happy home is laid in the kitchen." The housewife's best friend is the one who can help in the kitchen. Such a friend is our new cook-book.

In addition to the valuable recipes, and suggestive "Bill of Fare," the book contains much that is not found in the ordinary cook-book, such as, "Substitutes for Meat," "How to Become a Vegetarian," "How to Make Unfermented Bread and Wine for Sacramental Purposes," "The Pulse of Health," "Weights and

Measures for the Kitchen," and many other important subjects.

"How to Can Fruit," is a chapter which in itself is worth the price of the complete work to any housewife.

Friend in the Kitchen is not an advertising medium. It recommends no branded articles. It is simple, thorough, practicable. A vegetarian cook-book for every-day use.

Cloth, Stiff Boards, 50 cents. Waterproof Paper, 25 cents.

REVIEW AND HERALD PUBLISHING ASSN.

New York City

WASHINGTON, D. C.

South Bend, Ind.

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

Drink Dole's Pure Hawaiian Pineapple Juice

At Druggists, Grocers & Soda Fountains

D = Aids Digestion

Trade supplied through regular channels. If you can't get Dole's, write Hawaiian Pineapple Products Co., Ltd., 112 Market Street, San Francisco, California

Boulder-Colorado Sanitarium

Boulder, Colorado



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

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.

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.

Long Beach,
California
The Place for
YOU

Long Beach Sanitarium



At beautiful LONG BEACH, California's famous health resort, where it is ALWAYS COOL in summer, warm in winter. New pressed-brick building. Every modern convenience. VERY LATEST Sanitarium Methods. Beautiful macadamized streets, where guests may enjoy long walks, riding, driving, motoring, Tennis, golf, boating trips, and the most delightful SURF BATHING in the world. South from Los Angeles 25 minutes' ride. A pleasant home, where the entire family can be accommodated. Booklet Free.

W. RAY SIMPSON, Mgr., Long Beach, Cal.
Tell your friends where to go.



A Story of Vigor, Action, Courage, and Adventure

No modern tale of romance or adventure surpasses in interest this story of the fortunes of Jonathan, son of the king of Israel. The love of this royal youth for the shepherd lad David, and the marvelous happenings that befall the two, form a narrative no less interesting because true.

"A Man of Valor"

By Arthur W. Spaulding

is the true story of a real boy and of his growth into the same vigorous and valorous manhood to which every real boy aspires to-day. Its description of the intrigues of kings, the clash of opposing armies, and the final triumph of right over might, are most inspiring. The "Man of Valor" is a book which, once opened and read, becomes a chosen friend. While specially a book for boys, there are few girls who will not read it with intense interest.

For the lessons of practical value which naturally connect themselves with the narrative, it is well worth while for every parent to place this book in the hands of his children.

In Cloth, Handsomely Illustrated, the price is \$.75. Order from your Tract Society or from



Review & Herald Publishing Association
WASHINGTON, D. C.

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, Hydrionic treatments, and the general line of Sanitarium measures.

Surgery when required.

Regulated dietary. Send for catalogue.

Graysville Sanitarium - Graysville, Tenn.



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

A Book for Your Girl!



If you would cultivate the finer sentiments and mold the higher ideals in the mind of your daughter, your pupil, or your girl friend, place this book in her hands.

Happy School Days

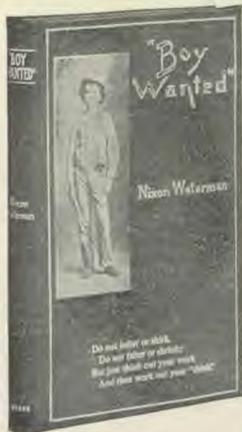
By Margaret E. Sangster

No one who is familiar with this author's writings will require assurance of the

excellence of this new gem from her pen, nor question that the book, once placed in the hands of a girl, will be read thoroughly with both interest and profit. 271 pages, handsomely bound, and in a neat gift box. Price, \$1.25.

Review & Herald Publishing Assn.
WASHINGTON, D. C.

A LIVE WIRE



Touch a real live wire anywhere along its entire length, and there is a sharp reminder that it is charged with an active current. So with this book—open it anywhere at random, and there is that confronts the eye which leads to a continuous reading of it.

"Boy Wanted," by Nixon Waterman, is a live-wire book for live-wire boys—boys who

want to be something and to do something. Its arrangement is unique and pleasing. 134 pages, handsomely bound, and illustrated with full-page plates. Price, \$1.25.

Review & Herald Publishing Assn.
WASHINGTON, D. C.



A real treat for the readers of "Life and Health" in the JULY "SIGNS OF THE TIMES" MAGAZINE. Contained within this pleasing and appropriate cover is much for thinking people.

