VOL. XL. Edited by J. H. KELLOGG, M. D. NO. 11



10 CENTS PER COPY.

### PUBLISHED MONTHLY

\$1.00 A YEAR.

Entered at the Post-office in Battle Creek, Mich., as Second-class Matter.

# **GOOD HEALTH**

Insured by

# **GOOD BREAD**

Scientists agree that no food is so nearly perfect as wheat bread, containing, as it does, all the properties needed to keep us healthy and vigorous.

## MARVEL FLOUR

## Wholesome – Nutritive

Makes sixteen loaves per barrel more bread of better quality than other flour. The bread keeps fresh and moist for a longer time, and is in every way superior — distinctive.

**MARVEL** is rapidly gaining in popularity is now on sale in nearly all cities.

We solicit orders by mail. Dealers and bakers everywhere know that a uniformly excellent flour is the foundation of successful business. We can deliver MARVEL anywhere in the civilized world. Write us direct for information.

## LISTMAN MILL COMPANY La Crosse, Wis., U. S. A.



## A SANITARIUM IN THE WOODS



THE HINSDALE SANITARIUM

IN Hinsdale, seventeen miles from the Union depot, Chicago, on the Burlington Railroad, is the home of the Hinsdale Sanitarium.

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

A most ideal place for invalids, with full equipments for sanitarium work.

Open - air treatment, Swedish movements, hydrotherapy, electric-light baths, massage, scientific

dietetics, sun baths, and sensible health culture cure thousands of invalids where ordinary means have failed. Try the Battle Creek Sanitarium methods at the Hinsdale Sanitarium. Send for an illustrated booklet and full information. Address,

HINSDALE SANITARIUM, Hinsdale, Ill.

## How to FEED THE BABY

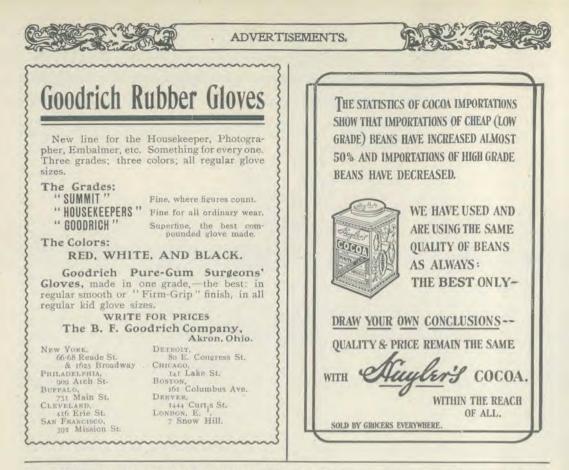
Is often a perplexing question when mother's milk is insufficient, either in quantity or quality. Pure cow's milk is not always available, and most of the proprietary substitute foods are deficient in fat. Even cow's milk, although containing the requisite fat, is somewhat deficient in carbohydrates. But Winters says: "Children get over slight chemical differences in cow's milk much more readily than they do physical differences — those due to contamination." And Jacobi states: "Clean milk is far more important than any amount of modification."

## Highland Brand Evaporated Cream



Which is simply good cow's milk reduced two and one-half times by evaporation and sterilized, overcomes all danger of contamination. Further than that, it is more readily digestible than either raw, pasteurized, or boiled milk. In short, it is far preferable to ordinary cow's milk from every standpoint. It is the simplest, most uniform, and satisfactory substitute food. Trial quantity on request.

HELVETIA MILK CONDENSING CO., Highland, Ill.



IF YOU ARE INTERESTED and wish to save money, read our Magazine Offers this month. If you do not find what you want, let us know, and we will make you an offer on any combination you may want.







