

HOUSEREEPERS NUMBER

AREAL, Coffee Substitute At Last

After thirty years of experiment the food experts of the Battle Creek Sanitarium Food Company have produced a REAL coffee substitute. The old substitutes were good in their way, but they have all been discarded.

¶ To-day the only coffee substitute used at the Battle Creek Sanitarium is

Noko

The REAL Substitute for Coffee

You can now have for family use a food beverage which will effectively take the place of the poisonous coffee.

It will not only taste good, but every cup will contribute to your well-being.

¶ So confident are we that you will like NoKo and that it will do you good—we agree that if you will use it for 30 days and if you do not feel better from its use, we will refund every cent spent for NoKo.

Read the "Thirty-Day Book for Tea and Coffee Drinkers." Your grocer has it or you can get it from us. Mention grocer's name.

The Battle Creek Cereal Coffee Co. BATTLE CREEK, MICH.



CONTENTS

APRIL 1907

PAG	GE
The Noblest of All Arts. By J. H. Kellogg, M. D 16	57
Upton Sinclair's Experiment (Illus.). By Rose Woodallen Chapman	59
The American Breakfast Scramble. By Mrs. E. E. Kellogg 17	75
Hygiene in Japan (Illus.). By Maria L. Edwards 17	77
What the Young Home-Maker Should Know. By Emma Winner Rogers, B. L	31
Solving the Floor Problems (Illus.)	34
Simple Life Biographies — Introduction: What Is the Simple Life? By George Wharton James	38
A Kitchen Garden in a City Yard. By Winifred Bennett 19	92
The Fireless Cooking Idea (Illus.))4
Two Ways with the Simple Life)5
CHAUTAUQUA SCHOOL OF HEALTH: Medicine Cabinets up to Date. (Illus.). By Linnie Roth, M. D	99
How the Body Resists Disease. By William S. Sadler, M. D. 20)3
THE CHILDREN'S COOKING CLASS 20	8
EDITORIAL	0
QUESTION BOX	4

DIRECTORY OF SANITARIUMS

Conducted in harmony with the methods and principles of the Battle Creek Sanitarium

CALIFORNIA (St. Helena) SANITARIUM, Dr. H. F. Rand, Medical Superintendent, Sanitarium, Napa Co., Cal.

See Announcement page 4, this section

NEBRASKA SANITARIUM, College View, Lincoln, Nebr. W. A. George, M. D., Superintendent.

PORTLAND SANITARIUM, West Ave., Mt. Tabor, Ore. W. R. Simmons, M. D., Superintendeut.

NEW ENGLAND SANITARIUM, Melrose, Mass. C. C. Nicols, M. D., Superintendent.

See Announcement page 8, this section

CHICAGO SANITARIUM, 28 33d Place, Chicago, Ill. Frank J. Otis, M. D., Superintendent.

TRI-CITY SANITARIUM, 1213 15th St., Mo S. P. S. Edwards, M. D., Superintendent. Moline, Ill.

See Announcement page 7, this section

PARADISE VALLEY SANITARIUM, City Office and Treat-ment Rooms, 1117 Fourth St., San Diego, Cal. Sanitarium, National City, Cal.

See Announcement page 6, this section LOMA LINDA SANITARIUM, Loma Linda, Cal. J. A. Burden, Manager.

See Announcement page 6, this section TREATMENT ROOMS, 257 S. Hill St., Los Angeles, Cal. J. R. Leadsworth, M. D., Superintendent.

GARDEN CITY SANITARIUM, San Jose, Cal. Lewis J. Belknap, M. D., Superintendent.

MADISON SANITARIUM, Madison, Wis. C. P. Farnsworth, M. D., Superintendent.

TREATMENT ROOMS, 201 Granby Block, Cedar Rapids,

R. L. Mantz, M. D., Superintendent.

PROSPECT SANITARIUM, 1157-1161 Prospect St., Cleveland,

F. A. Stahl, Superintendent.

TACOMA SANITARIUM, 426 S. C St., Tacoma, Wash. T. J. Allen, M. D., Superintendent.

COLORADO SPRINGS SANITARIUM, 126 N. Cascade Ave. Colorado Springs, Colo. Chas. R. Knox, M. D., Superintendeut.

ADIRONDACK SANITARIUM (Formerly Upper Hudson Sanitarium), Lake George, N. Y. E. F. Otis, M. D., Superintendent.

HINSDALE SANITARIUM, Hinsdale, Ill. David Paulson, M. D., Superintendent.

See Announcement page 3, this section MIDDLETOWN SANITARIUM, 46 to 48 E. Main St., Mid dletown, N. Y. dletown, N. Y. B. B. Kline, M. D., Superintendent.

TREATMENT ROOMS, 565 Main St., Springfield, Mass Chas, S. Quail, Manager.

SEATTLE SANITARIUM, 1318 3d Ave., Seattle, Wash, Alfred Shryock, M. D., Superintendent. PEORIA SANITARIUM, 208 3d Ave., Peoria, Ill. J. E. Heald, M. D., Superintendent.

GLENDALE SANITARIUM, Glendale, Cal. W. Ray Simpson, Manager.

See Announcement page 6, this section

PENNSYLVANIA SANITARIUM, 1929 Girard Ave., Phila delphia, Pa. H. B. Knapp, M. D., Superintendent,

See Announcement page 8, this section

NORTHWESTERN SANITARIUM, Port Townsend, Wash-

W. R. Simmons, M. D., Superintendent,

TREATMENT ROOMS, 58 Madison Ave., Detroit, Mich. Dr. Jean A. Vernier, Manager.

FOREIGN

SURREY HILLS HYDROPATHIC INSTITUTE, Caterham, Surrey, England. A. B. Olsen, B. S., M. D., M. R. C. S., Superintendent.

LEICESTER SANITARIUM, 80 Regent St., Leicester, England. F. C. Richards, M. D., M. R. C. S., Superintendent.

CALCUTTA SANITARIUM, 50 Park St., Calcutta, India. R. S. Ingersoll, M. D., Superintendent,

PLUMSTEAD SANITARIUM, Cape Town, South Africa. Geo, Thomason, M. D., L. R. C. S., Superintendent, CHRISTCHURCH SANITARIUM, Papanui, Christchurch,

New Zealand.

KOBE SANITARIUM. 42 Yamamoto-dori, Nichome, Kobe Japan. S. A. Lockwood, M. D., Superintendent.

GUADALAJARA SANITARIUM, Apartado 138, Guadalajara. State of Jalisco, Mexico.

SANITORIUM DU LEMAN Gland (Vaud) Suisse. P. A. De Forest, M. D., Superintendent.

SKODSBORG SANITARIUM, Skodsborg, Denmark, J. Carl Ottosen, A. M., M. D., Superintendent, SYDNEY SANITARIUM, Wahroonga, N. S. W., Australia D. H. Kress, M. D., Superintendent.

FRIEDENSAU SANITARIUM, Post Grabow, Bez. Magdeburg, Germany. A. J. Hoenes, M. D., Superintendent.

KIMBERLEY BATHS, 32 Old Main St., Kimberley, South Africa. J. V. Willson, Mgr.

Health Food Restaurants

HYGIENIC COMPANY, 1209 G. St., N. W., Washington, D. C. HYGEIA DINING ROOMS, 5759 Drexel Ave., Chicago, Ill. PURE FOOD CAFE, 403 E. 11th St., Kansas City, Mo. VEGETARIAN DINING ROOM, 436 N. 12th St. Lincoln, Nebr. VEGETARIAN RESTAURANT, 121 Schillito Place, Cincin-

VEGETARIAN CAFE, 814 Pine St., St. Louis, Mo. VEGETARIAN CAFE, 259 South Hill St., Los Angeles, Cal. PORTLAND SANITARIUM ROOMS, Mt. Tabor, Oregon. RESTAURANT, 2129 Farnum St., Omaha, Nebr. VEGETARIAN CAFE, 214 Union St., Seattle, Wash.

VEGETARIAN CAFE, S. 170 Howard St., Spokane, Wash,

CROFTON'S PURE FOOD AND VEGETARIAN RESTAU-RANT, 193 Devonshire St., Boston, Mass. THE LAUREL, 11 W. 18th St., New York City. HEALTH FOOD STORE, 121 Schillito Place, Cincinnati, O. HYGEIA CAFE, 203 3d Ave., Peoria, Ill. VEGETARIAN CAFE, 105 6th St., Portland, Oregon. VEGETARIAN CAFE, 45 Hunter St., Sydney, N. S. W.

Health Food Stores

PURE FOOD STORE, 2129 Farnum St., Omaha, Nebr. BATTLE CREEK SANITARIUM HEALTH FOOD DEPOT, Chas. S. Quail, 565 Main St., Springfield, Mass. HEALTH FOOD STORE, J. H. Whitmore, 118 Miami Ave.,

Detroit, Mich.

BOSTON HEALTH FOOD STORE, W. F. Childs, Room 316, 100 Boylston St., Boston, Mass.

E. SANITARIUM FOOD CO., 23 Wyoming Ave., D. M. Hull, Mgr., Melrose, Mass.

HEALTH FOOD STORE, 156 Monroe Ave., Rochester, N.Y. NEBRASKA SANITARIUM FOOD CO., College View, Nebr. BATTLE CREEK SANITARIUM HEALTH FOOD STORE, 555 W. 63rd St., Chicago. S. Coombs, Proprietor

BETWEEN OURSELVES

A chat with the editors and managers of GOOD HEALTH.

Just as we had finished making up the form containing Mrs. Rose Wood-allen Chapman's description of Upton Sinclair's Helicon Hall near Englewood, N. J., the news came to us of the fatal fire of Saturday morning, March 16th, which entirely destroyed the building and dangerously injured many of its occupants. As one of the newspapers described it: "A series of explosions ripped the front part of the building away and sent the flames to nearly every corner of the structure. The fifty-five persons who composed Mr. Sinclair's socialistic settlement, including the author of 'The Jungle' and his wife, were shut in by the flames. Children were tossed from windows in their nightclothes and caught in the arms of men and women or in blankets held by them. Scarcely any of the men, women and children who composed the colony escaped some injury, either by burns or in jumping from the windows of the big three-story building."

One person, an assistant carpenter, was killed, while several of the colonists were severely injured, early reports stating that Mrs. Grace MacGowan Cook may die. Mr. and Mrs. Sinclair were both somewhat injured by burns.

Though this disaster puts an end to the conjecture, for the present at least, regarding its ultimate success or failure, we see no reason why the article should be omitted from this issue. In fact, in the light of this misfortune, the story of "Helicon Hall" has become even more interesting, as thousands of people who knew nothing of the experiment before, are asking, "Where and what was Helicon Hall?" Perhaps, as has frequently been the case with greater institutions and organizations than this, there may rise from the ashes of Helicon Hall a much more imposing "Utopia" than the one originally planned by Mr. Sinclair, and which is described in this number.

The chief desire of the editors of Good Health is to make this magazine

a mutual affair-something in which every reader will take an active interest. In this way only can GOOD HEALTH benefit and be benefited to the greatest degree. There is scarcely a reader, perhaps, to whom some suggestion does not come to mind when opening a new number. Perhaps it is something with regard to the pictures. Perhaps one article suggests another article or a series of articles. Perhaps there is something about the cover or even the advertising section that may arise in the mind of the reader, and frequently the ideas that suggest themselves in this way are very good ones. How much better it would be if these ideas were not allowed to remain entirely fruitless. What a magazine needs, above everything else, is live, telling suggestions. Its readers are always best equipped to give them. We wish each reader of GOOD HEALTH would consider himself a member of a vast family working toward the great end to which Good HEALTH is devoted,the advancement of the physical and moral interests of the race. With such cooperation Good Health could not do otherwise than make great progress.

"The Home Dispensary"-something that will take the place of the old medicine cabinet-is a great need which is becoming recognized. The medicine chest in its day was a necessity. Home Dispensary in the not-distant future will be a still greater necessity. Recognizing that this subject is one which will be of vast interest to the housekeeper, we have given it special attention in this number, and an article in the Chautaugua School of Health Department, by Dr. Linnie Roth, will be found of special interest along this line. Good HEALTH is now at work planning a cabinet for commercial use which will be largely of this kind, only somewhat more general in the matter of contents. It is hoped that the plans for putting out this cabinet may be completed within the next few weeks.

Caterham Sanitarium and Surrey Hills Hydropathic Institution

Delightful location amid the picturesque scenery of the Cater-ham Valley, sur-rounded by beauti-fully wooded hills, with charming walks along old-fashioned Surrey lanes. Only twenty miles from London. Hourly



London. Hourly train service.

Well - equipped bath and treatment rooms. Weir Mitchell Rest Cure; Radiant Heat, Electric, Nauheim, and Brine Baths; Vibratory Massage; High-Frequency, Sinusoidal, Faradic, and Galvanic Electricity; Massage, Manual Swedish Movements and Medical Gymnastics.

Terms: \$12.50 to \$18.00 per week

For Prospectus Address

Caterham, Surrey, England.

A. B. OLSEN, M. D., Supt., Caterham, Surrey, England.



10 DAYS FREE TR

e ship on approval, without a cent sposit, freight prepaid. DON'T PAYA CENT if you are not satisfied after using the bicycle 10 days.

after using the bicycle 10 days.

DO NOT BUY of bicycle or a pair
at any price until you receive our latest
art catalogs illustrating every kind of
bicycle, and have learned our unheard of
prices and marvelonis new offers.

ONE CENT is all it will cost you to other centre write a postal and every-thing will be sent you free postpaid by return mail. You will get much valuable in-formation. Do not walt, write it now. TIRES, Conster-Brakes, Built and all sundries at half usual prices.

MEAD CYCLE CO. Dept. #105 CHICAGO



Adirondack Sanitarium

LAKE GEORGE, N. Y.

COME TO OUR MOUNTAINS,

Commune with God and nature among great, broad, beautiful hills of hemlock, spruce, pine and cedar.

COME TO OUR LAKES,

Quietly nestling in the laps of the mountains, - inviting peace to the tired soul.

COME TO OUR SUNNY SKIES,

Beneath which the landscape offers an ever-changing scene of rare beauty.

After Battle Creek System. Scientific Treatment and Positive Results. Booklets on request

E. F. OTIS, M. D., Superintendent

The New England Sanitarium

MELROSE, MASS.

OFFERS*IUST THE ADVANTAGES WHICH INVALIDS NEED AND DESIRE:



- 1. A complete medical equipment of the best appliances, not only for treatment, but for accurate diagnosis.
- 2. Ample accommodations in new buildings with every modern convenience. (The cut shows one of five large buildings.)
- 3. Large, sunny rooms overlooking magnificent landscape views.
- 4. Beautiful surroundings, spacious lawns, lake shore, woodlands, nature everywhere.
- 5. Close proximity to the metropolis of New England.

The New England Sanitarium is the Eastern exponent of the Battle Creek Sanitarium methods. It is just the place to recuperate from tired nerves and brain fag.

Send for illustrated circular showing views of the Middlesex Fells in which the Sanitarium is located,

Address: New England Sanitarium, Melrose, Mass., or C. C. Nicola, M. D., Supt.

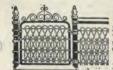


Good Piano Tuners

Earn \$5 to \$15 per day

We can teach you quickly BY MAIL. The new scientific Tune-a-Phone method endorsed by highest authorities. Write for free booklet.

NILES BRYANT SCHOOL, 65 Music Hall, Battle Creek, Mich



Many Styles, Sold on trial wholesale prices. Save wholesale prices. Save 20 to 40 per cent. Illustrated Catalogue free. Write today. KITSELMAN BROS.

Box 389 Muncie, Indiana.

Unlimited Possibilities are latent in the great within. A

genius is asleep in the subconscious of every mind. This genius can be awakened; these possibilities can be developed; and you can learn how by reading Eleratal Progress. \$100 a year; 4 months' trial, 25 cents (in silver); sample copy free. There is something in this magazine that you want. Write to-day. Address—

C. D. Larson, Fourth National Bank Building, Cincinnati, O.

SEND TEN CENTS

For a package of twenty assorted pamphlets on healthful living; sent post-paid to your address

Good Health Publishing Co. BATTLE CREEK, MICH.

is a perfect food, as wholesome as it is adelicious-highly nourishing, easily digested, fitted to repair wasted strength, preserve health and prolong life.

Be sure that you get the genuine, bearing our trade - mark on every can.

HIGHEST AWARDS IN EUROPE and AMERICA

Walter Baker & Co. Ltd.

Established 1780 Dorchester, Mass.

THE-HOUSEKEEPER

ppreciates the advantages of the Pasteur-Chamberland Filter. Its cleanliness, neatness, and thorough serviceability appeal to her. She recognizes it as an improvement in the home, a useful convenience as well as a valued aid in maintaining hygienic conditions. If interested in healthful living and modern health appliances, write to-day for our catalogue.



The Pasteur-Chamberland Filter Co. DAYTON, OHIO

Belts are used to advantage by corpulent eople, both ladies and gentlemen, to reduce corpulency and give shape to a pen-



dulous or relaxed obdomen. The use of these belts reduce the size and leave no room for superfluous fat to accumulate.

Elastic Stockings



for enlarged veins, weak or swollen joints, or where there is tenderness, itching, or burn-ing, are the recognized relief and cure for these allments.

Literature gratis, ence invited. Correspond

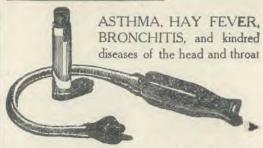
SHARP & SMITH

92 Wabash Ave., Chicago, Ill.

2 Doors North of Washington Street.

MANUFACTURERS OF

fligh Grade Surgical Instruments, Hospital Supplier Invalid Comforts, Trusses, Crutches, Etc.



are quickly relieved by THE IMPROVED

Magic Pocket Vaporizer

Developed at the Battle Creek Sanitarium and endorsed by its Physicians.

The most simple and convenient instrument made for this purpose. The only one which effectively treats the nasal and frontal cavities of the head, accomplished by its special nasal tube. Charged ready for use and supplied with extra solution sufficient for three months' treatment. Write today for booklet.

MODERN MEDICINE CO., Battle Creek, Mich

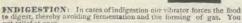
STOP THAT PAIN

There is only one disease-Congestion There is only one cure-Circulation

THE LAMBERT SNYDER HEALTH VIBRATOR

(9000 to 25000 vibrations the minute)

NO DRUGS NO PLASTERS NO ELECTRICITY



get relief at once.

RHEUMATISM: It is caused by uric acid centralizing at one point,
Vibration scatters the uric acid, and by increasing the circulation, drives

Vibration scatters the uric acid, and by increasing the circulation, drives trout through the pores, of deafness the vibrator stimulates the outer and inner mechanism of the ear and cures in many cases.

CHROULATION: If your circulation is poor the vibrator will increase it, and cause you to feel a warm glowall over your body.

LOCOMOTOR ATAXIA: In cases of locomotor ataxis or paralysis, the vibrator is the only relief. It stimulates the nerves, and vibration today for these aliments is recognized as the best treatment by the leading specialists.

leading specialists.

LUNG TROUBLE: If your lungs are weak and troublesome use
the wibrator. Vibration on the lungs forces the blood through the dead
cells and does wonderful work in all cases of consumption and lung

trouble.

PAINS OR ACHES: No matter what pains or aches you have or may have that are caused by congestion, the vibrator will relieve them.

NERVOUS DEBILITY: In cases of nervous debility our vibrator.