"An Unclean Mouth and Tooth Decay as Related to General Health," by D. H. Kress, M.D. Valuable and important.

"The Rights of the Individual," by M. C. Wilcox. For liberty-loving people.

"All Past Time," by the Editor—containing some pertinent quotations from good authority, and proving scientifically the exact day of creation. A convincing and unusually important article. You will enjoy every word.

"Freedom for the Other Man," by A. O. Tait. A strong article on religious liberty.

"The Stimulant in Modern Society," by Frank S. Weston.

"When Were the Stars Created?" by the Editor. You will thoroughly enjoy it.

"Creation and Evolution," by George McCready Price.

"Can We Know?" by the Editor. Some striking inconsistencies considered.

"An Era of Liberty, and Why," by the Editor. An interesting and appropriate article.

"The Gospel in the Promises of Abraham." Further important studies in Old Testament history, by William Covert.

"Geneva and the Reformation," by Mrs. E. G. White.

And a number of others.

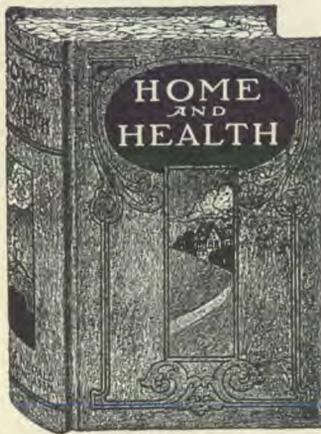
Don't fail to see a copy of this magazine. If the agents doesn't call on you, send ten cents to—

SIGNS OF THE TIMES

Mountain View, California

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

Popular Health Books



HOME AND HEALTH. A household manual, containing 2,000 recipes and practical suggestions on the building and care of the home, healthful living, home treatment of simple ailments, and the use of the natural simple remedies. Has hundreds of helpful hints, and a complete classified index which makes it convenient to find such recipes and items of information as are most needed in the home. Contains 600 pages, profusely illustrated and handsomely bound.

Cloth \$3.00
 Full morocco 5.00

MINISTRY OF HEALING, by Mrs. E. G. White. This book is dedicated to the medical missionary work, under an agreement on the part of the author and publishers that all profits be devoted to that purpose. It is a remarkable work, defining better than probably any other book ever written, the true relationship between the medical and the gospel work. It should be carefully read by every physician and nurse, as well as by every Christian worker. 541 pages, profusely illustrated.

Cloth \$1.50

TEMPERANCE TORCHLIGHTS, by Matilda Erickson. The greatest temperance hand-book ever published, and one which should be in the hands of every temperance worker in America, and in every home where a barricade against intemperance is being raised. Hundreds of writers have contributed to make this book a veritable temperance encyclopedia — “multum in parvo.” 256 pages, with nearly a dozen departments and hundreds of sketches,



anecdotes, and timely statistical references and comparisons.

Cloth \$.50



COLDS: THEIR CAUSE, PREVENTION, AND CURE, by G. H. Heald, editor of *Life and Health*. This is a handsome brochure, understandingly written, on a subject which is very commonly discussed but little understood,— a book which every one will read with interest.

Bound in white leatherette, stamped in brown ink . . . \$.25

Life and Health

Takoma Park

- - -

WASHINGTON, D. C.



Entrance to
Main Building

LOMA LINDA

The ("Hill Beautiful")

A Charming
Health Resort
in Southern
California

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."

They Help the Sabbath-School Teacher

Our Scripture Text Cards are a great help to the Sabbath-School Teacher in impressing Bible Texts upon the minds of the young students.

The texts are in blocked silver letters, on rich, enameled cards, with silk cord for hanging. In boxes of 12, per set, 25 cents.

REVIEW AND HERALD
Washington, D. C.

CONSUMPTION



DR. DAVIS

is curable and preventable. A great majority of cases can be cured, without drugs, and largely through the patient's own efforts.

This book tells how:

CONSUMPTION Its Prevention and Cure Without Medicine

With chapters on Sanitation, and Prevention of other Diseases, by CHARLES H. S. DAVIS, M. D., member of the New Haven County Medical Society, Connecticut State Medical Society, American Health League, etc.

Not a theoretical, but a thoroughly practical book, based on actual experience. Treats upon the open-air life, rational diet, and other important subjects. Contains 216 pages. In cloth, post-paid, \$1.

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

Is the Health of Your Boy or Girl Worth \$1 to You?

¶ If it is, let us tell you where you can spend that dollar to the very best advantage.

¶ Buy that book, "The House We Live In," by Vesta J. Farnsworth. Then don't put it in the bookcase, or on the shelf, but start right in with Chapter I, and go clear through it with your children, teaching them the vital truths which it contains.