Combination Offer for GOOD HEALTH MAGAZINE SPECIAL FALL AND WINTER SUBSCRIPTIONS A Year's Subscription, New or Renewal, to Good Health and Keith's Magazine on Home Building (\$1.50 per year). Included with All Offers Below Send us Send us Offer No. 4 - With one in Class A and B ...... \$2.75 To these offers add \$1.25 for Ladies' Home Journal, \$1.50 for Everybody's Magazine. THREE BEST OFFERS OF THE YEAR No. 1. An Annual Subscription to GOOD HEALTH and KEITH'S, with choice of Cosmopolitan, Woman's Home Com-panion, or Era, with one of Housekeeper, Madame, American Boy, Black Cat, or Modern Stories, \$4.50 value for \$2.50. No. z. An Annual Subscription to Scribner's, GOOD HEALTH, and KEITH'S, a value of \$5.50 for \$3.50. No. 3. An Annual Subscription to Review of Reviews, GOOD HEALTH, Cosmopolitan, and KEITH'S, a value of \$6.50 for \$3.25. CLASS B CLASS A WOMAN'S HOME COMPANION \$1.00 WORLD TO-DAY 1.00 NATIONAL MAGAZINE 1.00 HARPER'S BAZAR ...... \$1.00 GOOD HOUSEKBEPING ...... 1,00 AMERICAN ILLUSTRATED MAGAZINE (Leslie's Monthly) 1.00 CAMPBELL'S ILLUSTRATED JOURNAL I.00 PEARSON'S ..... 1.00 
 PHILISTINE
 L00

 New York Magazine
 1.00

 Men and Women
 1.00
 SUCCESS 1.00 CLASS C COSMOPOLITAN ...... ..... 1.00 MADAME ..... 1.00 ANY PHOTOGRAPHIC MAGAZINE ...... 1.00 BURR MCINTOSH 3.00 HOUSEKREPER. :60 OUTLOOK ..... 3.00 IMPORTANT COUNTRY LIFE 3.00 WORLD'S WORK 3.00 Make all remittances to GOOD HEALTH, and state READER MAGAZINE plainly to whom different magazines are to be ad-3.00 CURRENT LITERATURE \_\_\_\_\_ 3.00 dressed. No Foreign Subscriptions Accepted on these Offers. KEITH'S MAGAZINE 72 PAGES ESTABLISHED IN 1899 MONTHLY FOR HOME BUILDERS THE leading specialized magazine and authority on questions of Building, Decorating, and Furnishing Homes. 72 pages a month, full



THE leading specialized magazine and authority on questions of Building, Decorating, and Furnishing Homes. 72 pages a month, full of new and suggestive ideas. The designs published are by leading architects from whom plans and specifications can be secured. Questions on these subjects answered free to subscribers. Year's subscription \$1.50.

"Practical House Decoration," a 150-page book written by experienced decorators, and profusely illustrated, is a gold mine of practical

and artistic suggestions. Gives 12 complete schemes for decorating the entire house. Price \$1.00. SPECIAL OFFER.—This book will be included with any combination offer for 50 cts. additional.







#### "GENERAL" FOR 25 CENTS

The Nashville, Chattanooga & St. Louis Railway is distributing a very beautiful lithograph, 18x25 inches, of the famous engine "General" which is now on exhibition in the Union Depot, Chattanooga, Tenn. The picture is ready for framing and will be mailed to any address for twenty-five cents. The "General" was captured by the Andrews' Raiders at Dig Shanty (now Kennesaw), Georgia, on the Western & Atlantic Railroad, April 12th, 1862, and was recaptured by Conductor W. A. Fuller, Anthony Murphy and others, near Ringgold, Ga., alter an exciting chase of about ninety miles. It was one of the most thrilling exploits of the Civil War. The object of the raid was to burn the bridges on the Western & Atlantic Railroad and cut off the Con federate Army from its base of supplies. A booklet, "The Story of the General," sent free upon application.

W. L. DANLEY, G. P. A. Nashville, Chattanooga & St. Louis R'y Nashville, Tennessee

## Mothers' Problems

Every mother knows that happiness or misery - success or failure for 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 84 pages are full of help for the mother, not alone regarding the baby, but all other matters per-taining to the home and to its management. It is yibrant with strong, healthful ideas that will help many a weary mother who is now per-plexed with problems different from any she has ever before had to deal with.

It is edited by mothers, Mary Wood-Allen and E. M. H. Merrill, women of wide experiand E. M. H. In and M. Sonard breadth in matters pertaining to Social Purity and Home Culture. You will enjoy seeing a sample copy of AMERICAN MOTHERHOOD we will enjoy send-

ing it to you. One dollar pays for a year's subscription.