Price only \$2.00. prepaid on receipt of \$2.35 FREE Our new 48-page book on vibration, fully illustrated. It tells you what has and is being done by vibration. Our book is a plain, commonsense argument. Send for it to-day; it costs you nothing.

We are the largest makers and dealers of Vibrators in the World

LAMBERT SNYDER CO. Dept. 57a, 41 West 24th St., New York, N. Y.

Signs of the Times

As a Journal stands in a class by itself

It deals with the great questions of the day from a Bible standpoint. From Bible prophecy it makes clear the meaning of the social, polit-ical and religious unrest in the world to-day. It also affords light on the meaning of the great physical disturbances in all parts of the world.

It contains:

Outlook Department, which covers the whole

world in its vital questions; Home Department, filled with the very best for the home;

Missions Department, which keeps the reader in touch with the wonderful progress of the Gospel in all lands;

Question Corner, in which Bible questions are answered for its readers.

The Signs of the Times is helping thousands in Bible study, and in truly understanding current events.

Sixteen pages, weekly. Regular subscription, \$1.50 per year. Three months, 40 cents.

ADDRESS

Signs of the Times, MOUNTAIN VIEW, CALIFORNIA

Purity Books



SYLVANUS STALL, D. D.

The Self and Sex Series

is endorsed by hundreds of emi-nent persons like:

Dr Joseph Cook, Rev. Chas. M. Sheldon, Rev. F. B. Meyer, Dr. Theo. L. Cuyler, Dr. Francis E. Clark, Bishop Vincent, Wilbur Chapman, D.D. "Pansy," Frances E. Willard, Lady H. Somerset,

Zminent Physicians and Hundreds of Others.

4 BOOKS TO MEN. By Sylvanus Stall, D. D.

What a Young Boy Ought to Know.
What a Young Man Ought to Know.
What a Young Husband Ought to Know.
What a Man of 45 Ought to Know.

4 BOOKS TO WOMEN. By Mrs. Mary Wood-Allen, M.D., and
Mrs. Emma F. A. Drake, M. D.

What a Young Girl Ought to Know.
What a Young Woman Ought to Know.
What a Young Wife Ought to Know,
What a Woman of 45 Ought to Know.

Price, \$1.00 per copy, post free. Send for table of contents. toss Land Title Building, Philadelphia, Pa. Vir Publishing Co.,



The Superior Quality of this powder makes it one of the best for the treatment of_

Prickly Heat Nettle - Rash Chafed Skin etc., etc., etc.

It is an excellent remedy for PER-SPIRING FEET. and is especially adapted-

FOR INFANTS

Delightful after Shaving

Price, postpaid, 25c. per box

Agents Wanted

The Ouick-Focus



KODAK

Touch a button and the lens snaps automatically into the focus for which it has been set. Just the camera for quick work.

Pictures, $3\frac{1}{4} \times 5\frac{1}{2}$. Price, \$12.00.

EASTMAN KODAK CO.

Rochester, N. Y.,

Kodak catalog free at the dealers or by mail.

The Kodak City.

INSTRUCTIVE, INTERESTING

"Correct English,= How to Use It"

A MONTHLY MAGAZINE DEVO-TED TO THE USE OF ENGLISH

IOSEPHINE TURCK BAKER.

Editor

Partial Contents

Course in Grammar How to Increase One's Vocabulary The Art of Conversation Shall and Will; Should and Would: How to Use Them Pronunciations (Century Dictionary) Correct English in the Home Correct English in the School What to Say and What Not to Say Course in Letter-Writing and Punctuation Alphabetic List of Abbreviations Business English for the Business Man Compound Words: How to Write Them Studies in English Literature

Agents Wanted

\$1.00 a Year. Send! 10c. for single copy

CORRECT ENGLISH, - Evanston, Ill.

In replying to advertisements, please mention GOOD HEALTH.



The Kalamazoo ADJUSTABLE TABLE



Manufactured by

IHLING BROS. & EVERARD,

233-5-7-9 Main St. East,

Kalamazoo, - - - Michigan



MOTHERS' PROBLEMS

Every mother knows that the happiness or misery—success or failure—of her little one depends upon the knowledge and sympathy she puts into the task of bringing it up.

American Motherhood is a monthly magazine devoted to raising the standards of home life and motherhood. Its pages are full of help for the mother regarding her baby and many other matters pertaining to the home and its management. It will help many a weary mother who is now perplexed with problems different from any she has ever before had to deal with. It is edited by mothers.

Mary Wood-Allen, M. D. Mrs. Rose W. Chapman,

women of wide experience in home, State, and national work.

You will enjoy seeing a sample copy of American Motherhood—we will enjoy sending it to you. One dollar pays for a year's subscription. New trial subscription offers:

15 Months for \$1.00 4 " .25

You can also now secure the Teaching Truth series, written by Dr. Mary Wood-Allen, and other especially valuable books, at the same address and at the following prices post-paid:—

Teaching Truth-	\$0.50
Almost a Man-	.50
Almost a Woman	-50
Child Confidence Rewarded	.25
Ideal Married Life	1.10
Mothers' Manual-	.90
Just Away	
Baby's Record	.55
Husband and Wife	.90

AMERICAN MOTHERHOOD

COOPERSTOWN, N. Y.





"THE DAYS OF THE DAWN, THE YEARS OF SPRING"



President Roosevelt's speech about the sphere of woman set a lot of feminine tongues going in all parts of the country and all ranks of society, some approvingly and some in vehement protest. One lady essayist who takes strong

The Noblest of All Arts

issue with the President, asserts that women should have just the same educational advantages as men, and declares, respecting the household arts so warmly commended by the President, that "she can learn the simple arts of housekeeping and sewing when she needs them."

There is an unreasonable number of women whose lives are really so much out of touch with domesticity that the art of home-making is altogether a terra incognito. They have no real conception of what is required of the modern housekeeper.

Housekeeping is no longer the simple art with which our remote ancestors or even our grandmothers were acquainted. The well-instructed housewives of the last generation who cooked and spun, wove and knitted, and sewed and embroidered, would be quite lost in the wilderness of modern household requirements. Housewifely duties were simple when life was simple, but the complications of a modern civilized life have altogether changed the situation. The modern household is exposed to a hundred pitfalls of disease and death unknown to the households of former generations. Lurking in every nook and corner are dangerous possibilities which can be met and mastered only by knowledge and skill which modern science and modern technical training can supply.

In primitive days, when the bill of fare consisted of just a few natural foodstuffs, "cooked in the sun," as they say in Mexico, and furnished ready for use from the bounteous hand of Mother Earth, the management of the culinary department was simple enough. To wash and grind the grain and make it into cakes, or to parch a handful of corn or other seeds, to gather a few wild fruits, and milk the family goats, was about the extent of labor required to supply the family needs. There were no dainty appetites to tempt, no dyspeptic stomachs to cater to; for indigestion and dyspepsia were unknown in those happy times. There were no trichinæ to be discovered in the ham, no tapeworm embryos in the beefsteak, no sausage to be suspected of hiding billions of deadly microbes, no cheese hiding mites and tyrotoxicon, no green vegetables swarming with the eggs or embryos of round worms, thread worms, or other "varmints."

In those days there was no typhoid horror haunting the milk can or the water pail; no nightmare of poisonous antiseptics in the canned fruit, nor of

copper salts in green vegetables.

The housewife of older time knew nothing of the hidden problems of coalstoves or the constant apprehension of explosion with fire and injury from gas or gasoline burner; and then there are the only partly solved problems of the kitchen sink, the garbage can, the food cupboard, the cellar, and a score of other kitchen puzzles.

The housewife who knows how to deal with all these problems or half of them in a manner abreast with modern scientific and sanitary knowledge must be one who has enjoyed opportunities for a special training and instruction.

We have not mentioned the modern art of cookery which makes wholesome human foods out of coarse products fit only for cattle "fodder" in their crude state, and caters to the esthetic sense as well as to the stomach. No person can be a competent and an intelligent cook without a knowledge of chemistry. The modern kitchen is a laboratory. The presiding genius must know the composition of foodstuffs, the food value in calories of each grain or fruit or vegetable, and the food requirement of each member of the family. A trained cook must know the special dietetic value of each food element,—fats, proteids, carbohydrates, salts,—and the proper combinations of foods and food elements from the standpoint of digestion as well as flavor and attractiveness. There are volumes of knowledge for the housewife to acquire before she can properly direct even the kitchen of a modern home, to say nothing of the intricacies of house construction, ventilation, plumbing, heating, renovating, etc.

To talk of these things as "simple" is certainly to exhibit an amazing degree of ignorance of modern progress. A visit to such an institution as the Pratt Institute of Brooklyn, the Drexel Institute of Philadelphia, or any other of the splendid schools of domestic economy which have sprung up within the last twenty-five years, would be a wholesome eye-opener to such a person. The modern housekeeper must be a well-trained expert to perform her functions in an up-to-date manner. And if she is to assume in addition the duties of wife and mother, what a world of knowledge she needs of physiology and psychology, child culture and physical culture, and general hygiene.

To leave all these important subjects for the time when knowledge or skill is needed, is simply to ignore them, for the hour of emergency will afford no opportunity to "redeem the time."

The housewife needs to be trained for her work as much as does the business man, the lawyer, or the doctor. And every woman needs the knowledge and this training which may sometime, when least expected, be required of her.

Modern inquiry is tracing back to the kitchen not only a large part of all our ills,—more than half, according to Sir Henry Thompson,—but many of our moral defects, as well,—bad temper, as well as bad breaths, business failures and defalcations from neurasthenia, intemperance, and worse vices.

Race degeneracy is going on at a rapid rate. The enlightened, trained, and awakened housewife can do more to check this downward trend than any other human agent.

UPTON SINCLAIR'S EXPERIMENT*

A Unique Housekeeping Venture Originated by the Author of "The Jungle," and the Way It is Working Out

BY ROSE WOODALLEN CHAPMAN

THE domestic problem is a subject in which we are all interested. It is something that comes home to every one of us, in a very literal sense of the word. We all appreciate the fact that

the question of how to secure competent servants is becoming more and more serious every year. Yet, strange as it may seem, very few of us are making any effort to find a way out of the difficulty. We devote a great deal of time to talking about it. A good many articles are being written upon the subject, and yet, in all probability, there are not more than a dozen attempts being made throughout

the whole United States to find a reasonable, practical solution. It was with intense interest, therefore, that, in behalf of Good Health and its readers, I went to visit the most recent of these experiments.

Upon the western brow of the palisades in the outskirts of the town of Englewood, N. J., stands Helicon Hall, an impressive building of gray stucco with tall white pillars. For a dozen years it has been

known as a boys' school, but now is noted as the home of Mr. Upton Sinclair, whose book, "The Jungle," aroused so much interest in the condition of the packing-houses as to cause a govern-

> mental investigation which resulted in most important legislation. It is under his leadership that this latest attempt to solve the domestic problem is being undertaken.

My ring was answered by a cheerful young woman who led me to a comfortable seat in the central hall and then disappeared, to return immediately with the message that Mr. Sinclair would be out presently. I was

presently. I was not sorry for the opportunity this afforded me to scrutinize carefully the unusual surroundings in which I found myself. It was very evident that the man whose ideas had here been worked out had a wonderful conception of what the heart of a house ought to be.

Naturally my attention was first given to the most unique feature of all,—the beautiful inner court which was to my right. I had often heard of such courts in Southern homes, but never before



Upton Sinclair

had seen one or heard of one in our Northern latitudes. A dancing fountain attracted my attention first. Its sparkling drops fell into a quiet pool, upon whose surface floated lily pads and whose sloping banks were covered with thick, green moss. Under a rustic bridge ran a merry little stream, in whose shallow depths I caught a glimpse of goldfish at play. Sword ferns and maidenhairs were growing in graceful clumps, slender reeds added their picturesque effect; while above all, towered immense palms and rubber trees. On all sides of this were arranged the rooms. On the first floor, those for general use; sleeping rooms on the floors above. The enclosure was covered over with glass, beneath which curtains were arranged, to be drawn when the sunlight was too strong.

To my left, within the building proper and just opposite the door of the grand entrance, was the stairway. Two flights ascend from either side of the hall to a middle landing, whence the steps again diverge to the upper floor. Enshrined. as it were, in the heart of this beautiful stairway is a pipe organ, while the finishing touch to the landing is given by a little overhanging balcony.

In front of me was a marvelous brick fireplace, open on all four sides, so that its light and warmth might penetrate in every direction, completing a unique interior which, it seemed to me, must exert some influence upon the carrying out of the new undertaking.

While I was still busy in enjoying the interesting sights about me, Mr. Sinclair appeared, clad in every-day garb—a sack coat of rough material, a flannel shirt with rolling collar, the conventional tie (it should have been more Byronesque), and brown corduroy trousers. His greeting was unaffectedly cordial, and he proceeded to take me to view the

different departments of the building, answering meanwhile with patient interest my multitude of questions.

Having been brought face to face with the domestic problem in a very vital way, Mr. Sinclair was not willing, as hundreds and thousands of his fellow beings are, to fold his hands in abject submission. Instead, he prepared an article setting forth the problem as he saw it, and the possible solution in which he would like to interest some of those who had suffered as he had and were willing to try to find a way out. This article was published in the Independent last June, and called forth several hundred replies. As more details became known, however, the great majority of these withdrew from the project. Nevertheless, a goodly number remained, and these gathered together for a further discussion of the plan. Here it was that the final weeding-out process took place. After many conferences, fifteen families were found willing to enter upon the undertaking. These were more or less congenial in tastes and pursuits, a number being noted writers. There were also artists, musicians, professors, together with a few business men. When Helicon Hall was discovered, a careful examination showed the adaptability of this building to the general plan, whereupon it was purchased and the Helicon Home Colony formed.

The fundamental principle of the project was cooperation. Instead of fifteen families wrestling with the problem of fifteen incompetent cooks and endeavoring to find fifteen capable second girls, they were to live together in one building, thus requiring the services of but one cook, with two or three assistants, and two or three chambermaids. This was reducing the problem to the lowest common denominator, so to speak.



Helicon Hall

The next step was to elevate the work of the home from menial service to the dignity of a profession. For this reason it was decided that there should be no servants at Helicon Hall. There would

be paid workers, some of whom would devote all of their time and others but part of it to the common service. All. however, would be experts in their own lines, and hence just as worthy of respect and social position as the expert musician or artist. The standard should be the excellence of the work performed, not the kind of work

done. Then, too, expert salaries were to be paid, not day laborers' wages. Thus it would be possible to attract men and women of ability whose personality would be an addition to the community.

So far the plans seem to have worked very well. The colony at present employs a staff of eight women and five men, all

of whom, to quote from a recent circular, "live in the colony upon equal terms with its members, and are doing their work thoroughly and intelligently at a cost of less than ten dol-



Dining-Room, Helicon Hall

lars a month to each paying member of the Colony." This is encouraging, but the next sentence is even more so: "There are about two dozen others upon our waiting lists, and new applications are received continually." Thus it would seem that the Colony will experience no great difficulty in securing the grade of service which it requires.

One important factor in solving this problem may be found in the effort of the community to reduce the necessary work to the minimum. The key-note of all is the utmost simplicity consistent with comfort. This is shown in many ways, but most noticeably in the diningroom. In this charming room, with its view upon one side of the wooded hills and upon the other of the beauties of "the jungle," as the members of the Colony have appropriately named the inner court, there are no long tables covered with heavy linen or adorned with glittering silver or glistening cut glass. Instead, a number of small mahogany tables are placed side by side to form three sides of a square. Upon their polished surfaces are placed the necessary dishes. The waitresses have easy access to all by coming to the inside of the square, and, as a result of this arrangement, forty guests have easily been waited upon by three waitresses.

There are, of course, no distinctive costumes for the paid helpers. There is no air of repression about them as they go about their work. While waiting for Mr. Sinclair, one young woman passed back and forth upon various errands whistling a cheery little tune; and at luncheon the waitresses took part, whenever they so desired, in the general conversation.

After a thorough tour of the building, Mr. Sinclair excused himself and left me to my own devices until lunch-

eon should be announced. It did not take me long to decide where to go. Once more I traversed the court to its farther end, passed under the stairway and back into the kitchen, where I engaged in conversation with the presiding genius of that place. I hardly know what title to bestow upon her, whether to call her head cook, manager of the kitchen, or culinary artist. This I do know, that I found her an exceedingly interesting talker, a woman of varied ability who had been engaged in different pursuits which had taken her from California to New York City, and who had taken up this work in the Colony because she loved it and was interested in the experiment. It is the intention to have all of the work systematized as much as possible and all the latest labor-saving devices introduced. As the building was not occupied until October, however, it is not surprising that all these plans have not yet been fully carried out. Doubtless in time the kitchen of the Helicon Home Colony will become an interesting objectlesson for all who wish to learn the easiest ways of carrying on culinary operations.

From the kitchen I wandered back to the big sun-window on the second floor back of the organ. Here were several children at play. Upon my request to be allowed to join them, the oldest remarked in a very grown-up manner: "We'd be very pleased to have you." Then, with a sudden, more childlike eagerness, "Do you suppose you could help me fix this dress? I am not very expert in putting in sleeves." Without explaining my own sad lack in that direction I gladly undertook the task of readjusting the folds of a red crêpe paper gown which was being devised for a little black-eyed, dark-haired witch to wear at the fancy dress party which was to be given the next night. From my new-found friend I gleaned many interesting side-lights upon the life of the Colony, and saw that the idea of cooperation was taking strong hold upon the children. There had been no thought in my little interlocutor's mind that a stranger might not be interested in the task in hand. She was busy herself with adornments for others. Why should not I be as ready to help her as she to help her playmates?

It is in the care of its children that the plan of the Colony is most unique. It is the idea of these experimenters that children would be better off under the care of "experts" than in the hands of more or less untrained parents. Moreover, the great idea of the whole thing is to free

women from all home duties, that they may be able to devote themselves to the professions or occupations which attract them-just as free as are the men. The children, therefore, in the Helicon Home Colony do not live with their parents, although they are, of course, all in the same building. The theater has been fitted up for a dormitory, and here all the children sleep, including the youngest, two and a half years of age. It is but fair to add, however, that her mother is the one who devotes all of her time to the children. and so she sleeps in the same room with her baby. Adjoining the dormitory is the play-room, where the children enjoy their games and eat their meals.

Parents are not required to put their children in the dormitory, but it is not expected that any who are not in harmony with this method of caring for



The Stairway, Helicon Hall

the children will join themselves to the Colony. If a mother wishes her child to eat at the table with her, it may be done. Or, if she wishes to superintend her little one's nap, that also is possible. Most of these questions, however, so Mr. Sinclair informed me, were settled by the children themselves. They enjoy sleeping together and eating together, and, consequently, are allowed to do so.

There are at present ten children in the home, ranging from two and a half to ten years of age. The two older ones go to school. It is the intention to have the remainder under the care of an expert kindergartner,

A number of families are planning to join the Colony in the spring, and, doubtless, others, when they learn of the project, will desire to unite themselves to it. There are nine and a half acres surrounding Helicon Hall, and as soon as the weather will permit, ground will be broken for a number of cottages for the homes of those who prefer to live by themselves rather than in the community dwelling. These houses will be unique in that they will contain

"The Jungle" at Helicon Hall

no dining-room, no kitchen, and no nursery; these industries, so to speak, being delegated to the special buildings intended for that purpose. There will be, for instance, a building for the children which will contain a crèche under the care of a trained nurse and a resident physician, with a kindergartner for the older ones, as already suggested. Here the children will live, going home when desired for visits, or, as suggested by Mr. Sinclair, as a possible last expedient in the way of punishment.