THE HOUSE WE LIVE IN

By VESTA J. FARNSWORTH

makes the teaching of the body to children a perfectly easy, natural task. The children will crowd around you to see the attractive pictures and to hear the charming stories it contains. When you have finished, they will know more about their bodies than the average man or woman you meet upon the street.

¶ This book is not an abstruse physiology, but in the simplest, every-day terms, it tells the story of the "living temple" so that even the youngest children can understand and appreciate it.

¶ Handsomely bound in blue buckram, with cover design in attractive colors. 218 Pages. Profusely illustrated.

Price, post-paid - \$1.00

Review & Herald Pub. Assn.
Takoma Park, - Washington, D. C.

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.

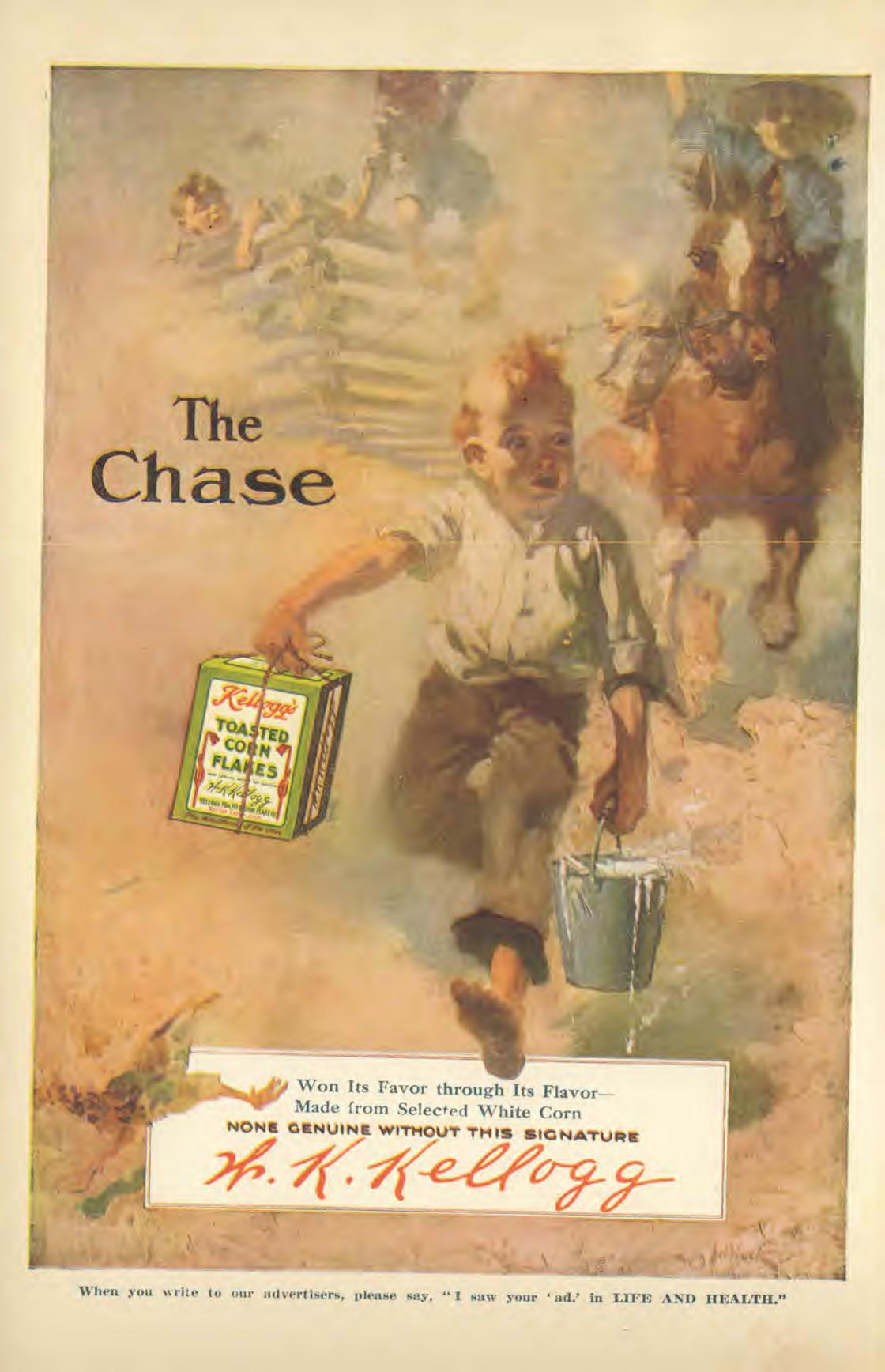


Flowers Bloom
all the Year
Round at Par-
adise Valley

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



The Chase



Won Its Favor through Its Flavor—
Made from Selected White Corn

NONE GENUINE WITHOUT THIS SIGNATURE

W. K. Kellogg

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