#### AMERICAN MOTHER COMPANY

Dept. G., Salem, Mass.

#### SANITARY AND INVALID SUPPLIES We will furnish any of the following named supplies in combination with one year's subscription (new or renewed) to GOOD HEALTH for the price set opposite each :-Combination Water Bottle and Fountain Syringe, B \$2 00 Combination Water Bottle and Fountain Syringe, A 2 25 Hot Water Bag, cloth insertion, two quart . . I 75 Hot Water Bag, cloth insertion, three quart 2 00 Spine Bag, 26-inch Stomach Tube . . 2 00 2 00 Natural Flesh Brush Wet Abdominal Girdle T 00 2 00 Faradic Dry Cell Battery 8 00 4 00 Perfection Douche Apparatus, complete 2 25 Douche Pan . . . . I 50 Perfection Vaporizer 3 00 Magic Pocket Vaporizer Magic Pocket Vaporizer, with bulb for ear treatment I 25 I 75 Rectal Irrigator I IO A Package containing Sanitarium Talcum Powder, Massage Cream, and Antiseptic Dentifrice . . . . . . . 1 25 Any of the above Combinations will be sent to separate addresses if so desired. Address GOOD HEALTH PUB. CO.

115 WASHINGTON AVE., N., BATTLE CREEK, MICH.



### COURSE IN

# DOMESTIC SCIENCE

HE Battle Creek Sanitarium management have organized a new department of instruction, to be known as the School of Domestic Science. It will be carried on in connection with the Training-school for Nurses and other educational work conducted by the institution. This course will cover a f study

year of study.

The course of instruction will consist of lectures, demonstrations, practical drills and training, and laboratory work. The following subjects will be included in the course: Elementary Anatomy; Physiology and Hygiene; Household Physics and Chemistry of Common Things; Didactic and Laboratory Work; Sewing — Dressmaking; Domestic Sanitation; Household Bacteriology; Economy; Heating; Ventilation; Lighting; Care of the House; Sanitary Laundering; Household Pests; Cleaning, Special and General; Hot Weather Housekeeping; Gymnastics of Housework; Dietetics; Cookery; Microscopy; Chemistry of Cooking; Cooking for the Sick.

The course will be in every way practical and up-to-date. Nowhere in the world can so thoroughgoing a course be obtained as in this course. Only such persons as can give first-class references will be admitted to this course.

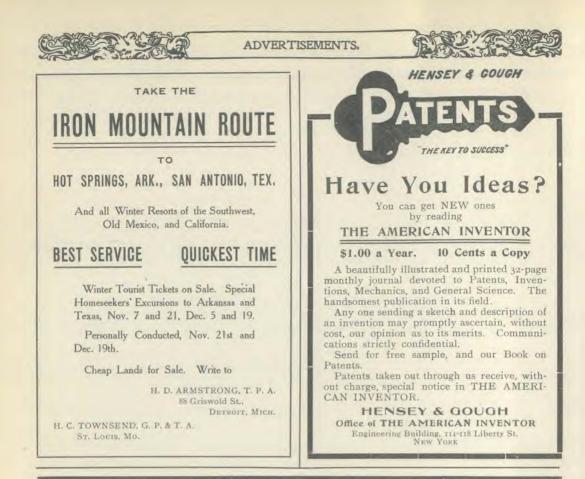
TERMS: The terms for instruction in this course are exceedingly liberal. Students will be given an opportunity to pay for room, board, laundering, and instruction by six hours' work daily. Those who desire to do so will have an opportunity to work eight or ten hours daily, and receive compensation at a fixed rate per hour for this extra work. This will make it possible for able-bodied persons to earn eight or ten dollars a month in addition to board, room, and instruction while taking this course. The class hours are arranged in the evening, and at such other times as will not interfere with the regular duties, so as to enable those who desire to do so to put in full time in work.