> The question of expense, of course, is a very vital one. Mr. Sinclair informed me that at the present time the expense figured at nine dollars a week for board and room per individual and four dollars a week for each child. This, of course, is not much less than would be required to provide similar accommodations elsewhere, but it is expected that increase of membership, making use of the now vacant land, systematizing in the purchase of supplies and the establishment of a dairy, as planned, will proportionately reduce the expense of living.

These questions, however, as well as the fundamental one as to whether or not this is a permanent solution of the problem, can only be answered in the process of time. We may feel

that in some of their theories the colonists are extreme, and yet we must all admit that in undertaking such an experiment they are certainly performing a service to all mankind. We shall await the outcome with expectant interest.

Just as we had finished making up the form containing Mrs. Rose Woodallen Chapman's description of Upton Sinclair's Helicon Hall near Englewood, N. J., the news came to us of the fatal fire of Saturday morning, March 16th, which entirely destroyed the building and dangerously injured many of its occupants.

Though this disaster puts an end to the conjecture for the present at least, regarding its ultimate success or failure, we see no reason why the article should be omitted from this issue. In fact, in the light of this misfortune, the story of "Helicon Hall" has become even more interesting, as thousands of people who knew nothing of the experiment before, are now asking, "Where and what was Helicon Hall?" Perhaps, as has frequently been the case with greater institutions and organizations than this, there may rise from the ashes of Helicon Hall a much more imposing "Utopia" than the one originally planned by Mr. Sinclair, and which is described in this number.

THE AMERICAN BREAKFAST SCRAMBLE

How the Provident Housewife May Avoid Its Confusion and Pave the Way for Greater Comfort and Better Health Conditions

BY MRS. E. E. KELLOGG

THERE is an old saying that "haste makes waste," which is quite as applicable to things dietetic as to haste in other matters. Hasty preparation of food is apt to result in some or all of it being placed upon the table in an underdone or unappetizing form.

There is much being said, and justly, concerning "pure foods," but the very best material served without care in cooking may prove detrimental to health. It requires both pure material and wholesome preparation to make a fit food for bodily use.

Indifference or lack of time is the usual occasion for hasty food preparation, and there is probably no meal of the day which offers such a temptation to the cook to slight the preparatory processes as that of the morning meal, the breakfast, in the homes of working people, where the breadwinners must be at their tasks at an early hour.

If coupled with the hastily cooked meal there must be a hasty swallowing of the viands, then a rush for the train, the shop, or the office, who can count the waste to health resultant from such haste? Americans as a people are proverbial for the way in which they bolt their food, as they are also for dyspepsia—the natural sequence of such haste.

The fact is being emphasized, through much scientific experimentation, that food loses greatly in dietetic value if not thoroughly chewed when in the mouth. To chew is so essential that to go breakfastless would be far less disastrous than to partake of food without leisure to masticate it properly.

Since neither alternative is desirable, it behooves the housewives of the land to seek out ways and means to avoid this unhygienic scramble to break the fast and begin the day.

In various ways this may be accomplished. The underlying principle which perhaps best solves the problem is simple meals.

The continental breakfast of coffee and rolls greatly simplifies the house-keeper's morning tasks, but is open to other objections. A meal of fruit with bread or some grain food would be more satisfying and quite as easily prepared.

One housekeeper, several of the members of whose family must leave home for their post of duty by 6:00 A. M., obviates the need of hurrying on her own part by planning such menus as can be largely prepared overnight. As, for example:—

Roasted Rice with Black Raspberry Sauce
Cream Toast
Celery
Bread

Fresh Fruit
Cream Toast
Celery
Butter

Fresh Fruit
Toasted Corn Flakes with Cream
Escalloped Potato with Protose
Canned Peaches
Bread
Butter

Grape Granola with Nut Cream
Baked Potato
Bread
Apple Sauce
NoKo

Fresh Fruit
Stewed Nuttolene and Tomato
Hashed Creamed Potatoes
Bread Butter
Stewed Prunes

In the first instance the rice is steamed the afternoon previously and the sauce made in an aluminum double boiler. Just before retiring, the table is laid and carefully covered so that no dust, which during the night more than any other time is settling on every level surface, shall soil the linen and dishes; the celery is washed and laid on ice, the butter likewise cut and arranged in the refrigerator, as also the cream for toast. The dishes to be used for serving, with necessary spoons for dishing, are placed on a tray on a table in the kitchen, and covered. The cooked rice is placed in a steamer over a kettle of cold water, the boiler containing sauce placed in the outer one which is filled with cold water, both being covered and placed over burners of the gas range. In the morning, as soon as awake, in dressing gown and slippers, she descends to her kitchen and lights the burners under the food. While she returns to complete her toilet, the food is heating, and by the time she is in readiness, the rice and sauce are not and ready for the meal. Passing through the dining-room it is but the work of a moment to put up the shades and uncover the table; one trip to the refrigerator to place the butter and fruit on the table. A trip to the kitchen to put the cream heating and to bring in the hot rice and sauce, and the breads. By the time these foods are served, the cream is hot and ready to be poured over slices of zwieback arranged in individual dishes. In less than ten minutes after coming to the dining-room her breakfast is ready to serve.

For the second menu, the escalloped potato is previously prepared, placed in the oven in a double baker and reheated in the morning. When baked potatoes form a part of the bill of fare, they are cleaned and placed in the oven overnight. If of medium size, fifty minutes usually suffices to cook them well. If time is limited, they are served as lest course, letting them finish baking while the other foods are being partaken of.

Another housekeeper uses an Aladdin oven in which her breakfast is put at bedtime and allowed to cook very slowly all night and found in readiness for the earliest morning requirements.

The fireless cooker elsewhere described in this number may be used to serve a similar purpose. For foods demanding a low cooking temperature it is admirable.

Another, who is a pure-food devotee, serves such simple breakfasts as:—

Apples Toasted Corn Flakes, Hot Cream

Bananas Rice Flakes with Poached Egg

Apples

Hot Malted Nuts with Zwieback

Such meals, if properly arranged to supply ample and well-balanced nutritive material, and varied from day to day, are most commendable. Almost no time is required for their preparation, and there is little likelihood of the foods being served underdone.

The chief difficulty to be met in this connection is in the pampered palates of the participants. When we shall have educated ourselves and our families back to nature's standard, the breakfast problem will meet an easy solution.

Hygiene in Japan

(Continued)

BY MARIA L. EDWARDS

M OST Japanese houses are small, with rarely more than two or three rooms for a family of four, six, or eight, as the case may be; but since they need no beds, no chairs and no tables (the floor serving for all three), they do not seem so crowded. These rooms may be all on the ground floor, or possibly in one half of the homes the sleeping-room is above, and reached by stairs resembling our step-ladders. None of the

homes have chimneys, because none furhave naces, fireplaces, or stoves. The large majority of the people have only the little charcoal stove. which costs about eighteen sen (nine cents). This stove is a block-shaped

Japanese Mat Makers

piece of clay twelve or fifteen inches square with a hollow place in the top for the burning pieces of charcoal, with holes made down through to a sort of chamber for the ashes. This opens in front by a sliding door which controls the draft.

If the weather is cool, the family hovers over this small stove to keep warm. The cooking is done on this one stove. In winter the temperature goes down as low as, or lower than, in California. There is often frost at night, and water setting out may freeze

over the top. Snow sometimes falls, but soon vanishes.

When going through the Red Cross Hospital, I asked the doctor how they heated their wards, and he replied that they used only the natural heat, meaning the rays of the sun. The lack of artificial heat in the homes is another factor in hardening the Japanese, for they are never subjected to the debilitating influence of a close room at a

temperature of 75° or 80°. No wonder the soldier life is not such a hardship to them as to our American boys.

The patients in the Red Cross Hospital are as happy a lot of people as I ever saw anywhere. Al-

most the entire number at that time were recovering from injuries sustained in battle. A very few of the 1,800 patients were in the contagious wards. The large majority were occupying temporary buildings, one of which, our guide told us, could be erected in six days. These buildings were placed side by side, twenty to thirty feet apart, with a hall across the center. These halls all down the line were connected by covered verandas. On either side of the hall were small rooms for the surgeon, nurses, supplies and food, and the ends of the buildings



Japanese Ladies at Home

formed wards which would hold from forty to sixty patients. As we passed from one building to another the nurse in charge welcomed us and took us through the wards. If the patients were able, as the signal was given by one of them, they would all sit up in bed on their feet, Japanese fashion, and together make a very profound bow to the American visitors. They looked very neat and clean, all dressed in white kimonos with the significant red cross on the right sleeve. Along both sides of the wards the sliding windows were constantly kept wide open, so that the patients were practically living an out-of-door life. In the operating room and surgical ward, things impress one as being exceedingly crude compared with such places in this country, but the essentials were always to be seen. Some means was always devised to do the sterilizing, etc., so that nothing for the aseptic and sanitary care of the patient was lacking. One building was termed "Amusement Hall," where the convalescent patients could go and play games and enjoy themselves. In their storeroom they showed us more dressings and supplies than I had ever seen before.

To illustrate the ability of the Japanese to pursue an idea to wonderfully practical results, I will mention my visit to the Imperial Laboratories in Kobé. We found them carrying on definite research work with small animals, as well as microscopic work on various diseases, such as hydrophobia, diphtheria, typhoid, tetanus, etc.; but their work with rats, pointing to the destruction of the plague, was the most interesting. Several times the disease had broken out within recent months, and that made the officials all the more determined that the trouble should be diligently dealt with. Right here let me explain that rats are very great pests in Japan. The first night I spent in Tokyo I heard my hostess giving directions to have the blinds to the bedroom windows closed early to keep the rats from getting into the house. They are everywhere present. It is also a well-known fact that rats are the chief carriers of the plague germ, and hence the Japanese began offering three sen (one and a half cents) for each rat brought to the station. When I heard the fact, I could understand why the children are so anxious to catch rats and take them to the police. They are brought to these laboratories and a careful record is taken of the locality from which each one comes. The bodies are placed in a large wire basket about the size of a shallow bath tub; this is dipped in a very strong carbolic acid solution, then the hearts and spleens are quickly removed and subjected to a bacteriological examination, and the rest of the animal is immediately buried. Over 1,400 were handled the day previously to our visit, and about 1,200 so far that day. By this means infected localities have been discovered, and the spread of the disease has been prevented. They sent out one thousand cakes of rat poison daily to the suspicious localities. This part of the business alone keeps several employed.

Some of the things that seem so exceedingly neglected compared to the carefully regulated work mentioned above are these:—

At almost all the frequented temples there is to be found the medicine god, which appears to be the favorite deity, because his members are usually worn away by the frequent application of hands to the part of the god corresponding to the afflicted part of the sick. If the eyes, for instance, are affected, the person will rub his hands over his

sick eyes and then over the eyes of the god, etc. Now if the same carefulness were carried out in the temples that is observed in the hospitals, we would exI observed that none of the Japanese who came over on our boat were allowed to land at Vancouver until each one had been subjected to a careful ex-

amination by an eye specialist.

Again, the lepers are allowed to go about the streets and beg. It is not at all uncommon to see those who have had a foot, a hand, or other member apparently eaten off by the disease, confronting your pathway and asking alms. The money is usually thrown down on the ground, and they pick it up quickly, and in turn pass it along. And again if the same carefulness were shown

here that is used in the handling of typhoid fever, all of these cases would be placed on an island or other isolated spot with no communication between them and other members of society, and especially would the pernicious interchange of money be abolished.

(To be concluded.)



Tea Ceremony

pect to see a Red Cross nurse continually on duty with the medicine god, spraying his eyes and sponging his body to prevent the spread of disease. It seems very probable that this familiarity with the medicine god is sufficient to account for the wide-spread eye trouble in Japan.

THE swallows circle, the robin calls;
The lark's song rises, faints, and falls;
The peach-boughs blush with rosiest bloom;
Like ghosts, in the twilight, the pear-trees
loom;

The maples glow, and the daffodile

Wear the same hue that the west sky fills;
The moon's young crescent, thin and bright,
Shines in the blue of the early night;
And over all, through all, April bears
A hope that smiles at the Winter's fears.

—Sara Andrew Shafer.

What the Young Home-Maker Should Know

BY EMMA WINNER ROGERS, B. L.

SOLOMON had an inspired moment, as we often have in dreams, when in reply to the high behest, "Ask what I shall give thee," he asked for "an understanding heart," for wisdom. If he had been awake, being very human, he likely would have asked for "long life," or "riches," or "the life of his enemies." We are much more than human, and it is good to rise to our highest selves, if but in dreams, and to have the inspirations of these moments become our guiding stars.

Wisdom means knowledge and the judgment to use it aright. This is the all-inclusive gift for which the homemaker should ask, and which is alone able to make the rough places smooth, and to create within the four walls of the smallest or the largest abode the happy and well-ordered home.

The making of a home is a partnership affair, and the wisdom for it ought to be possessed by both partners, for all of its activities, interests, and relations, in a reasonable degree, even if one shall be the more expert in its internal activities and the other in its external relations. The young man who does not know a good deal about health conditions, sanitary science, the chemistry and values of foods and drinks, the care of the sick, simple cooking, and something about proportion, beauty, and value in the arrangement of the house itself and its decoration and furnishing, is in no proper state of culture for the head of a modern household. The training at West Point and Annapolis in the minor arts of life has aroused in me a respect for those institutions despite their major training for the outworn and barbarous pursuit of war. Their student soldiers and sailors come out competent to live in health and comfort and immaculate cleanliness in the desert, or the city, or on the ocean.

On the other hand, the young woman in the partnership should know something of the relation of income to expenditure, of bookkeeping, of the demands and customs of the business and professional world, and should be able in an emergency of illness, or absence, or other event to act intelligently for the best good of the home. If we use the feminine pronoun in this article, it is for convenience, then, and intended in a measure to be inclusive of both partners in the home-making venture.

One important and fortunate fact seems to escape mothers and educators generally, that a reasonable education and training for home-making is not a very long or difficult process. This is peculiarly true of young people in the average home of moderate means. They are bound to absorb and acquire a large amount of useful information, and to learn numerous simple activities by seeing and doing them at home. The more skilled and resourceful the parents, the greater will be the children's knowledge and skill in home-making.

But is it not true that a certain amount of special training is highly valuable, and should be given to young people before they start out to build up homes for themselves? The public schools do this for the children, and more and more the high schools, manual training, and private schools and colleges provide courses in practical home-making or household economics. Six months or a year of training, along with the usual studies of the school or college curricu-

lum, or better still, in addition to it, will do much to give the young home-maker that sense of command over materials and methods and subordinates which goes far to secure household peace and safety.

That the young home-maker should be well equipped for her task is as important if she intends to give part of her time to some work beside homemaking when she assumes the care of a home. It is more important even, for she may stumble along and learn by experience if her life is to be given up largely to household cares and works; while if she is to be only a supervising head and yet create a true home, she must know thoroughly what goes to make this, and what to demand and expect of her assistants. It is a time of transition, and there be women, and who shall arraign or condemn them, who, while they wish to create a happy and well-ordered home, at the same time have a faculty or work or profession which they deem it neither necessary nor wise to sacrifice. To these a comprehensive knowledge of home economics and activities is specially essential.

The first thought on the material side of the new home is the house, which is to be its visible embodiment, knowledge of simple architectural principles as related to the uses of the house ought to be a part of the young homemaker's curriculum of study, together with a more complete knowledge of household sanitary science. The health and happiness of the home is to depend vitally upon the house. Is its drainage, sewerage, and plumbing sanitary? the cellar well lighted and ventilated? Do the chief rooms face the south and east to admit the life-giving sunshine abundantly? And then all the minor questions of comfort and convenience need intelligent consideration.

If people demanded more convenient and healthful houses, they would be provided by builders, architects, and owners. It is the ignorance of the nome-maker which results in the insanitary and inconvenient shells that most people put up with and call home.

The young home-maker needs to have special knowledge about foods and drinks, which come second to shelter in the making of a home. The sciences relating to foods and drinks, acquainting one with their values, purity, and cost, are highly essential, as is also information regarding their production. manufacture, and distribution, and familiarity with municipal, State, and national pure food laws. Eternal vigilance is the price of more things than liberty, -notably of pure food, and until the housewife requires certain quality, weight, and care in preparation, and knows when and how failures come about, dealers will be as careless and indifferent as the purchaser, and pure food laws will not be strictly enforced. How many home-makers send samples of the milk or water supply, or any suspected food at intervals to be inspected at the municipal laboratory, or even know that such a place exists for their protection? With unwearied devotion parents will for weeks care for sick children in whom impure milk, water, or food, or insanitary plumbing has caused the dreaded scourges of diphtheria, scarlet fever, typhoid, or malaria, when a few hours of timely investigation and a knowledge of and training in simple household science would have removed or prevented the source of the disease.

The young home-maker ought to know something of physiology, 'nygiene, and nursing, something definite on these lines, so that under no circumstances shall discomfort, suffering, disease, and death result from ignorance of simple laws of health and practical methods of relief. The uses of exercise, baths, dieting, and relaxation in health and in sickness ought to be a part of the knowledge of the home-maker.

It is a day of hospitals, sanitariums, and trained nurses, and where these are available the burden of the home-maker may be greatly lightened. Yet comparatively few, after all, can or do avail themselves of any of these. The comfort of being cared for in one's own home, even if a very simple one, in ordinary sickness, appeals to the poor as well as to the rich and the well-to-do. And this is quite possible where proper knowledge and reasonable skill is part of the home-maker's equipment. For only a very small fraction of households in a community can afford the luxury of a trained nurse. Their remuneration and their prodigal use of every appliance in the treatment of the sick put them beyond the reach of the average The millions of artisans' household. families, of clerks, small merchants, clergymen, artists, and others can rarely afford the services of the trained nurse save in extreme cases. In all but these the home-maker should be able so far as knowledge and skill are concerned, to nurse the sick if necessary, or superintend such nursing.

A home should be attractive and beautiful, not with the beauty of luxurious furnishings, hangings, and rare pictures and books necessarily, but rather adorned with the beauty of simplicity and sincerity in its material finish and furnishings. The home-maker should have had such training of her native artistic instincts and tastes as to create within her home an artistic and restful atmosphere through the fitness of the decoration and furnishing to their setting. The right uses of color

and ornament, the selection of well-made pieces of furniture which may be permanent possessions, the trained eye to choose even an artistic magazine or newspaper print to pin on the walls rather than crude and showy so-called pictures, will make the simplest home a place to live and grow in, spiritually as well as physically.

The duty of the home-maker to the household help, what may rightfully be required of servants and what treatment they ought to receive, is important knowledge for the young home-maker. Poor servants are one of the shocking examples of ignorance in the home,ignorance too often on the part of both mistress and maid. It is high time there were some standards of housekeeping, and some efficient training for service, coming measurably up to these stand-That thousands of women accept wretched service, and suffer the wear and tear of nerves and time because of it, indicates the ignorance and inefficiency of the home-maker in not requiring previous training as a condition of employing household help. Trained cooks could save a hundred lives where the trained nurse saves one, and trained housemaids and laundresses would reduce by many the unfortunate inmates of sanitariums and rest-cures, where burdened housewives flee for rest and peace.

The wise and economic use of money is another essential knowledge for the young home-maker. Waste is as reprehensible morally among the rich and the well-to-do as among the poor, although not so great a source of discomfort and distress. With the suffering from poverty in every community, and with famine, pestilence, and war abroad in our world, only half redeemed as it is from barbarism, the Christian citizen has no right to waste money or the things

which money buys. Abundance with economy will be the ideal of the conscientious home-maker, and she will seek to deserve the praise given in the Good Book: "She looketh well to the

ways of her household, and eateth not the bread of idleness, . . . she stretcheth out her hand to the poor, yea she reacheth forth her hands to the needy."

SOLVING THE FLOOR PROBLEMS

Conditions Underfoot within Doors and How Best to Improve Them —Short Cuts in Every-Day Housework

THAT ubiquitous foe to the house-keeper's peace and the health of her household, dust, is always settling in still air. Since the lowest and broadest surface in a room is the floor, it is evident that the greatest quantity of dust will settle upon it. It is likewise evident that every movement, every footfall upon that floor, will start the

myriad dust motes a gain flying through the atmosphere, some of them to be taken into the air-passages of the occupants of the room with every breath.

Dust is pulverized dead matter
from almost every
conceivable source.
Unsavory as this
may seem, it might
not be dangerfraught did not
many of these inert
particles have
clinging tenaciously to them, living

organisms capable of producing disease.

This, then, is why the housekeeper needs to spend so much time and energy dusting her floors. If the floor is a smooth surface of finished hardwood, or of stone, tile, or one covered with linoleum or wood carpeting, the dust may be easily wiped up and carried away. If, however, a carpet

covers the floor, it not only presents the disadvantage of hiding the dust in its meshes, but also of holding it there. Dust clings tenaciously to wool fabrics, particularly to such as have a thick nap or rough surface, as do carpets and wool portières.

The usual procedure of sweeping a carpet with a broom to cleanse a room removes but little dust save that which clings to the larger particles of



Conducive to Backache

household dirt or to the nap which the broom wears from the carpet. It is more generally a dust-scattering process. The vigorous strokes of the broom drive the dust through the meshes of the carpet to form an accumulation underneath it, besides filling the air of the room with dust motes.

The custom of some housekeepers of sprinkling moist tea leaves, coarse salt, moistened paper, or dampened

corn-meal upon the carpet before sweeping, aids in keeping down the invisible "cloud of dust" from the air and removing more of it from the floor than a dry sweeping. The use of a good carpet sweeper is also effective in gathering the dust without diffusing it through the air. At best a carpet is a veritable dust collector, better dispensed with. A finished floor with removable rugs which may be taken out-of-doors to be freed from dust makes possible a state of cleanliness unobtainable when a floor is carpeted.

Sweeping may be required for the removal of large dirt particles, but as a sanitary measure, floor dusting is far the most essential, and this, to be most effectual, should be done each morning before the dust which has settled during the night is again started in motion. If the floor is a painted one, this may be easily accomplished by wiping it over with a lightly dampened clean



Bending the Knees and not the Back

cloth; cheese-cloth is excellent for the purpose. This can be most thoroughly done by hand, but the cloth may be fastened over a clean broom or handled brush. For a varnished, waxed or otherwise polished floor, a broom cover of heavy cotton flannel serves the purpose best. When the dusting is complete, the cloths used should be washed with soap, boiled, and dried before using again. The broom covers, if taken

out-of-doors, thoroughly shaken, and left hanging for some time in bright sunlight, may be thus kept reasonably clean for several days' use, but should regularly go into the weekly washing.

If a room needs sweeping, it is an excellent plan to sweep it overnight if not needed for occupancy during the evening. This permits the dust a chance to settle during the night in readiness for its early morning removal. This is especially desirable for diningroom, kitchen, and other rooms where foods are prepared.

For the thorough morning cleaning of a polished floor, fold a crash floor-cloth which has been carefully wrung as dry as possible from clean water, into a convenient shape for pinning around a long-handled scrubbing-brush. With this go over the entire floor, changing the cloth as necessary. Most of the dust will cling to the damp cloth, and what does not, will lie upon the

floor in rolls, which may be easily taken up with a hair broom and dust-pan. If the floor to be cleaned is a waxed one, it may be wiped thoroughly with a dry cloth, or if the damp cloth is used, the floor must be afterward polished with the weighted brush.

The floor of rooms in which the regular, daily processes of housekeeping are carried on, as the kitchen, laundry, creamery, and pantry, usually require, besides sweeping and dusting, a frequent cleansing with water.

For cleaning a tile floor, nothing does so well as a scrubbing-brush. At first thought this statement brings to mind an idea of aching backs, bedraggled clothing, and hard work not willingly chosen. But this is not necessarily the case. It is possible to do even floor scrubbing with comparative ease if the work is undertaken properly. When one assures herself that the best results are obtainable by certain procedures, the next step is to seek out the best and easiest method of doing this.

Every kind of work connected with housekeeping is better accomplished in a dress suited to the occupation. The first step, then, should be to don some sort of regimentals. A large apron made of denim or some fabric largely waterproof which will cover the entire dress skirt and is kept in place by being buttoned down the back, serves the purpose very well, but a pair of overalls made like a little girl's protective overalls is even better.

A thin board (covers of grape baskets serve the purpose very well if two are used) to kneel on, and two or three large, clean cloths (cheese-cloth or portions of well-worn-out woolen underwear are the most desirable for the purpose). a scrubbing-brush of bristles, not splints, to which is attached a long handle, and two pails or pans for the water are

the tools best suited for the work. Make a good strong suds of soap and hot water, divide the floor into small portions, scrub each portion with suds and brush, then kneeling on the board, rinse with a cloth and clean water and dry with a dry cloth before wetting another portion of the floor. If the floor is very much soiled, a sand soap or sapolio will be needed instead of ordinary soap. To use this economically, it is well to moisten the cake lightly and rub it briskly over the portion to be cleaned, afterward scrubbing well with the brush, and then rinsing in clean water. If considerable water remains on the floor after scrubbing, brush it into a dust-pan and turn into a third dish provided for the soiled matter. There is a dust-pan with long handles well suited for this purpose.

If one has not a long-handled scrubbing-brush, a hand brush serves even a better purpose, and if care is taken to kneel on the board, resting the weight of the body on one hand, and scrubbing with the other, changing from time to time so as to use each arm alike (remembering that such exercise is really good for the muscles, and each arm should have an equal privilege of gaining strength), one will not find the process of cleaning the floor so laborious after all. Care must be taken with either method to keep the body in good position to avoid fatigue. The arms, and not the back, must be made to do the work.

Begin at one side of the room and work toward the center until one half has been thus cleaned; then begin at the opposite side of the room and again work toward the center, by which time the first half will have become dry so that you can kneel on it to finish the second portion. Far better results are obtainable by thus cleaning the tile in sections than could be obtained by try-

ing to wet it all over at once. Tile, like a dish left long unwiped, is likely to dry in streaks. If care is taken to give the tile thorough attention each day, a floor may be kept an unlimited number of years looking as fresh as when first laid.

A hardwood floor, unpainted, to be kept looking fresh and clean, requires the same method for cleaning as the tile, using a thick, hot lather made of ivory soap. Careless washing will often leave a hardwood floor looking dark and water-streaked, but a thorough scrubbing with the brush with careful drying will usually give satisfactory results.

Floors which are painted or varnished should be cleaned without the use of soap if possible. Soaps contain more or less alkali, which in solution softens, and if strong enough, dissolves paint. If soap is needed, make a suds with it and use this, never rubbing soap directly upon the paint. Clean flannel cloths wrung out of hot water will generally remove dirt from a painted surface if the same is cleaned daily. The paint fills and covers the wood so that the dirt does not penetrate it as it is apt to do an unpainted floor, so it is really the paint or varnish that needs the cleaning, and not the wood. It will be plain, then, that a scrubbing-brush and strong soaps are not suited to the purpose when cleaning a painted floor, as they would remove the paint.

What is termed mopping as generally performed, is not the most desirable way of cleaning floors. To do good work by this method, one needs at least two mops for drying, besides the one used to wet the floor, one pail of suds, and one pail of clean water for rinsing. There are patent wringers which, attached to the pail, do away with the need of wringing by hand.

Mopping is not well suited to the cleaning of corners, and the careless worker is likely to leave marks and soil on the base-boards, while the article used is itself, unless taken entirely to pieces after each use and washed and dried with care, likely to become sour or musty, a first-class breeder of germs, thus making of the mop as ordinarily used and cared for, a most unsanitary implement.

Floors covered with oilcloth or linoleum require as much care in cleaning as do painted floors. In fact, oilcloths and linoleums are in reality painted floor coverings, and for this reason should not be subjected to the scrubbing-brush and soap. Clean with old flannel cloths and hot water, sopping the water up with the wasincloth, afterward wiping as dry as possible with clean soft cloths. When thoroughly dry, apply a very little warm linseed oil and rub it in very thoroughly. A flannel rag, moistened in oil, is a good way to apply it. Avoid washing when dry cleaning will do as well.

E. E. K.

I'm glad the sky is painted blue,
And the earth is painted green,
With such a lot of nice fresh air
All sandwiched in between.

-Mary Ainge De Vere.

SIMPLE LIFE BIOGRAPHIES

BY GEORGE WHARTON JAMES

(Author of "The Wonders of the Colorado Desert," "The Story of Scraggles," "How to Live the Radiant Life," etc.)

Introduction: WHAT IS THE SIMPLE LIFE?

[This is the first of a series of articles by George Wharton James upon the lives of men who have lived simply. Most of the persons of whom Mr. James writes he has known individually and personally. The purpose of these articles is not to glorify the individuals, but to show how by the exercise of simple principles they were enabled to accomplish great and lasting good for the race. He who amasses a fortune does little for the race, but he who teaches it to live wiser than it has done, relieves pain, suffering, disease, and worry, helps the sinner overcome his sin, prevents cruelty to children and animals; teaches the kinship of the race with the so-called lower animals; leads men and women to get out-of-doors and live in, study, and love Nature; to value life more than show, humanity more than custom, and character more than profession,—he who in any degree teaches these things to the world by either precept or example, does much for humanity, therefore, much for God. We look for a great blessing upon our subscribers as they read these articles. May they stir in many hearts resolute desires to seek after the secret of the power of the men and women described, so that each life will become a radiating influence for good in other lives.]

In opening this series of articles, I wish briefly to suggest what I mean by living the simple life: Time was when we were afraid of the word "simple," and even now most of us prefer to be called anything but simple; and to be termed a "simpleton" is to offend us by telling us we are near to a foolish or silly or insane person. This is not the meaning I attach to the word "simple." A thing is simple as opposed to a thing that is complex. An act is simple as opposed to one that is complex. A motive is simple as opposed to one that has many factors.

As applied to life it is the doing of the most natural and rational things in any circumstance that may arise. It is the so ordering of the daily, lowly thought of life that doing the simple thing, the natural thing, the rational thing is the first and chief consideration.

Let me illustrate. A young couple is going to get married, and therefore they propose to build a house for their home nest. What is the simple, the natural, the rational thing for them to do?—First to consider their means, next the cost

of the house, their plan to make it the most perfectly adapted to their present and reasonable future needs. If they plan a house for show, to create a sensation, to dazzle other young couples, to display their wealth, they put by the simple, natural, and rational things and substitute complex, unnatural, and fashionable things in their stead.

A young woman is buying a hat. The simple method is to choose one that suits her purse, her station in life, her own appearance. The fashionable, foolish, and yet too often followed method is to be overpersuaded by the girl who presides at the counter to buy something stylish, to follow the prevailing mode, no matter how ridiculous or senseless it is and to wear shabby undergarments because she has spent all her money in a hat that she never ought to have bought.

The trouble with most of us is that we are constantly asking what other people will think of our actions instead of doing the things that are right for us to do. We are made to live complex lives by adherence to custom, tradition,

fashion. We neither think nor act for ourselves. We are afraid to be called peculiar, strange, different. cranks. And yet God has made us all different. None of us is like any other one, Each face has its own characteristics. Why, then, not each soul, each life? Why should everybody do as I do, or I do as everybody else does? I am on the earth to be myself, and not some one else. Whenever I see a good or virtue in another that awakens in me a desire to possess that good or virtue, and I go to work to possess it, I thus make the good mine. This is not imitation, but possession. I take full possession of the good. But if I pretend to possess it and do not, then I have to live a complex life. Within I am one thing, without I am another, and this means complexity, duplicity. Most of us are pretenders. We want to appear what we are not. The maid apes the dress, manners and tones of her mistress; the clerk, the style, the extravagance of his employer. In the drawing-room we learnedly discuss things which simplicity of mind and lack of knowledge tell us we would better leave alone. When visitors come to dinner, we make a big splurge and make believe it is our regular custom, our actions exposing us as clearly as did the cries of the naughty children who thought they were deceiving their guests when the ice-cream and cake came in by gleefully shouting: "We have it every day! We have it every day!"

Why not be simple, natural, frank, unassuming, real, just what we know ourselves to be? It is simple to be good, to be humane, kind, just, honest, truthful, helpful, frank. And to be these things is to be simple.

Vice is always complex, inhuman, unkind, unjust, dishonest, untruthful, selfish, and cruel.

Let us be simple in all things and consider first of all the right natural course for us to pursue. Then we shall really live. If one is poor, let him say so, honestly, simply, and frankly. It is no disgrace to be poor, but it is a disgrace to pretend to be well off when we are not. If we are ignorant, let us not pretend to be learned and thus expose ourselves to the scorn of those whom we have attempted to deceive. If we have anything we ought to say, let us say it in the most simple and direct manner, even as Christ taught us when he said, "Let your yea be yea, and your nay, nay, for whatsoever is more than these cometh of evil."

The curse of our country to-day is pretense, sham, shoddy, show, and it all comes from trying to appear greater than we are. We build houses and even churches of brick and put on them a "brown stone front" to make believe that the whole structure is of stone. As one said of a church I know well, speaking of its architecture, "It is Queen Anne in front and Mary Ann behind." In other words, a sham, a pretense, a show, a deception. All deceptions are opposed to simplicity, for truth is simplicity itself. And nothing can be beautiful that is false. We may think it beautiful, but that is owing to our ignorance and want of true perception. True beauty can never be false, and falseness can never be beautiful. And these are principles that never change. They apply to man and character, as well as to houses and churches.

Books are valued for their contents, not their bindings, or, at least, they should be. The man who values the looks of his books more than their contents is not a simple-minded man. The woman who values her furniture and bric-à-brac more than the joy and

comfort of her husband and children is not a simple-minded woman, for life is made for human beings, not "junk," even though that junk be called "curios" or "antiques."

The greatest things are the simple things, whether in architecture, literature, mechanics, or manhood. There is nothing complex about the great styles of architecture; they are simple, dignified, grand, therefore lasting. As soon as ornamentation and complexity are introduced, they are factors of weakness and decline. So the true architect keeps going back, again and again, to the simple, the pure, the strong. In literature the greatest poems and writings are those that deal most simply and directly with the primitive emotions of the human soul. Fine writing that values form more than thought may have a vogue for a short time, but the experience of the ages shows that nothing lasts that is not simple. In mechanics the great inventions have been and are the simplest ones. The lever, the pulley, the hydraulic ram, are all simple, and the value of a new invention is estimated largely by its simplicity or the reverse.

And so is it with manhood. Lincoln was a simple character. He had but

one purpose in view in his public life and that was the preservation of the Union. Single of aim, simple—he made all things else bend to it and gained the desired end. The general in the field who thinks more of his own "honor," or his own "glory," or his "dignity," than of the cause he represents is the complex-minded man who brings trouble upon his country and cause. Washington kept but one thing before his mind. He was not working to show the effect he could produce upon his fellow revolutionists, and thus lay the ropes which he could pull in the future and enable him to become president. He planned to drive the British from America, and with single, simple, pure aim he kept that constantly before him until it was accomplished.

The man who values character more than profession,—more what he is than what people think he is,—is the simple man. He is living the simple life, and the simple life is the Christ life, the good life, the helpful life, the life of going about doing good,—the life, which, when apparently ended, compels the utterance, "He being dead, yet speaketh." For such there is no death, for "their works do follow them."

Blooming of the Flowers

The birds have come and the flowers have come,

The music of waters, ice-bound and dumb Through frigid nights and the long, cold days, Is heard again in the psalm of praise That nature, in sylvan temple bowers, Sends up with the vernal birth of flowers. Red are the buds, and the leaves are green;
An azure haze on the hills is seen;
Like phantom ships in the crystal sky
The white-winged clouds go sailing by:
Sunshine and shadow and passing showers
Sweeten the air with the breath of flowers.
—Charles F. Fudge.



The working facilities in the home, -the tables, stoves, sinks, and tubs,should be of a height adapted to the stature of the worker, making it practicable for her to keep in proper poise

while at her tasks. Most sinks are set too low. Consider what a backaching procedure is dishwashing under conditions similar to that in the illustration below. It is likewise a waste of energy. It could be remedied by raising the sink.



A KITCHEN GARDEN IN A CITY YARD

How One Housekeeper Got Ahead of the Truck Gardener, Incidentally Gaining in Both Health and Experience

BY WINIFRED BENNETT

NOTHING could have been more hopeless-looking, from a gardener's point of view, than the tiny backyard, with its high, board fence, lying on the north side of a brick terrace, that shut out all direct sunlight on fully half of the small plot. When the man of the house spaded it up in the fall, and his wife told us of the beautiful garden she was going to have the next spring, I smiled with the superior air of one knowing plants from the botanist's point of view, and said, "I hope your seeds will grow."

This was sometime late in October, just when the nights were getting frosty, and every night when he returned from work, the man went off on some mysterious errand with a wheelbarrow. The result was a thick layer of street sweepings gathered from a vacant lot, where the material had lain and rotted during the summer. This was mixed with leaves and wood-ashes carefully saved from a grate where wood was always burned. By and by the snow came, covering the eyesore in the backyard, and at the same time a continuous stream of seed catalogs arrived by mail.

I think the little woman planted everything in that garden between January and March, with the aid of her imagination, but when the frost left the earth and the robins began to pull fat "night walkers" out of the compost layer in "the garden," a new era began.

One night the man turned up a fresh, brown, earth bed, and was then called

away on business. The little woman could not wait on masculine leisure, and in the cool of the sweet, spring twilight we heard the crunch of the spade and the occasional rattle of the rake against bits of gravel. At breakfast the next morning, the little woman announced that she had planted radishes, peas, and lettuce in her vegetable bed, and a double row of sweet peas around the three partially sunny sides of the lot. The shady side of the square had been reserved for pansies, and a clump of wild ferns brought from the woods,

As the days passed, green things began to appear, first by ones and twos, and then by dozens and hundreds. In spite of my scientific eye, everything looked much the same to me, but the little woman pointed out differences in shape and color in the various groups.

We were still skeptical, when one day there appeared on the table some wonderful little, green, crinkly leaves of lettuce that came from the garden, and with these some baby radishes of excellent flavor. Next there were young onions and more lettuce of better size and color, and the garden began to look very fine with its military rows of green-jacketed infantry and outriders of tomato plants in hoop trellises. The radishes were all used up and a new crop coming on about the time that we left the city for the summer, while the family with its garden remained behind.