This is by all odds the most favorable opportunity offered young men and women, of limited means, who desire to prepare themselves for a useful life work. A young man or young woman without a dollar in pocket can begin this course in Domestic Economy, and after completing it, can enter the Sanitarium Training-school for Nurses, and, after passing through this course, can enter the American Medical Missionary College, and can finally graduate into the medical profession and pay his way from the beginning to the end of this long and thorough course of training in labor for the institution.

Each course fits those who take it for a useful and lucrative position. Those who finish the Domestic Science work can readily find positions as cooks, matrons, and in other domestic capacities.

Graduates from the Nurses' Training-school are in constant demand, and command good wages. Those who are interested in this educational opportunity should address for further information, Mrs. M. S. Foy, Secretary of School of Domestic Science, Battle Creek Sanitarium, Battle Creek, Mich.

The course begins June 1st. Students received until July 15th, but may be received at any time by special arrangements.



## THE NEW ENGLAND SANITARIUM

= MELROSE, MASSACHUSETTS =



Is the Eastern Branch of the Battle Creek Sanitarium and follows the same rational principles as to diet, treatment and health culture. It is thoroughly equipped with every convenience for the care of invalids, and with the latest and best appliances for the diagnosis and treatment of chronic conditions.

The location is truly ideal. Within six miles of Boston, and yet completely hidden away in midst of the famous Middlesex Fells, a natural park of 3,500 acres preserved by the state on account of the wonderful charm and beauty of the scenery.

It is just the place to rest tired nerves and recuperate from brain fag; assisted by

a corps of experienced physicians and trained nurses.

-Particulars with Reference to Accommodations, Methods, Rates, Etc., may be had by Addressing-

NEW ENGLAND SANITARIUM, Melrose, Mass. Or C. C. NICOLA, M. D., Superintendent.







# HERE'S YOUR CHANCE

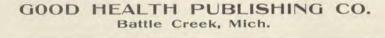
Read this announcement. It is the opportunity of years. The greatest magazines in their respective lines in this country have entered into an arrangement whereby they are offered in combination as a premium to be handled by other

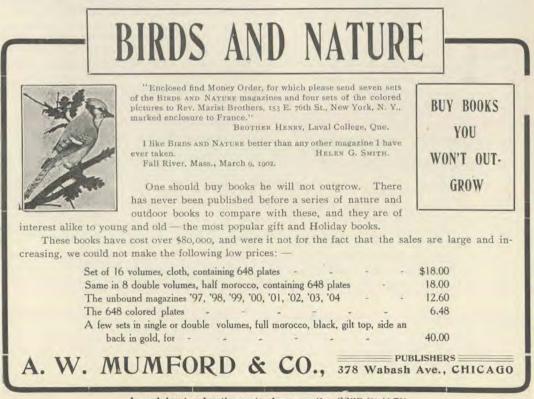


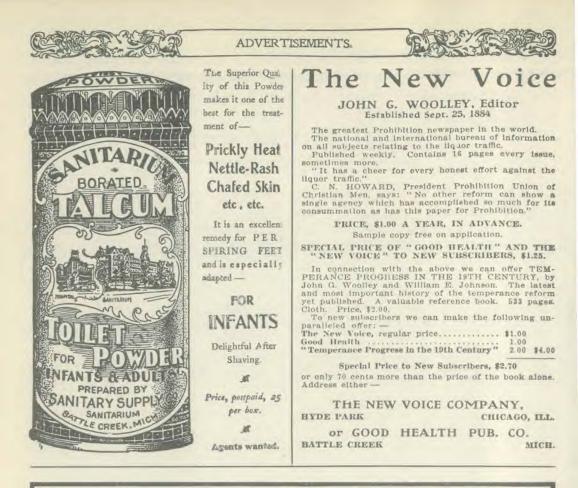
periodicals. We can secure but a *limited number* of these subscriptions for premium purposes, therefore "first come, first served."

	Regular Price	
GOOD HEALTH 1 year with COSMOPOLITAN	\$2.00	\$1.00
GOOD HEALTH 1 year with COSMOPOLITAN and REVIEW OF REVIEWS	5.00	2.50
GOOD HEALTH I year with COSMOPOLITAN, REVIEW OF REVIEWS and		
WOMAN'S HOME COMPANION	6.00	3.00

Mail your remittance to-day—and be sure of getting the greatest magazine combination that was ever offered  $\rightarrow$  an opportunity of years, and one, it is safe to say, that will never be made again. If your money is received too late, it will be returned. Act at once.