When we returned in the fall, the backyard had been transformed. Not a bare board of the fence showed anywhere; there were vines and flowers on the fences and on the poles supporting the clothes-lines, and in the middle the tomatoes showed brave patches of red hanging over the hoop trellises. There were bunches of parsley and "pot" herbs in the corners, and the whole back of the ugly terrace was covered with great vines of "moon" flower and morning glory. The little woman was as brighteyed and brown-faced as a house wren and just as active. She told us all about her experiment, and what that cool, green spot had meant to them in the hot summer; how its delicious odors

had filled their rooms at night, and how even the birds had loved to linger there to bathe in the spray of the garden hose or shelter in the shadow of the vines.

In spite of the poor light, the dust, and all the various insect pests, the garden had produced lavishly, not alone in actual fruitage, but in glowing health and the joy that comes of simply "digging" and living.

The expense had been very small, and the returns in pleasure alone enormous. The following list will give some idea of the materials used and the products.

MATERIALS

PRODUCT

Flowers July 1 to October 15.
Flowers July 15 to October 15.
Flowers June 15 to October 15.
Covered nearly all of back of terrac.
Flowers June 1 to August 15.
Enough lettuce for entire season.
Peas July 6 to 26.
Peas July 14 to August 20.
Radishes for family of four during spring.
Parsley for garnishes and for winter use.
Herbs for summer and winter drying.
Produced all family could use.

THE FIRELESS COOKING IDEA

A Boon to the Housewife Which has Passed the Experimental Stage and May Now be Considered as an Up-to-date Household Improvement

THE process of cooking has been so intimately associated with heat resultant from continuous combustion that at first thought it seems incongruous to speak of cooking without fire. But that such a thing is not at all impracticable has long been demonstrated by the housewives in a somewhat out-of-the-way

portion of Germany, through the use for cooking of what is there known as a "hay box." This is an apparatus consisting of a covered wooden box, lined with cloth or other convenient material, then filled with hay. The food to be cooked is brought to the boiling point and kept there for a short time in the usual manner over a fire, then the disk is quickly transferred to a sort of nest in the hav. Both it and the box being tightly covered, the cooking proceeds without need of further attention or additional heat, though, of course, more slowly than if direct heat were being applied.

Through a United States representative in Germany the system of cookery was recently brought to the attention of President Roosevelt, by whose direction the Commissary Department has been making some successful tests with the intent to use the method in army cooking.

According to the Scientific American: "This method of food preparation has been recently made available for domestic use by the introduction of the cooking cabinet. In the main this is nothing more or less than a well-constructed box of oak, thoroughly insulated to keep in

the heat. It is thirty-six inches long, fifteen wide, and seventeen deep. It is equipped with three enamel vessels of a construction especially designed for this character of work, having covers which are clamped on to further facilitate the retention of the heat. The lids of these vessels are held by a revolving bar-lock device, which not only makes a hermetically tight joint, but also acts as a handle. One of these vessels is of eight quarts' capacity, and the other two, four quarts each. After the viands in the kettle have been exposed to the heat of the stove until boiling has taken place for a minute or so, the lid is clamped into place, and the whole pot transferred to one of the pockets of the cooker.

"The actual time consumed in the preparation of food by this process is about double that ordinarily required, but the food may be left in very long and will not be overdone. The saving of fuel resulting from the use of the cooker is considerable, and the burdens of the housewife are about halved."



The Fireless Cooker

TWO WAYS WITH THE SIMPLE LIFE

How a Young Professor and His Wife Met the Household Problems and What Thorough Preparation and Careful Thought Led To

BY HELEN CAMPBELL

NO," said the city man, planted luxuriously in a bed of pine needles under a pine whose wide-spread branches could easily shelter a hundred. "No. This is good! The choicest bit, perhaps, of an unsurpassed vacation. But pray let us have a few minutes' silence as to the simple life. 'Back to the land!' is a pleasing cry; but how about the thousands of us who must live where our work is, and make that living tolerable? Even the fury of fervor in your head man here doesn't convince me that cathedrals are to be abolished because columnar tree-trunks are as good or better, or that a tent is the only ideal habitation for that part of the world really in earnest. There's more than one way with the simple Meditate on Marcus Aurelius: 'Even in a palace life can be lived well,' otherwise simply. Meditate on my wife. She's got it all down to a fine point. Tell them, Connie."

The charming young woman, whose cheeks flushed crimson as the group repeated in unison, "Yes, tell us," shook her head.

"I have told it so often, John, that you know it by heart. This time it is your turn, and I'll prompt if you miss anything."

And now the young professor sat up and looked about him.

"In the first place," said he, "we talked it over for two years, the time of our engagement, and my wife experimented steadily. It wasn't a question of abolishing everything desirable and calling it the simple life. It was the holding on to what people of true taste and cultivation found essential. She had been a teacher of manual training in another city and resigned her place to come to me. She was certain it would be possible to keep house, yet not be swamped by the work it entails. She wanted a post-graduate course in her chosen work, and we both wanted beautiful things, suited not only to the tastes, but the actual needs of both. She was to study the higher art phases of manual training; and, as she was required to produce some forms herself, she made things that would be needed in our own home, a quiet flat up in Morningside. Everything was made of solid oak, from typewriter desk for me to dining-table, the spaces for them in each room carefully measured. She began with a hand-made oak chair, the wood for it two dollars only, but we could not have bought it for fifteen. On her own writing-desk she put in a morning study period of six weeks,about fifty hours of labor,-but every drawer and pigeonhole was exactly as she desired. Then she made a sumptuous-looking box, a wedding chest like those of the old time, which makes a fine window-seat and holds all manner of things. And the dining-table was finished with boiled oil instead of varnish and shellac, coat after coat, rubbed in patiently, till now nothing hurts it, and every guest admires its beauty. A list was made beforehand of just absolute needs, and the house has

not one thing that does not come under that head. There is no silver to keep clean save knives, forks, and spoons. There is no big sideboard, but a small oak serving-table made by herself, with spaces cunningly planned for holding just the things most used on the table. For a good while she kept a list of the time required to do each individual thing, and, if even five minutes could be saved by elimination or some new way of doing it more easily, she studied it out till the thing was accomplished. She had given up her salary as a teacher, and wished to spend as little as possible till earning began again. Her post-graduate course is over, and she has been professor a year, has made much of the furniture of the house with her own hands, kept nouse without a maid, and made all her own clothes.

"We eat no meat. That makes a big difference in cooking and in gas bills. The vegetables that need long time for cooking are all eliminated. If Europeans get on comfortably on a uniform breakfast, why shouldn't we? Variety can come in the other meals. We use lettuce profusely, for it is to be had good the year round in New York, and have an endless variety of salads, always at dinner, cutting into the lettuce fruit or vegetable, whatever is in season, and using much of the best olive oil. Bananas and tomatoes are our standby, and apples baked, stewed, or raw. Eggs, too, we use in every form except fried; the best bread to be bought, and often quick muffins of wheat and oatmeal. If you looked into our kitchen you would see just three cooking utensils hanging over the gas stove,-a double boiler and two sauce pans. They are enough. We have little puddings, if we want a sweet, but

no pies or cakes. No meat means saving lots of expense, and knocks out grease and smells and much dishwashing. The dishes are never wiped. After washing they are rinsed in boiling water and left to drain till they are wanted. Nothing white is used where it can be avoided.-I mean napkins, table-cloths, white curtains and all the white fluffy things women mostly wear. A house with white bureau scarfs, bedspreads, and all the rest can't be kept presentable without constant work from somebody. So my wife uses soft silk blouses and doesn't own a ruffled white petticoat. She makes all her gowns in one piece and I like 'em. So do other people. In short, we have every sort of comfort a house stands for, with none of the usual fret and bother, and see no reason why many a family might not do the same. Perhaps they will some day when it dawns upon them what the simple life really stands for. She'll tell the rest, if there is any rest,-washing put out and all that. But we live at ease and work happily, and our friends seem to like to come to us. What more would you have?"

"We can't all make our own furniture," said the objector, "and where's your outdoors."

"We walk, my friend, going and returning from college, and daily, in good weather, use our bicycles in a spin up Riverside Drive or in the park. Also, we know the Jersey side, and all the big trees are our own up to Yonkers and beyond. That appears to be a fair portion of outdoors. As to furniture, there are good simple shapes to be had. The chief word, as you have seen, is 'elimination.' A whirlwind of useless and mostly unbeautiful bric-à-brac is in every home. Abolish it all, and Freedom begins."

"But," interposed the objector again.
"'But me no buts,'" said the professor, rising hastily. "Work it out,
man, as we all must, each according to

his light; and with illumination you'll find elimination the way out into peace."

—Abridged from the Boston Cooking-School Magazine.

Sleeping Out-of-Doors

SLEEPING out-of-doors, while being a remarkable restorative measure for the sick, is also a powerful disease preventive for those who are well. For the hosts of men and women, who, for various reasons, are obliged to lead

sedentary lives in offices, shops, and homes, or who are employed in dusty factories and dingy workrooms, it easily furnishes the opportunity for securing several hours of refreshing and invigorating open air obtainable in no other way. Brain - workers, college professors, school-teachers, and professional per-

A Modern Sleeping Porch

sons may bring to their daily vocations a clearer head, a sounder body, and a better disposition by this means. For those persons, also, who—while not immediately ill of any disease—complain of being run down, weak, and de-

ficient in nerve energy; of suffering from headache, a tired feeling and fulness on arising in the morning, and, on account of these symptoms, fall easy victims to the numberless patent alcoholic nostrums and drug swindles, outdoor

> s leeping would prove to be a tonic and restorative.

Besides being a healthrestoring and preserving measure, extraforaneous repose decreases the amount of sleep required each night. By providing oxygen in a more liberal quantity than indoor air, the reconstructive metabolic processes of the body-cells

are hastened and tissue repair and nerve force are more rapidly and effectually restored. This means a saving in the amount of rest a human being needs of approximately one hour a night. It has been estimated authoritatively that an individual reaching the allotted span of threescore years and ten has expended twenty-two years of his life in sleep. Allowing eight hours as the number spent in slumber by the average individual, a saving of sixty minutes each night would mean an economical extension of more than two years of wakefulness and activity for such a person were he an outdoor sleeper. This does not take into consideration either the extra years one might live beyond the normal period of life on account of the increased vigor and bodily tone induced by nightly breathing pure outdoor air. As a factor in augmenting efficiency and productiveness, this added life, so to speak, would be of considerable importance to many men, like our "captains of industry," who are pressed for time. To these and other men it would allow, also, more moments of leisure for needful recreation.

Nevertheless, despite the fact that sleeping out has so many advantages over spending the nights indoors, it is only rarely that we find an individual who, by a practical trial, has convinced himself of this truth. When such a person is found, we usually discover that ill health has been the original causative reason for his acquiring the habit. To most other folks the mere suggestion of reposing a night in the open gives them a chill and arouses the imaginary horrors of pneumonia. In their fancy they picture outdoor sleeping as a shivering exposure to dampness, draft, and discomfort, while inhaling dangerous "night air." For the man who turns up his coat collar, commences to sneeze and expects a cold in the head, tonsilitis, and the grip, each time an outer door is opened for a moment and a breath of fresh air enters his home, sleeping on a roof never will be a favorite or popular method of seeking nocturnal rest; but to the one who will consider such a plan sensibly and rationally, adopt it carefully and understandingly, and pursue it faithfully and continuously, there will come a quick realization of its benefits, a pleasurable delight in its indulgence and a contempt for its imaginary dangers .-Charles Floyd Burrows, M. D.

PROTECTION FROM GERMS

Sarah, a colored auntie of the old type, had come to bring home the weekly wash and was told that one of the family was ill with typhoid fever. The following conversation was overheard:

"Miss Mary, dey tells me down-stairsdat Mr. John has de tyford. Is dat true?"

"Yes, Sarah, that's what the doctor fears. And it's such a dreadful disease! Are you afraid of it?"

"I used to be, honey. I sut'nly used to be afeared of dot zizeeze; but two years ago, when it was so bad 'round here, de doctor tol' my John Henry dat tyford always comes from germs, an' since dat time I pours all our drinkin' water through a tea strainer,—one of dem fine wire ones, dat nothing can crawl through 'less I see it. My min' is a-restin' easy about tyford in dese days, honey."

Priessnitz said: "All cure is better effected by external than by internal means.

"Had I not water. I should cure by means of air."



MEDICINE CABINETS UP TO DATE

An Effective Drugless Collection Taking the Place of the Time-Honored Assortment of Nostrums, Pills and Powders

BY LINNIE ROTH, M. D.

IN the treatment of disease the measures employed at the onset are those which count the most, and it is possible in some cases to abort or even to prevent a serious illness by taking it in its earliest stages. Yet comparatively few households are provided with the articles necessary for treating the most common ailments. and much precious time is thus lost.

for such emergencies, it will be found of great advantage to be provided with a simple equipment which should preferably be kept in a closet or cupboard especially set apart for the purpose.

This outfit should contain, if possible, the following articles: a clinical or fever thermometer, a bath thermometer, fomentation cloths, a hot-water bag, an ice-bag, an enema can and tube or a combination fountain syringe, a rubber



Up-to-date Home Dispensary

nd much precious

1. Talcum powder. 2. Spine bag. 3. Combination water bottle
and fountain syringe. 4. Bulb syringe. 5. Massage cream. 6. Bath
thermometer. 7. Safety pins. 8 Fever thermometer. 9. Friction
mits. 10. Abdominal cloths. 11. Throat pack. 12. Mackintosh.

13. Roller chest pack. 14. Fomentation cloths.

bulb or Davidson syringe, cheesecloth and mackintosh for compresses, a chest pack, safety pins, and one or two friction mitts. Other articles may be added to the closet if desired, as there are a number of other things which will be convenient, if not absolutely necessary.

A clinical thermometer should be found in every household, as even the slightest

ailments it is important to ascertain the temperature of the patient. This is especially true in the care of children, as slight symptoms may be the forerunners of some infectious disease, or even of a serious illness. In the adult and in older children it is best to take the body temperature by placing the end of the thermometer beneath the tongue, keeping the mouth closed, for from two to five minutes. It would be unsafe, however, to



Clinical and Bath Thermometers

take the temperature of small children in this way, as they might bite the thermometer. In these cases it is best to place the thermometer beneath the arm, holding it close to the side, or in the rectum. In the latter position the temperature will be one-half to one degree higher than elsewhere. For a small child the temperature is slightly higher than for the adult, whose normal temperature is 98.6°. A temperature above 100° is called fever, and that above 105° denotes a very serious condition.

After using, the thermometer should be washed in cool water with strong

soap, then rinsed in clear water before returning it to the case. In infectious cases the thermometer should be disinfected before washing. These thermometers should never be exposed to a temperature higher than they are made to register, in washing or under any other circumstances, as they are easily broken by such means.

The bath thermometer is a necessity in preparing the water for different kinds of treatments, especially when the temperatures are prescribed by a physician. For the enema, the foot bath, the leg bath, the full bath, and such treatments, the exact temperature should be gaged by a thermometer, and not guessed at, as is so frequently done.

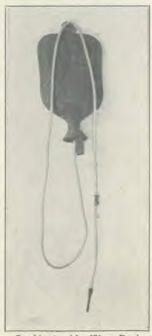
In case of pain, such as that from indigestion, earache, toothache, etc., in inflammation, sprains, and in many other conditions, nothing will afford relief so quickly as heat, which can be administered either by fomentations or by the hot-water bag.

The cloths used in giving fomentations should be about a yard square, a quarter of a single blanket making an excellent cloth for the purpose, at least two such being needed for the treatment.

A hot-water bag is useful in so many ways that it would be impossible to mention them all. By placing a moist cloth over the bag and covering this with a dry one, preferably of flannel, an excellent fomentation is secured. The bag is also very useful in warming the bed for the patient, in giving extra heat in blanket packs, and in similar

treatments. A stomach bag is the most practical for general use, but a long spine bag is also very serviceable.

In the application of cold, either continuous or intermittent, an ice-bag is very helpful. This can be filled with finely broken ice. with snow, or even with very cold water, the end being securely tied to prevent leaking. The bag should always be covered with at least one thickness of muslin or cheese-cloth before applying to the skin. 9 When intense cold is used, it is necessary to remove it from the surface at least



Combination Hot Water Bottle and Fountain Syringe

every half hour, and to rub the skin briskly or to make a short application of heat, to prevent injury to the tissues from too long an application of cold.

It is recognized by many of the highest medical authorities that no better heart stimulant can be used in heart disease than the icebag applied over the heart for half an hour two or three times a day.

The enema is a measure of great benefit, in cases of constipation, indigestion, at the onset of any illness, in fevers as well as in many other conditions. The tem-

perature should be regulated according to circumstances, but as a rule it should be as cool as possible without causing colic. In pain or diarrhea, however, the hot enema will afford relief more quickly.

The bulb syringe is very convenient for syringing the ear in earache, but

will also be found useful in many other ways. For small children and babies it is very convenient for administering an enema. end should be well lubricated before inserting it, and the water passed into the rectum by gentle even pressure. It may be repeated as many times as desired. In little babies it will often give immediate relief from colic.

The heating compress can be applied to



almost any part of the body and for various conditions. It consists of a piece of cheese-cloth or muslin, wrung quite dry from cold water and applied to the surface, then covered with some impervious material, as mackintosh or oiled silk, and flannel. It must be applied snugly to prevent the entrance of air around the edges, at this is frequently the cause of chilling. The covering should be sufficient to prevent evaporation, and it should be carefully pinned at all intersections. It is often beneficial to precede the compress by

fomentation. By making the application cold to begin with, the stimulation causes a reaction which very quickly warms the compress, and as the heat is retained by the coverings, it acts like a continuous fomentation.

In whatever form the heating com-

press may be applied, it should not produce chilliness. If this results, the compress should be covered more thickly, and if it persists, the compress should be removed. When a heating compress of any kind has been worn for some hours or overnight, on its removal the surface should be sponged off with cold water and rubbed briskly to secure good reaction.

For a cold on the lungs, bronchitis, and



such conditions, a heating compress to the chest or the chest pack, as it is frequently called, can be applied very easily, and will be found of great value. While a chest pack may be included in the outfit, it is not absolutely necessarv, as an excellent pack can be made by covering the cheese-cloth or muslin compress to the chest with a pair of knitted drawers, preferably woolen. The seat

should be placed beneath the chin, the legs crossed in the back and brought around beneath each arm and pinned in front (see page 201). For further description and illustrations see Good HEALTH for May, 1906.

The friction mitt, which consists of some coarse, rough material, as mohair, is very



Cold Mitten Friction

useful in making cold applications to the surface of the body for the tonic effect or for cooling after hot treatments.

The mitt or mitts should be dipped in cold water, wrung, then slipped on the hands. The surface of the body is then rubbed briskly with the mitts, the surface of which may be again dipped in the water if desired. It is usually best to rub and dry one part of the body before pro-

ceeding to another, covering the surface systematically.

With this simple outfit one is prepared to care for not only almost any ordinary ailment, but also to give treatments in more serious illness, and the knowledge that one is ready will relieve the mind of much anxiety.

You may make homes enchantingly beautiful: hang them with pictures; have them clean, airy, and convenient, but if the stomach is fed with sour bread and burned foods, it will raise such rebellion that the eyes will see no beauty anywhere.—Sel.

It was not God's purpose that people should be crowded into cities, huddled together in terraces and tenements. In the beginning He placed our first parents amidst the beautiful sights and sounds He desires us to rejoice in to-

day. The more nearly we come into harmony with God's original plan, the more favorable will be our position to secure health of body, and mind, and soul.—Sel.

Every duty which is bidden to wait, returns with seven fresh duties at its back.—Chas. Kingsley.

"Great minds have purposes; others have wishes."

How the Body Resists Disease

IV.

BY WILLIAM S. SADLER, M. D.

- 6. By Destroying When the body is unthe Germs able to eliminate, cripple or incapsulate germs; or, in case of having successfully incapsulated them, it immediately begins the work of crippling them preliminary to their final destruction, which is accomplished in a number of ways:—
- (a) By Germicidal Substances.—This germ-killing principle consists probably of two elements, one of which is always found in normal blood, and the other which is manufactured by the body to meet its specific germ invaders. These two elements unite and effectually encompass the destruction of the microbe.
- (b) By the Alexines.—These are the dissolving or digesting ferments which are thrown out from the bodies of the white blood-cells, and which affect the dissolution or removal of their fallen enemies from the battle-field.
- (c) The Leucocytes, or White Blood-Cells.—These little wandering warriors have power to throw out from themselves minute arms and legs, and thus wrap themselves around the germs, literally swallowing them whole, and digesting them within their own bodies.

It has recently been discovered that the white cells are not always able to attack and overpower germs alone. There is produced by the cells of the body a substance which is found circulating in the blood called opsonin, which is able to stupefy or in some other way weaken the germs so as to make them a ready prey to the leucocytes. In some diseases the blood may be swarming with white cells, but if the opsonins are not present to prepare their prey for

them, they are unable to attract and overpower their little enemies. These opsonins, then, become one of the important factors in the resistance of the body against disease.

When a patient has pneumonia, opsonins are not found in the blood until about the time of the crisis, although the blood contains enormously increased numbers of white cells, but when the opsonins appear,—whatever they are,—they so weaken the pneumonia germs that they fall immediate victims to the attacks of the white cells,—the crisis of the disease occurs,—and the patient begins to recover.

The little "first-aid" cells manifest great fear of certain classes of germs, such as microbes of many acute diseases, and this is why the disease rages so furiously for a number of days, until the body develops more opsonins to weaken and cripple the microbes so that they can be successfully attacked by the leucocytes. The opsonins seem to render the germs palatable to the leucocytes.

It is a singular and interesting fact that the "macrophags," that is, the large white cells, with a single nucleus, seem to evince a preference for an animal diet. They are the cells that eat up the dead tissues and débris found about a wound. And when under the influence of certain irritant poisons, absorbed from the intestine, they behave very strangely, especially if the body cells are weak, and there is evidence of senile decay. They have been observed to prey upon the body itself. Under the spell of these poisons, these reformed defenders of the body turn in-

surgent, and devour brain cells, liver cells, and feed upon any part of the body that happens to be in a weakened state, showing great preference for the nerves, brain cells, and other of the more highly organized tissues. This affords a simple explanation of loss of memory and other symptoms found in old age.

In old age, these very cells depart from their former habits of defense and virtue, and spend their time in the vicious work of destroying their fellow body cells, thus producing atrophy, sclerosis, and even gray hairs; and cases are on record in which a person has turned gray in a single night, due to the fact that hordes of "macrophags" invaded the hairs from the roots, carrying off the pigment in a few hours.

There are a number of germs that may invade the human body which are almost as large as, or even larger than, the white blood-cells. How do these little fellows manage such large intruders? They do it in this way: A number of the white blood-cells unite, literally fuse their bodies together, thus producing what might be termed a "giant" cell, and in this united form attack the invader.

- (d) Certain Fixed Cells.— Certain cells of the body which are stationary, such as endothelial and epithelial cells, are also found to take on ameboid movements in an emergency, and assist their brothers, the white cells, very materially in the work of devouring and destroying disease-breeding intruders.
- (e) The Lymph Glands.—The lymph glands constitute a great system of breastworks, a chain of protected forts, which effectually back up the advance guard and firing line of the body's defensive army. When the white cells and the various agencies before enumerated, are unable to cope with the invaders, and the enemy comes in such vast

hordes, and is so powerful as to sweep aside the outer defenses of health and life, then it is they must pass through this system of fortifications arranged throughout the body for its final defense against the invading foe.

Within the lymph glands are found the sturdy lymph cells, which, after methods similar to those of the white blood-cells, are able to resist the advance of the enemy. And when the battle waxes hot, the lymph glands may enlarge, or, as we commonly speak of them, become inflamed and swollen, and thus the field of battle and the possibility for producing new soldiers is enormously increased. So, while the swelling of a lymph gland, as seen in scrofula and other conditions, is an evidence that the body is poisoned, and is invaded by no small number of unfriendly germs, it also indicates that nature is nobly rising to the occasion, to meet the enemy by increasing her means of defense, and enlarging her fortifications. The sensible thing to do, is to cooperate with this wonderful healing process within the body, and seek to help nature in her earnest struggles against the germs.

The Omentum. - The omentum is a great vascular apron which hangs down in the abdominal cavity from the region of the stomach, and which has power, when germs enter the abdominal cavity and peritonitis is threatened, to extend itself even down into the pelvic cavity, and there, by means of its great vascular supply, to bring more of the fighting blood-cells to the scene of the struggle, to bring more blood to nourish the struggling tissues, and to carry away the poison secreted by the germs. During surgical operations we often find the omentum adhering in some far-off corner of the abdominal cavity, which is a silent testimony to the struggles of former days.

THE TWO WAYS



Eaters Gathering Eatables



Eaters Killing Other Eaters



DEAR CHILDREN OF THE GOOD HEALTH FAMILY: -

I'm glad to know that so many of the that Miss Cooper is always glad to hear children are enjoying their cookery and how the children are getting along.

finding it so interesting. It certainly is a most interesting thing, since it affects not only our health and happiness, but our very life. It is more important to learn how to live properly than anything else one can do.

Don't forget

Last month we talked about "fuel foods"—thefoods which are especially used to keep us warm and to give us strength to act and do.
The kinds of fuel foods are starch (which we talked about last month). sugars, fruit acids, and fats.

When we speak of sugar, we usually think of the white granulated



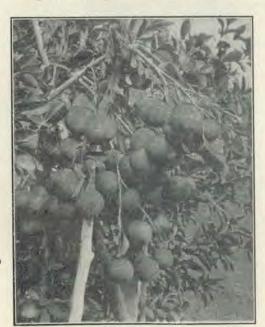
Preparing Apples for Canning

material found on our tables. But there are other kinds, there being three distinct varieties-(1) Canesugar, which we obtain not only from the sugar-cane, but from the sugar-beet and maple-tree as well. (2) Milk sugar, which is found in milk, but is not a very sweet sugar. and is used for the coating of sugarcoated pills. (3) Fruit sugars, known as grape sugar and fruit sugar. These you can not buy as sugar at the grocer's, but you do get them dissolved in the juices of ripe fruit. Our body also manufactures it from the starch which we eat. This is a part of the process known as digestion. Starch is one of the chief forces in which fuel food is



Taking Can from Oven

stored. And, strange to say, neither plant nor animal can live upon it as starch. It must be changed into sugar. In the human body we have a substance found in the saliva, known as ptyalin, which performs this function. But did you ever stop to think that starch is primarily intended for the food of some young plant? The potato is really a storehouse of food for the young plant. In the spring, when the "eyes" begin to sprout, these young plants must have something to feed upon in order to grow. Within the potato is a substance very



Florida Oranges

similar to our saliva, which changes the starch into sugar, preparing it for the use of the young plant. It is the same way with wheat and the seeds that we plant.

The fruit sugars are the most wholesome form of sugars; hence it is much better to get our sweets from fruit than from candies.

Another important part of fruits is the acids. They are also a fuel food, but their chief value is that of a cleanser. We use soap and water to cleanse the outside of the body and sometimes forget that we need an internal cleansing as well.

On the whole, well-matured and ripe fruit is a most wholesome and delicious food, and should form a part of our daily ration. I wish that all of the Good Health children

could share with me some of the Iuscious oranges and grape-fruit I have been eating down in Florida. But I can only show you an illustration of them.

Since fruit is such an important food, and since it is not in season at all times of the year, it becomes necessary to employ some means of preserving it. The only safe method is that of canning. The only reason that fruit will not keep without canning is because of tiny organisms which we call germs that



Folding Beaten Wnite of Eggs into Marmalade

cause it to decay. These are present in the air and all about us, but they are killed by heat. So in order to preserve our fruit we must heat both the fruit and the jars containing it, for fifteen to thirty minutes.

I presume most of you have never canned fruit, because mammas usually think it quite a difficult task, but I am going to tell you of a method which is so easy I am sure you can do it. To start with we will use apples, for they are quite easy. But other fruits are canned in the same way.

TO CAN APPLES.

For a one-quart jar.

Pare, core, and quarter four or five medium-sized apples and place them immediately into cold water to prevent their becoming dark. Prepare a syrup by heating together one-half

cup of sugar and two and one-half cups of water. Fill the jar with the apples and pour slowly over them the syrup, reserving a portion with which to fill the jar at the last. This must be kept hot. Place the lid without the rubber on the jar, but do not screw it down at this point. Place the jar in a shallow pan with a little water in it and set in a cool oven. Turn the heat on very gently, otherwise the jar may break, and keep a comparatively cool oven all the time. At no time should the fruit cook so rapidly that the juice will run out. As soon as the fruit is tender (this may be tested by raising the lid and trying with a clean silver fork), remove from the oven, taking care not to expose to drafts or any wet objects. Lift the lid and as quickly as possible adjust a clean rubber band (a new one is preferable). Then screw the lid down (not quite tight), wipe it off, and allow to cool for an hour or so. Then screw the lid down again very tight.

Be careful not to touch the jar with anything cold and not to expose it to draft.

TO COOK PRUNES.

Select California sweet prunes. Wash in hot water and put to soak overnight in enough cold water to cover. In the morning set on the back part of the stove and cook slowly for about three hours. When properly cooked, the prunes will be plump, whole, and tender, with a rather syrupy juice about them. Thus prepared they are delicious.

PRUNE WHIP.

2 cups prune marmalade 4 egg whites

Cook prunes as above directed. Prepare the marmalade by pressing the prunes through a colander. Beat the whites of two eggs to a stiff froth and fold into the marmalade. This is done, not by stirring, but by putting the egg whip down at the side of the dish and bringing it up through the material. This is repeated until the ingredients are thoroughly blended. The mixture is then put into a baking dish and baked for about thirty minutes or until "set." Then a meringue (pro-

4 tablespoonfuls powdered sugar 1 dozen pecan or walnut meats



Prune Whip

nounced me-rang') is made by beating the remaining two eggs to a stiff froth and folding in the powdered sugar. Spread this lightly over the top, arrange the nut meats symmetrically over this, and replace in the oven until the meringue is of a golden color. Serve with plain or whipped cream.

ORANGE APPLE.

Pare and core six or eight nice apples. Place in a baking pan, fill the centers with sugar mixed with a little grated orange rind and pour over each a teaspoonful of orange juice. If the apples are rather dry, put a tablespoonful or two of water in the pan. Cover and bake until almost done. Then remove the cover and allow to finish uncovered. Serve with—



Orange 1 Apple

ORANGE APPLE.

1 cup orange juice
Juice 1 lemon
1/3 cup sugar
4 level tsp. corn-starch
Grated rind of ½ orange

Obtain the orange juice with a lemon drill as you would lemon juice Add the sugar, lemon juice, orange

juice and grated rind, and heat to boiling. Braid the corn-starch with four teaspoonfuls of cold water and add to the boiling liquid. Cook five minutes, stirring constantly.



The School of Murder

THERE are ten thousand murders in the United States every year. In several of our large cities there are half a dozen or more murders daily. Only a very small

proportion of the perpetrators these crimes are brought to justice -not more than two or three per cent. Human life is not held in the same sacred regard now as in former times. Able jurists, even some ministers, justify murder by appealing to the unwritten law. There are many other indications of an unmistakable decay in morals.

The causes of this decadence doubtless are many. That hunting as a pastime

is to a degree responsible for this, can not be doubted. The accompanying picture, which appeared in a recent popular magazine, shows a boy picking up a bird which he has killed, which he will carry home as the proud evidence of his skill in marksmanship. His parents and friends will applaud him for his accomplishment. The fact that a throbbing heart has ceased to beat, that a quivering brain has ceased to feel, that a beautiful living form, a

> marvelous mechanism more wonderfully wrought than any machine of human construction, has been destroyed, are considerations which are not for a moment entertained.

Boys are early trained to look upon the killing of animals as a most delightful source of pleasure and entertainment. From the shedding of the blood of birds, squirrels, deer, and other ani-

mals, it is not a great step to the shedding of human blood. Animal blood has the same red color; animal flesh is made up of the same

quivering muscle fibers, the same glistening white nerve trunks, as are found in the human body. Only an expert could distinguish between a mass of lean human flesh and that of an ox.

To kill for mere wanton pleasure is as mean and contemptible as it is unnatural,



210

It is heathenish, barbarous, to encourage boys in such wicked sport by providing them with guns, and complimenting their exploits is to train them for acts of violence, possibly for murder, in later years. There is a wonderful amount of truth in the assertion of the late Senator Hoar: "What we most need in these days is not to find out how to civilize the heathen, but how to get the heathenism out of civili-

The standard of morals, at least of ethics, maintained by some Christians is hardly up to that of the ancient heathen philosopher who wrote,—

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

THE CANNED MEAT TRADE

Government Reports Show a Falling Off of Over a Million Dollars' Worth of This Kind of Business.

A recent government report shows a falling off of more than a million dollars in the canned-meat trade. This means the consumption of several million pounds less of this unwholesome foodstuff. Intelligent men and women everywhere are finding that they can get along well without consuming as food the miserable remains of dead beasts of questionable character which are peddled about the country in tin coffins under the name of "canned meats." There is plenty of better food in the markets.

A philosopher poet who flourished three thousand years ago, declared in one of his most beautiful poems that God "causeth the grass to grow for the cattle and herb for the service of man; that he may bring forth food out of the earth." Our modern philosophers are slow in recognizing the great biologic law that all food comes from the earth. David was right. God never intended that the most glorious of all his creatures should get his food from a filthy slaughter-pen, but offers him abundant supplies of the purest and sweetest of foodstuffs from his own great store-house.

President Roosevelt gave the cause of diet reform a very great boost when he ordered the investigation of the packinghouses. Gradually the light is dawning upon thousands of minds, the truth that flesh-eating is as unnecessary as it is unnatural, and that the results of flesh-eating are as dangerous and pernicious as the process of slaughter and packing is repulsive.

A BARBAROUS PENALTY

The passing of the Guillotine in France a Lesson Which Might Well Be Heeded in the United States.

CAYOUR declared that it is easier to stir up a revolution than to inaugurate a reform in France; yet this most conservative of nations, where the guillotine was once almost as active as a sausage-grinder in a meat shop, has at last actually done away with the death penalty. As a writer in the *Temps* well says, "Human justice is essentially fallible. . . . Why, then, should judges have the power of passing the death sentence?"

The old argument that capital punishment is necessary for the protection of society is neither a sound argument nor even a good excuse. A murderer always escapes the death penalty if even a fair presumption of insanity can be established. But is not a murderous lunatic far more dangerous to society than a sane murderer? There is no beast in the forest so dangerous as a man with a homicidal mania. He

has absolutely no fear of consequences. He has almost supernatural strength and cunning. His appetite for blood is insatiable.

We kill criminals because we hate them. We must give them their deserts. Justice must be satisfied. We must wreak vengeance upon them. "Vengeance is mine, saith the Lord."

It is high time that the death penalty was erased from our statute books. It is anti-Christian, and barbarous, and has no place in civilized society.

A REMARKABLE OPERATION

About Thirteen Feet of Small Intestine Successfully Removed by M. Pauchet of the Hotel Dieu.

M. Pauchet, one of the surgeons of the Hotel Dieu recently presented a patient at the Picardie Medical Society from whom he had removed four meters (about thirteen feet) of the ileum with a corresponding proportion of the mesentery. The patient suffered from a very large irreducible inguinal hernia, which gave him great pain and incapacitated him for work. On opening the sac the cartilage was found to consist of the ileum with thickened adherent mesentery. The whole mass was fused together by inflammatory exudate, so the only thing that could be done with it was to amputate it at the external ring. The weight of the mass removed was more than one pound. The ends of the divided intestine were united by a lateral anastomosis by means of a button. The patient left the house at the end of a month apparently well, but as soon as he returned to his ordinary diet a very obstinate diarrhea appeared, the undigested food being expelled through the anus very soon after it was taken into the mouth. The patient was placed on a dry diet, with purées and porridges prepared from farinaceous and other vegetable products. The patient had no further difficulty, the bowels moving regularly twice daily. The reporter expressed the hope that by the adoption of

a vegetarian diet the patient's small intestine would gradually increase in length antil entirely restored to its original proportions. (This is hardly to be expected.)

RACE SUICIDE IN ENGLAND

The Dregs of the Population Multiplying Rapidly While the Better Class Becomes Sterile.

MR. SIDNEY WEBB, the eminent English publicist, has been making a study of the causes of the diminishing birth-rate in that country. He freely admits the fact that there is a steady decline in the birth-rate, especially among the higher classes. "The dregs of the population multiply rapidly," he declares; while the higher classes of cultivated and refined citizens are becoming almost sterile. This is because the dregs of the population are less far removed from "simple-life" conditions than are the better classes. The first effect of an unnatural environment upon animal or plant is to lessen or destroy productivity and reproductivity. Sterility is growing among civilized women. Of those who bear children an increasing proportion are unable to nurse them. The conditions imposed by modern civilization are inherently unwholesome for the human race, and are certainly leading us to race extinction.

A return to natural habits, a recognition of the immutability of the laws of our being, a "sharp turn" toward rational living, alone can save the race from complete degeneracy and the final extinction toward which we are to-day so rapidly hastening.

THE DANGER IN CANDIES

Adulterants Employed by Confectioners Render a Common Source of Ailment Doubly Perilous.

CANE sugar is always more or less unwholesome when taken in concentrated form and in other than very small quantities. So at best, even when made of purest materials, candy is objectionable, and a source of mischief; but the competition among candy-makers has led to the aggravation of the evils which arise from the candy-eating habit by the introduction of various sophistications. For example, the manufacturers of chocolates employ numerous substances of various sorts, "thinners," "stiffeners," and other cheap substitutes for chocolate. These cheap adulterants melt at a higher temperature than does the natural fat of the cocoa bean, and hence are very convenient for the manufacturer to use, especially in hot weather, besides costing much less than the material for which they are substituted. Glucose whitened by means of poisonous bleaching substances, paraffin, the same as used for making candles, barite, a white mineral used for adulterating lead, talcum, a mineral substance much used for toilet powders and paints, white clay, chrome yellow, and various other mineral substances, besides poisonous coal-tar dves, are extensively used by the manufacturers of candies.

These harmful substances are to be found not only in cheap candies, of which they often constitute the major part, but to some extent also in candies which are sold for the highest price.

A CURE FOR SEASICKNESS

A Simple Application of Hot Water to the Brow Is Recommended as a Very Effective Measure.

As the present is the season when ocean travelers suffer most from seasickness, it may prove of service to know that Dr. Wolf, a German physician, claims to have made the discovery that bathing the brow with hot water will cure seasickness in a few hours. The patient lies horizontal on deck, while hot compresses, as hot as can be borne (160° F.), are rapidly applied to the brow. The clothing must be loose.

From personal observation we would recommend with the above the use of the ice-bag applied to the back of the neck.

HOW TO COOK POTATOES

Loss of Valuable Materials Results When Skins Are Removed, Connecticut Experiments Prove.

Some experiments carried on at the Connecticut Agricultural Experiment Station have shown that a considerable loss of material results from the cooking of potatoes from which the skins have been removed. In the boiling of peeled potatoes, three per cent of carbohydrates and four per cent of albuminoids were lost. When the skins were left on, the amount of nutrient material lost was infinitesimal. Baking or steaming are on this account preferable means of cooking potatoes as well as other vegetables.

One of the most valuable elements of the potato and other fresh vegetables is the considerable amount of alkaline salts found in these esculents, which are largely lost when the vegetables are boiled in water after having the skins removed.

HEALTH is a thing of growth, like grass and trees. One can raise a crop of health as he may raise corn or potatoes. You can not get a bushel of potatoes out of a pint bottle of some sort of extract or decoction, nor even one potato. Neither can one get vitality or strength out of a pill box or a medicine chest. Health doesn't come that way any more than do potatoes. One can raise a crop of potatoes, and one may in much the same way raise a crop of health.

To get a good crop of potatoes one must plant good seed in good ground, and must cultivate the plants, and in due time he will reap a good harvest. It is exactly the same in relation to health. One must sow the seed and cultivate it, and must wait for the harvest time, for new growth is an essential element. Health can not be secured by magic any more than potatoes.



[Every reader of Good Health is entitled to the privileges of the Question Box. All letters should be addressed to Editor Question Box, Good Health, Battle Creek, Mich. Questions must be confined to matters regarding health and kindred topics. Each letter must be signed with the full name and address. The name and address are required so that when necessary, the letters may be answered directly, as it is frequently impossible to include all letters and their answers in this department, owing to the large number received.—Editor.]

To: 462. Blotches on Face and Body; Treatment.—L. F., Illinois: 1. "I have had on my face for the past eight or ten years a number of blotches or copper-colored scabs, occasionally healing up but always recurring. They also appear on my hips near the lower part of the spine. The trouble has been diagnosed variously as ivy poison, blood poison and scrofula. Kindly give your opinion and outline what would probably be the most effective treatment."

Ans.-The cause is probably autointoxication. For temporary relief, bathe the face with very hot water for five minutes three or four times a day. The radical relief consists in curing the autointoxication. Avoid the use of flesh foods of all kinds, including fish and fowl. Milk is a favorite food for germs, and should be avoided or used only in the form of buttermilk. Eggs are a highly nitrogenous food, but should be used sparingly, as nitrogenous foods favor autointoxication. Let the diet consist principally of fruits, grains, vegetables, and legumes with the hulls removed. Fresh dairy butter may be used freely. Bread should be toasted-not simply browned on the outer surface, but cut in thin slices and baked in a slow oven until browned through and through. Drink an abundance of water, fruit juice and buttermilk. Employ an enema daily, using water at a temperature of 80°. Take a cold bath every morning. Live out-of-doors as much as possible. Secure an abundance of fresh air while asleep, either by leaving the windows wide open or by using a fresh-air tube.

2. "Is there any danger of conveying the disease to others by being shaved in a public shop or by giving my underclothing to poor people?"

Ans.—The danger is not great, for every one carries upon his skin the germs which are capable of producing acne.

3. "Would there be any danger of transmitting it to offspring?"

Ans.-No.

10,464. Floating Kidney—Butter in Hyperpepsia—Catarrh of Intestines—Listerine—Canned Vegetables—Sterilized Milk, etc.—Mrs. L. S. T., Minnesota: 1. "Is there any home treatment for floating kidney?"

Ans.—Yes. Exercises to develop the abdominal muscles, a correct sitting position, vigorous rubbing of the abdomen with a towel or the hand dipped in cold water every morning on rising, and the use of the Abdominal Supporter, are the measures which can be carried out at home and will be found helpful.

2. "Will the free use of butter, say from 400 to 500 calories daily, by a person suffering from hyperpepsia be enough to overtax the liver?"

Ans.-No.

 "Is drinking a glass of hot water, night and morning, injurious to the stomach?" Ans.—No.

4. "Outline the treatment for catarrh of the intestines."

Ans.—The diet should consist of easily digestible foods, such as have been outlined before for cases of autointoxication. Buttermilk and fruit juices are also excellent.

Avoid cane-sugar, fried foods, fats, olives, all pastries, pickles, and such condiments as pepper, pepper-sauce, mustard, etc.

5. "Is there any virtue in the use of listerine in enemas, and also in using a solution of it for a catarrhal condition of

the stomach and bowels?"

more thoroughgoing Some Ans.-No. cleansing agents are necessary,-soap, for example. A strong soap-suds enema is frequently very helpful. The important thing is to begin the cleansing at the other end of the alimentary canal by eating only clean food. Vegetables and fruits should be thoroughly washed in their preparation for the table. All that has been said concerning the diet in autointoxication applies to these cases. Keep the bowels thoroughly emptied. Use the enema twice a day, if necessary, until the feces are no longer foul. The foul odor is due to too long retention of fecal matters in the colon.

6. "Do you consider canned vegetables of the market healthful foods?"

Ans.—Yes. They frequently, however, require thorough cooking. They often contain an excess of salt, and they are sometimes

artificially colored, though such instances are now comparatively rare under the Pure Food Laws.

7. "How may milk and cream be sterilized

for home use?"

Ans.—By scalding. The milk and cream should be kept at a scalding temperature for fifteen minutes. This will destroy all dangerous germs.

8. "Give a test for pure water."

Ans.—There are no simple tests for pure water for home use which can be relied upon. The water must be sent to a bacteriological laboratory for careful examination. Chemical tests are not sufficient. Water which, as tested chemically, may seem perfectly pure, may be deadly because of the presence of germs which could not be detected except by bacteriological analysis.

9. "Are boiled milk and cream constipa-

Ans.—9. Yes. These foods are so completely digested and absorbed that they leave no residue. Cream is less constipating than milk on account of the presence of a considerable amount of fat.

LISTERINE

The original antiseptic compound

¶ Listerine is peculiarly free from irritating properties, even when applied to the most delicate of the tissues, whilst its volatile constituents give it more healing and penetrating power than is possessed by a purely mineral antiseptic solution; hence it is quite generally accepted as the standard antiseptic preparation for general use in domestic medicine, and for those purposes where a poisonous or corrosive disinfectant can not be used with safety. ¶ It is the best antiseptic for daily employment in the care and preservation of the teeth.

Literature more fully descriptive of Listerine may be had upon request, but the best advertisement of Listerine is—LISTERINE

Lambert Pharmacal Company, St. Louis, U. S. A.

10,465. Enlarged Glands — Flatulence.

—A. K., West Virginia: "My little girl of eleven years has enlarged neck, both glands being swollen above the collar bone. She has grown very fast and has always used a great deal of milk. I. What would you recommend?"

Ans.—The glands are possibly tubercular. It may be that the infection is derived from the milk. We would recommend the use of sterilized milk. Buttermilk is preferable. See that the child lives out-of-doors as much as possible, and that she has an abundance of fresh air at night. She should chew her food very thoroughly, avoid drinking at meal time, taking pains, however, to drink an abundance of fluid at other than meal time. Avoid the use of meat, tea, coffee, chocolate, fried foods of all kinds, and mushes. The child should eat an abundance of fruits, easily digested vegetables, well cooked and dextrinized cereals, such as toasted corn flakes, toasted wheat flakes, etc., and should have a cold friction bath every morning on rising.

2. "Outline treatment for gas on the stomach and constipation, accompanied by frequent severe headaches."

Ans.-The cause is probably autointoxication, the treatment for which has been outlined several times in these columns. Keep the colon clean, adopt an aseptic dietary, reduce the fats and proteids in the dietary to the minimum. This means the entire avoidance of meat and eggs. Take a cold bath daily on rising. Live outdoors as much as possible. Use the enema daily for a few weeks, employing water at a temperature of 80°. There is no danger in the continued use of the enema so long as it is not warm.

10,466. Flatulence and Sluggish Circulation - Red Nose - Cottonseed Oil -Salt .- A reader, California: 1. "I eat two meals a day, using no meat, tea, coffee, liquors, or sweets, have plenty of exercise and fresh air, and masticate my food thoroughly. Still I am greatly troubled with gas in the intestines. With the exception of this difficulty and sluggish circulation, I am perfectly well. Although an elderly man, I feel ordinarily as well as a man of thirtyfive. Can you give me the cause of and remedy for either of these troubles?"

Ans.-Your troubles are probably due to retention of fecal matters in the colon. Treatment is practically the same as in the answers to the foregoing question.

2. "What is the cause of and remedy for red nose in a person living as I have stated above?"

Ans.-Autointoxication. Some relief may be obtained by washing the face alternately in hot and cold water.

3. "Can you recommend the use of cottonseed oil?"

Ans.-It may be wholesome, but we have never thought it best to recommend it, as there are plenty of good fats concerning which no question could be raised.

4. "Isn't common table salt quite as good for bath purposes as the so-called sea salt?" Ans .- Yes.

New Jersey: 1. "State the cause of stinging sensations at the neck of the bladder upon passage of the urine. Advise remedy for the same. I have been careful of diet, abstaining from the use of meat, tea and coffee, and have never used tobacco or alcoholic liquors.

Ans.—The cause is probably acidity of the urine. Drink a quart or more of water daily than you are accustomed to drink. Take short hot sitz baths daily for three or four minutes at a temperature of 104°, with the feet at the same time in a bath of water at 112°. At the end of three or four minutes rise and have some one dash a pail of cold water over the parts which have been immersed. Dry carefully.

Miss F. E. S., Tennessee: 1. "If it is true that salive can not act on insoluble starch. such as is in the raw cereals, how do you account for the fact that hogs, cows, and horses thrive on wheat, oats, etc., and that many persons maintain good health on the raw food diet?"

Ans.—Starch digestion begins in the mouth by the action of ptyalin of the saliva. This, however, can act only on soluble starch. All raw cereals are digested in the intestines. Special provision is made in the case of those animals which thrive on wheat, oats, etc., for the digestion of the raw starch. The saliva of these animals acts chiefly as a lubricant and for macerating the food.

2. "A writer on dietetics says that 'it takes a strong stomach to digest mush, oatmeal, and cracked wheat' as usually cooked, because the starch has not been sufficiently acted upon in the cooking. Do the stomach juices really have any part in digesting starch, cooked or uncooked?"

Ans.-No. The gastric juice has no part in the digestion of starch. However, the saliva continues to act upon the starch which has been swallowed into the stomach for an hour or an hour and a half after beginning the meal, and this action of the saliva continues until it is stopped by the acid of the gastric juice. The ptyalin of the saliva is active only in an alkaline medium.

W. W., Ohio: "For several years I have been troubled by apparent weakness of the back, especially noticeable when stooping at work. I find it difficult to straighten up, and my back appears sore or stiff upon getting out of bed in the morning. Weakness of the bladder is a noticeable symptom. I recently suffered from lumbago. Please give cause and treatment."

Ans.—We recommend a large fomentation to the back, followed by a heating compress, to relieve the soreness and stiffness in the back. The heating compress should be worn all night. In addition you should take a sweating bath at least twice a week, in the evening before retiring, and a tonic cold bath every morning on rising. Adopt a low-proteid diet.

10,471. Massage of the Eyes.—G. E. McK., Washington: "Define proper movements for massage of the face underneath the eyes. Should the fingers be moved from the eyes outward or how? Should the pressure be light or hard?"

1

Ans.-In applying massage directly to the eye, one must exercise great delicacy of touch. Have the patient close his eye. Place the fingers of the hand upon the temple a short distance from the orbit, and the tip of the thumb upon the upper lid of the closed eye. Make gentle rotary movements, gradually increasing the pressure, but taking care that it be not so great as to cause pain. Patients whose eyesight is impaired often remark that they are able to see better after the application. In massage of the face in the region of the eyes, work outward from the eyes, nose, and mouth, at which points many muscles find their insertion. Place one thumb upon the lower lid and the other just beneath the eyebrow. Make traction outward, drawing upon the inner corner of the eye; then change the position of the thumbs so as to massé all the muscles about the eye. These movements improve both the nerve and muscular tone of the eye. The habit of rubbing the eye for relief, which prevails almost universally among persons thus suffering, is a strong suggestion of the utility of massage administered systematically and in a skilful manner.



Nursing.—E. McC., Texas: 1. "Kindly explain what causes a breaking out on the toes with people who are careful of their diet? Will the use of lemon juice daily have anything to do with it? Outline treatment."

Ans.—The feet should be thoroughly cleansed daily. Bathe the parts with green soap and hot water. Follow this by careful drying. Then apply carbolic acid, one part of a 2% solution of carbolic acid in alcohol. When this is dry, apply a little dusting powder. Change the stockings every day. We do not see how lemon juice could have anything to do with the breaking out.

2. "Your article in the October Good Health, 'The Society Baby,' is severe. Kindly tell me what course of home treatment I should adopt to secure milk enough to nourish my child. I was not able to nourish my first baby, a boy, and was obliged to resort to modified cow's milk."

Ans .- The nursing mother should be free from worry. You should adopt a diet of some easily digestible foods, such as toasted corn flakes, toasted wheat flakes, and other dextrinized cereal preparations, toasted bread or zwieback, poached eggs or other soft-cooked eggs, cream, fresh buttermilk. baked potatoes, rice, and some of the vegetables which are not so coarse. Fruits should be used in abundance; nuts, if well chewed, are allowable. Avoid the use of meats, tea, coffee, chocolate, fried foods, pickles, condiments, and cheese. We would also recommend the use of malt honey or meltose, bees' honey, malted nuts, and various gluten preparations. Malted nuts is the best thing we know of. Live out-of-doors as much as possible.

J. S., Rhode Island: 1. "Which dates are the better, Persian or Ford?"

Ans.—Dates should be classified by the mode of curing. White dates cured in sugar, and black dates cured in molasses are the best. Tunis dates are also excellent. These are cured in their own natural juices.

"Define treatment for a pain in the heel, feeling somewhat like a stone bruise, I have tried both hot and cold foot baths, but these do not seem to relieve it."

Ans.—You should have the foot examined by a competent surgeon. It may be there is some disease of the bone.

always sleep on my right side, having been taught that this is best, and find when I go to bed with a full stomach I always awake lying on my left side. At other times I do not turn over. Why is this the case?"

not turn over. Why is this the case?"

Ans.—The patient is probably restless and moves about. Why the patient should lie on the right side it is impossible to explain. It is utterly impossible to account for some of the things people do when they are asleep.

South Carolina: "When one has an excess of acid in the stomach and fermentation is present, what is best to relieve chronic constipation, an excessively foul tongue, and a yellow skin?"

Ans .- The patient needs an application over the stomach two or three times daily, for fifteen minutes, of a flannel cloth wrung out of very hot water. The last application of the day should be followed by the application of a heating compress, consisting of a towel or a piece of cheese-cloth wrung quite dry out of very cold water and applied over the stomach, covered by several thicknesses of flannel and an impervious mackintosh rubber or oilcloth covering to prevent evaporation. This should be removed in the morning on rising and a cold sponge bath should be taken at once, giving special attention to cold rubbing of the abdomen. Drink an abundance of cold water. Secure a free movement of the bowels daily, by the use of the enema if necessary. Observe the same rules for diet which have been outlined in foregoing answers to questions for the cure of autointoxication. Live outdoors as much as possible. Take a sweating bath two or three times a week at night just before retiring.

Inadvertently the credit for the Japanese pictures used in connection with the article "Hygiene in Japan" in last month's issue was omitted. These cuts were kindly loaned to us by "The Housekeeper," Minneapolis, Minn. The editors of GOOD HEALTH appreciate the use of them as a distinct favor, inasmuch as they were reproductions from original pictures taken expressly for "The Housekeeper" in Japan.

"The New Hygiene"

ETCHNIKOFF'S latest work, telling about the wonderful discoveries that have resulted from his researches. Not a bulky, uninteresting volume filled with abstruse facts and figures, but an engrossing little book which any health-seeker or enthusiast can read and digest as readily as the deepest student of science. One can read it in an evening or make it the study of months.

Of this work, Dr. Kellogg, editor of Good HEALTH, says: "The New Hygiene is a most charming little book . . . presenting new facts and new principles, which from a hygienic standpoint are truly revolutionary."

Sent post-paid for only \$1.10.

Good Health Publishing Co. Battle Creek, Mich.

Become A Vegetarian

ND become stronger, healthier, happier, clearer-headed—and save money. Learn about Vegetarianism -and save

The Vegetarian Magazine.

The Vegetarian Magazine.

The Vegetarian Magazine stands for a cleaner body, a healthier mentality and a higher morality. Advocates disuse of flesh, fish and fowl as food; hygienic living and natural methods of obtaining health. Preaches humanitarianism, purity and temperance in all things. Upholds all that's sensible, right and decent. Able contributors. Has a Household Department which tells how to prepare Healthful and Nutritious Dishes without the use of meats or animal fats. Gives valuable Tested Recipes and useful hints on HYGIENE, SELECTION OF FOODS, TABLE DECORATION, KITCHEN ECONOMY, CARE OF COOKING UTENSILS, etc. Full of timely hints on PREVENTION AND CURE OF DISEASE. Gives portraits of prominent vegetarians, and personal testimonials from those who have been cured of living. TELLS HOW TO CUT DOWN LIVING EXPENSES WITHOUT GOING WITHOUT ANYOF LIFES NECESSITIES, EXPLAINS THE ONLY WAY OF PERMANENTLY CURING THE LIQUOR HABIT. WAYS TO INCREASE MUSCLE AND BRAIN POWER. Valuable hints on Child-Culture—how to inculcate unselfishness, benevolence and sympathy in children. A magazine for the whole family. Uniquely printed, well illustrated. Pages 7 by 10 inches in size. Published monthly. Sent postpaid to your address, 1 year, for \$1; 6 mos., 50c; 3 mos., \$5c; 1 mo., 10c. No free copies. roc. No free copies

BOOKS YOU OUGHT TO HAVE

	and the address of the section	
	4 Reasons for Vegetarian Diet	.05
	The Philosophy of Diet	
	Meatless Dishes	
F	lygeia Cook Book, Dr. Heard	+50
	Moral Basis of Vegetarianism	
	for War or Peace, Which?	
(Cleanliness the First Principle of Hygiene	.10
(Clerical Sportsmen, J. Howard Moore	.05
1	Vegetarianism from Principle	.24

THE VEGETARIAN MAGAZINE, CHICAGO, ILL.

COMFORT

IN TRAVEL

is to be had in a very high degree upon the

SAFE, FAST, AND COMFORTABLE

TRAINS OF THE

ICHIGAN

"THE NIAGARA FALLS ROUTE"

BETWEEN

Chicago, Points in Michigan and the Fast



ALL TRAINS PASSING

NIAGARA FALLS

by day stop five minutes at Falls View, affording a near and comprehensive view of America's Greatest Wonder.

O. W. RUGGLES.

General Passenger Agent

W. J. LYNCH, Passenger Traffic Manager

CHICAGO

A LUXURIOUS HOME

FOR THE SICK AND CONVALESCENT



Employing all rational methods, hydrotherapy, massage, electrotherapy, electric-light baths, diet, etc. For the treatment of acute and chronic ailments such as rheumatism, nervous diseases, Bright's disease, gout, diabetes, stomach and intestinal disorders, anemia, diseases of women, etc. No contagious diseases taken. For particulars, rates, etc., write for Booklet "A" to

PENNSYLVANIA SANITARIUM, 1929 Girard Ave., Philadelphia, Pa. Or to H. B. KNAPP, M. D., Supt.

5/50 TRI-CITY SANITARIUM

Situated on the Moline Bluffs Overlooking the Majestic Mississippi



Offers the delight of a beautiful and ever changing landscape, besides a magnificently constructed and equipped building, the services of Sanitarium trained physicians and nurses, a carefully prepared and daintily served hygienic dietary, the most modern facilities for the care of surgical and obstatrical cases, and a quiet homelike atmosphere

attractive illustrated booklet describing the institution, its advantages and methods, will be cheerfully mailed to those interested if addresses are sent to

TRI-CITY SANITARIUM,

MOLINE ILLINOIS.

HOW TO JUDGE INVESTMENTS

B eFORE you invest a dollar in anything, send for my book, "How to Judge Investments,"
This book tells you about everything you should know before making any kind of an investment, either for a large or small amount.

It tells how you may safely start on the road to

wealth.

It explains the growth of capital and how small investments have brought wealth and fortune to others

It tells how others have grown rich.

It tells how to select a 5 or 6 per cent security. It explains how an investment in a development enterprise may pay profits equal to 100, 200, or even 500 per cent on the money originally in

Stocks and bonds, both listed and unlisted real estate, investments of different kinds and financial matters are fully described in simple lan-

guage.

This book gives good, sound advice and will help you to invest your surplus earnings (if only a few dollars a month) in securities that promise the best possible returns.

A financial critic says of this book, "It is the best guide to successful investing I ever read."

The regular price is \$1.00, but to introduce my magazine, the Investor's Review, I will send the book post-paid on receipt of a two-cent stamp and in addition will send you the Review for three months free.

months free.

The Investor's Review is of interest to all persons who desire to invest their money safely and profitably. Address Editor,

INVESTOR'S REVIEW, 729 Gaff Building, CHICAGO, ILL.

Clean, wholesome and invigorating as the outdoor sports which it so effectually covers,

WESTERN FIELD

is a source of never-ending delight to its readers.

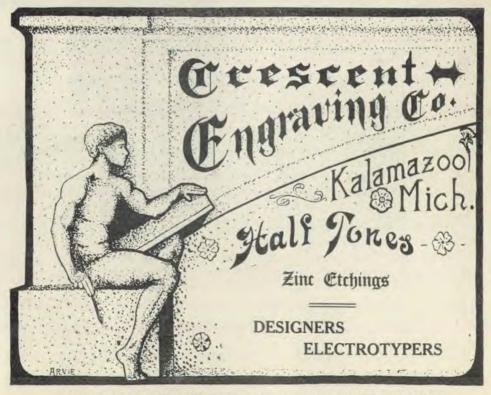
An American magazine for American sportsmen, it is as broad as an American's requirements and is a-throb with the quick life of this hustling age. Its every statement is authentic; its literary articles are the cream of the world's writers; its illustrations are the despair of contemporaries.

Send for a (free) sample copy, and put us to the test.

WESTERN FIELD CO.

609-610 Mutual Savings Bank Building,

San Francisco, Cal.



In replying to advertisements, please mention GOOD HEALTH.

THE OPEN-AIR TREATMENT OF CONSUMPTION

Leading Lung Specialists are contributing articles on the PREVENTION and CURE of TUBERCULOSIS to every number of

JOURNAL OF THE OUTDOOR LIFE

Official Organ of the National Association for the Study and Prevention of Tuberculosis.

Let us send you six back numbers containing valuable articles. Fifty cents silver or stamps.

Journal of the Outdoor Life

38 Main St., TRUDEAU, N. Y. In the Adirondack Mountains

Per Year \$1.00

Per Copy 10c.

A Quiet, Well-Equipped Sanitarium Et Chicago

This Sanitarium is located in Hinsdale, one of Chicago's most delightful suburbs, on the Burlington Railroad.

Its charming grounds comprise 16 acres of rolling land covered with virgin forest and fruit orchard.

A most ideal place for invalids, with full equipment for sanitarium work. Building is lit by electricity, private telephones in each room, beautiful outlook from every window.



Open air treatment, Swedish movements, hydrotherapy, electric light baths and electrical treatments, massage, scientific dietetics, sun-baths, and sensible health culture, cure thousands of invalids where ordinary means have failed.

Try what scientific physiological methods can accomplish at the Hinsdale Sanitarium.

An Artistically Illustrated Booklet giving Full Information may be obtained by addressing

The Hinsdale Sanitarium

Or DAVID PAULSON, M. D., Supt.

HINSDALE, ILL.

Allied Sanitariums of Southern - California -

Institutions using the same methods for the restoration and preservation of health that have proved so successful in the older institutions at Battle Creek, Mich., St. Helena, Cal., and Boulder, Colo.

Circulars furnished on application. You can see Southern California while stopping at these Sanitariums.

When you visit the beautiful orange groves of Redlands and Riverside, stop at Loma Linda, or the "Hill Beautiful."

Loma Linda Sanitarium is sixty-two miles east of Los Angeles on the main line of the Southern Pacific Railroad, located upon a hill 125 feet high. It stands in a valley amid orange groves, fruits, and flowers, for which this section is famous. Surrounding this valley on every side are emerald hills and snow-capped mountains. Loma Linda has been justly called a veritable "Garden of Eden." Address.

LOMA LINDA SANITARIUM

LOMA LINDA, CALIFORNIA



LOMA LINDA SANITARIUM



PARADISE VALLEY SANITARIUM

Near San Diego, California. Is one of the few places in the known world where all conditions are favorable to restore the sick to health.

The Climate is the Most Uniform
No extreme heat or cold.
San Diego Co, has more sunshiny days during the winter months than any other section in the United States. The winters here are like May and June in the east. It is the place where the sick get well.

Write for catalogue.

P. V. SANITARIUM NATIONAL CITY.

CALIFORNIA

GLENDALE

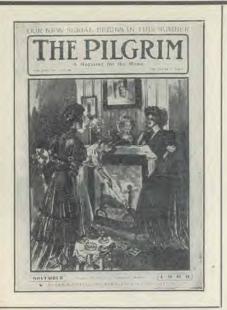
SANITARIUM

GLENDALE - CALIFORNIA.

Southern California's GREAT HEALTH RESORT

Battle Creek Sanitarium physicians, nurses, methods of treatment, and diet. Upto-date treatment rooms just completed. New gymnasium. Delightful climate. Building steam heated, electric lighted, electric elevator. Reasonable rates. Just the place the sick and overworked have EAMED OF AND LONGED FOR. Electric cars leave Huntington Building, 6th and Main Streets, Los Angeles, for the Sanitarium every thirty minutes. for full particulars and free booklet B. Tubercular, insane, or objectionable cases not admitted.





The Pilgrim is distinctly a HOME magazine. It is beautifully illustrated. Meets the wants of EVERY MEMBER OF THE FAMILY.

Four pages latest fashions, bright stories, up-to-date articles on live subjects, children and mothers' departments, health and hygiene, practical culinary advice and recipes. Same page-size and general style 'as Ladics' Home Journal.

Now in its XVth volume. Published monthly. Price \$1.00 per year.

We Want 100,000 More

PEOPLE TO TEST IT FOR ONE YEAR. We know you will like it and become a regular subscriber after that.

That is why

We make you this generous offer

This 3-piece, gold-lined SILVER SET, quadruple plate on white metal, consisting of bon-bon dish, sugar bowl, and creamer, FREE—ABSO-LUTELY FREE,—for the next sixty days to every person sending us \$1.00 for a year's subscription. We pay all charges,

If you prefer a guaranteed SAFETY RAZOR OUTFIT to the Silver Set, you can have it. Or a \$1,000 accident INSURANCE POLICY, fully paid up for one year, if you are over 16 and under 65 years of age. Take your choice, but write to-day and enclose \$1.00 to

The Pilgrim,

DETROIT.

MICHIGAN

N. B .-- Write your name and address plainly.



The Battle Creek Sanitarium and Hospital Training-School

For CHRISTIAN NURSES

A Great Opportunity

For all Christian young men and women who are in sympathy with the principles taught at the Battle Creek Sanitarium, and who desire to prepare themselves to work for the betterment of the race in the capacity of Christian nurses.

A three-years' course is provided, and the instruction given comprises a larger number of subjects and more thorough training than is offered by any other school in the world. In addition to the subjects taught in hospital training schools special attention is given to all branches of physiologic therapeutics, including hydrotherapy, radiotherapy, phototherapy, kiniesitherapy, or manual Swedish movements, and massage.

There is also a very thorough course in surgical nursing. Ladies receive thorough theoretical and practical instruction in obstetrical and gynecological nursing.

The course also includes instruction in bacteriology and chemistry, comprising laboratory work, lectures, and recitations.

Nurses receive on an average two hours of regular class work daily, besides the regular training at the bedside and in practical work in the various treatment departments.

The course in gymnastics embraces not only ordinary calisthenics, but also the Swedish system of gymnastics, medical gymnastics, manual Swedish movements, swimming, and anthropometry.

The school of cookery affords great advantages in scientific cookery, and also instruction in dietetics for both the sick and the well, the arranging of bills of fare, the construction of dietaries, and all that pertains to a scientific knowledge of the composition and uses of foods.

The course for men covers two years of instruction and training.

Graduates receive diplomas which entitle them to registration as trained nurses. Students are not paid a salary during the course of study, but are furnished books, uniforms, board and lodging. Students are required to work eight hours a day, and are expected to conform to the principles and customs of the institution at all times. Students may work extra hours for pay. The money thus earned may be ample for all ordinary requirements during the course.

Applicants received whenever vacancies. The next class will be organized the first of April, 1907. Applications will be received during February, March, and April.

Students who prove themselves competent may, on graduation, enter into the employ of the institution at good wages. For particulars address the

BATTLE CREEK SANITARIUM TRAINING-SCHOOL,

Battle Creek, Michigan

CLUBS

Many organizations are now preparing outlines for study for the year 1907-1908. In the preparation of such work, especial attention is called.

Advance Announcement

Chautauqua Home Reading Course

American Year 1907-08

Beginning with September, 1907, readers are assured a course of extraordinary interest. It combines studies of conditions with a survey of significant historic events and influences in American life.

The Home Reading Faculty for this year includes John Graham Brooks, of Cambridge, Mass.; Katharine Lee Bates, of Wellesley; Horace Spencer Fiske, University of Chicago; Jane Addams, Hull House Social Settlement, Chicago; John R. Commons, University of Wisconsin; and others.

Subjects for the American Year are as follows :-

As Others See Us Composite America American Literature Provincial Types in American Fiction American Painting Newer Ideals of Peace

Topical outlines furnished clubs for the preparation of Year Books.

CORRESPONDENCE INVITED DEPT.,

CHAUTAUQUA INSTITUTION,

Chautaugua, N. Y.

The Battle Creek Schools

A Great Missionary System

Back-to-Nature



An Education without Money

Conducted in Connection with the Famous Battle Creek Sanitarium

Are you planning to be A Physician, A Nurse, A Teacher of Health, A Cook, A Leader in Domestic Science, A Hygienic Dressmaker, An All-Round Gospel of Health Evangelist?

3 3 3 3

Nowhere else in the world are such splendid opportunities offered as here for a thorough and many-sided training at so small a cost. Here the highest standard of technical scientific knowledge is joined with that of perfect Christian ideals. The great need of the world at the present time is strong men and women prepared for grand and noble enterprises. Of one of these schools, the American Medical Missionary College, Stephen Smith, A. M., M. D., LL. D., of New York City, a well-known medical teacher, and one of the most eminent physicians and surgeons in the world, says: "Standing alone as the pioneer institution devoted exclusively to the training of those who have been chosen to go before His face into every city and place whither He Himself would come, it inaugurates a New Era in the efforts to evangelize the world."

JUST NOW there is opportunity for a limited number of earnest men and women of mature years and established character to matriculate in these schools. JUST NOW there is set before YOU the privilege of elevating yourself from the lowest round of the ladder to the greatest height to which you are capable of climbing, and all without money.

Do Not Slight This Opportunity! Write at once for Calendar of the Course in which you are interested.

= Address.

« SECRETARY BATTLE CREEK SCHOOLS, « «

Sanitarium, Batttle Creek, Mich.

Corset Slaves



Nine Out of Every Ten

women you meet are just that—corset slaves. Not willing slaves either, mind you. Not bearing their burdens of headaches, backaches, weak stomach, liver or kidneys uncomplainingly—far from it. For if ever imprecations were hurled at any one thing more than another by the American women, the corset is that thing.

Didn't you ever hear this :-

"Oh, these corsets, they're just killing me! I do wish I could get away in the woods somewhere where I would not have to wear them."

It used to be "a case of have to." Women who did not wear corsets looked so "simply dreadful" that even the prospect of invalidism would scarcely offer inducement to appear in public corset-less.

That was the situation a number of years ago when we began to figure on a reform garment to take the place of the corset. To-day a great many sa 'sfied wearers of the **GOOD HEALTH WAIST** add their assurances to ours that this waist successfully replaces the corset.

It looks just as well—to an eye trained to real symmetry and gracefulness, it looks far better.

The waist is washable and adjustable and is carried in all styles and sizes. Children's waists are also carried

"All right for others but not for you?"

Not a bit of it.

A trial will convince you that this is just what you have been looking for.

USE THIS COUPON.

Good Health Publishing Co., Battle Creek, Mich.

Send your free catalogue, telling about the Good Health Waist, to

Name _

Address

A. Q.

No matter whether planning a vacation or business trip, it will pay you to see what the

Grand Trunk Ry. System

will be glad to do for you.



THE Double-Track Tourist Line of America,

with through car service to Toronto, Montreal, Portland, Me., Boston, Buffalo, New York, Philadelphia and Chicago

PLEASE CONSULT LOCAL AGENT OR WRITE

Geo. W. Vaux, A.G.P.T.A.

CHICAGO, ILL.

ST. HELENA, CALIFORNIA

SANITARIUM





and best eonipped institution west of the Rocky Mountains, affiliated with and employing the Battle Creek Sanitarium methods of treatment. Beautiful scenery. Delightful winter climate.

A postal will bring large illustrated booklet.



CALIFORNIA SANITARIUM, SANITARIUM, CALIFORNIA. R. R. R. Sta & Exp. Office, St. Helena

Announcement



FTER April 1, 1907, or as early as practicable, SEAL OFMINNESOTA Flour, in sacks, will be branded as follows:

This improvement in the brand is made to satisfy a popular demand for a more attractive sack, to be in keeping with the improved and higher quality of—

SEAL OF MINNESOTA

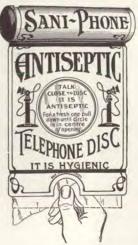
"The Great Flour of the Great Flour State"



The New Prague Flouring Mill Co.

NEW PRAGUE, MINNESOTA

An Ounce of Real Prevention



Don't try to kill the germs in your phone. Sani-Phone Antiseptic Telephone Disc keeps them out

If you value your health and that of those dear to you, do not allow an unprotected telephone mouthpiece to remain in your home or office. Disease germs of a hundred kinds find lodgment in it.

The new Sani-Phone Antiseptic Telephone Disc is the best protection against the ever present danger of infection. As shown in illustration, it is provided with a cylinder at the top which contains a roll of antiseptic tissue or film sufficient to cover the mouthpiece 100

times.

Where sick persons or strangers use the phone, the tissue or film should be pulled down and section torn off every time the phone is used. In families, however, one section will keep clean and harmless for a number of days. The original film should thus last a year. Twenty-five cents for a year's health insurance! That's buying it cheaper than you can get it from any other company. And four additional rolls containing 400 sections cost only 25 cents.

The Sani-Phone Antiseptic Telephone Disc is attached to the phone by sliding it over the mouthpiece without removing any part of the instrument. Does not interfere in the least with the transmission of sound, and can be used equally well for local or long distance calls,

The most eminent bacteriologists heartily endorse the Sani-Phone Antiseptic Telephone Disc.

Antiseptic Telephone Disc.

An ounce of prevention is worth many pounds of cure. Ask your stationer or druggist for the Sani-Phone Antiseptic Telephone Disc.

If either hasn't it in stock, send us 25 cents in silver, Postal or Express money-order, and we will send you one direct by return mail. Be hygienic and order one to-day.

MATENTTITLE GUARANTEE CO

Hygienic Telephone Disc Co., N.W. Cor. Third and Arch Sts., Philadelphia, Pa.



Breathe Fresh Air at Night

The sleeping hours are devoted by nature toward repairing the waste tissues caused by the work of the day. Fresh air, containing pure oxygen, is vitally necessary. Cures sickness, brings health and strength. You need not sleep out-of-doors to do this. Get the

ALLEN HEALTH TENT

Ventilation equals out-of-door It fits on the inside of a window, which is opened at top and bottom. Insures a warm room to sleep in. Does away with breathing impure air, which will collect in every room. Can be folded up in daytime and let down at night. Strongly Can be folded up in daytime and let down at night. Strongly recommended by physicians everywhere. Free booklet on the fresh-air treatment of weak lungs, consumption, and other house diseases, price of tent, etc. Write to-day.

Indoor Window Tent Co. 1307 South Adams Street

PEORIA, ILL.

PURE WATER



No. 7

You know that impure water undermines the health. You know that it vulgarizes the table. But do you know that it is made clear, sparkling, and wholesome by the

NAIAD FILTER?

A filter new in principle, of moderate cost, and endorsed by expert sanitarians wherever known. It furries the water and is more than a STRAINER. It is positively and water and is more than a STRAINER. It is positively and continuously GERM-PROOF. It admits of instant and complete renovation. It is made either PRESSURE OF NON-PRESSURE, and in different numbers, adapting it to the Home, Office, Schools, Hotels, Hospitals, etc. A Filter of the Highest Grade and Lowest Cost. If interested in the Subject of Pure Water, Write for our Booklet, R.A. It is Free.

The Natad Filter Co., Sudbury Building, Boston, Mass.

In replying to advertisements, please mention GOOD HEALTH.

Rest and Health Training Battle Creek Sanitarium

The Battle Creek Sanitarium offers a new and fascinating world to the seeker after rest and health. It offers not only the finest modern hotel appointments,—such as palm gardens, sun parlors, picturesque dining-rooms, rest foyers, elegant lobbies and parlors, the famous Sanitarium cuisine with its calorie diet system, interesting and diverting entertainments, etc., but also Electric-light Baths, Manual Swedish Movements, Mechanical Vibration, a great gymnasium, with individual and class instruction, four swimming-pools, all kinds of baths, including Nauheim; massage, phototherapy, X-Ray, Finsen-Ray, trained men and women nurses, thirty attending physicians, expert men and women bath attendants, etc.



Warm Climates Are Enervating. The pure, germless, invigorating air of Battle Creek, as controlled in the delightful seven acres of indoors at the Battle Creek Sanitarium, is rich in recuperative power.

Rates Very Moderate. Board and room, including baths, services of bath attendants, necessary medical treatment, etc., are not so expensive at the Battle Creek Sanitarium as board and room alone at many first-class hotel winter resorts.

Descriptive Booklet Free. Beautiful pictures illustrating the Sanitarium and its fascinating System of Health Training, Rest, and Recuperation. Write at once. Address, Box 21,

THE SANITARIUM, Battle Creek, Michigan