HOUSTON, TEXAS



LOMA LINDA SANITARIUM

## 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.

When you visit Los Angeles and its seaside resorts, make your home at Glendale Sanitarium.

Glendale Sanitarium is a three-story building of 75 rooms, steam-heated and lighted with electricity. It is located at Glendale, one of the suburban villages of Los Angeles, eight miles from the heart of the city. The Pacific Electric cars pass the Sanitarium every thirty minutes. The elevation is 600 feet above the sea. The climate is delightful both in summer and winter. Address,

#### GLENDALE SANITARIUM, Glendale, California.

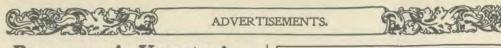
When you visit the home of Romona, San Diego, and Old Mexico, abide at the Paradise Valley Sanitarium.

The Paradise Valley Sanitarium is building a large addition, including very commodious bath-rooms, surgical ward, and Swedish mechanical department.

This well- equipped Sanitarium, located in a perfect climate, offers exceptional advantages for the restoration of health. Here the convalescent can enjoy the abundant sunshine amid blooming flowers, free from frost, storms, or extremes of any kind. The winter climate of San Diego is very much like an Eastern June without the extremes.

The Paradise Valley Sanitarium combines remedies without drugs, a menu without meat, with a winter without frost. This combination will restore your health. Address,

PARADISE VALLEY SANITA-RIUM, National City, California. City Office, 1117 Fourth St., San Diego, California. GLENDALE



## **Become A Vegetarian**

-and save through

#### The Vegetarian Magazine.

**The Vegetarian Magazine** The Vegetarian Magazine stands for a cleaner body, a distingtion of the stands for a cleaner body a standard stand stands for a cleaner body a standard stand decay as food; hygienic living med natural standard stand decay as food; hygienic living med natural standard stand decay and standard standard standard ble right and decay and used blints on Hygiens, ble right and decay and used blints on Hygiens, standard test food of the standard standard standard ble right stand decay and used blints on Hygiens, ble right stand decay and used blints on Hygiens, standard test food of the standard standard ble right standard standard standard standard ble right standard standard standard standard ble right standard stand

#### BOOKS VOIL OUGHT TO HAVE

Why I am a Vegetarian, J. Howard Moore 2.	5
24 Reasons for Vegetarian Diet	
Just How to Cook Meals Without Meat	5
Meatless Dishes	ü
Hygeia Cook Book, Dr. Heard	á
Moral Basis of Vegetarianism	2
For War or Peace, Which?	d
Cleanliness the First Principle of Hygiene	Ó
Clerical Sportsmen, J. Howard Moore	5
Vegetarianism from Principle	5
THE VEGETARIAN MAGAZINE, Chicago, III.	



## TRI-CITY SANITARIUM

Situated on the Moline Bluffs Over-Mississippi looking the Majestic



Offers the delight of a beautiful and ever changing Others 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 obstetrical cases, and a quiet homelike atmosphere

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

#### TRI-CITY SANITARIUM. MOLINE ILLINOIS.

## BABY'S RECORD

#### ANY MOTHER

Will find it easy and pleasant to record the development, cute sayings and doings, and important events in the little one's life.

#### ALL THE IMPORTANT EVENTS

In the baby's life are arranged for in the book and are illustrated by appropriate poems and half-tones.

SENT POST-PAID, CAREFULLY PACKED

#### 55 CENTS

We also publish the following TEACHING TRUTH SERIES written by Mary Wood-Allen, M. D., in a pure and scientific way.

TEACHING TRUTH	6 N E	. \$0.50
ALMOST A MAN .		.50
ALMOST A WOMAN		50
CHILD CONFIDENCE I	REWARDED	,25

These five books to one address for \$2.00 post-paid. Agents wanted.

WOOD	)-1	ALI	LEN	PU	BLISHI	NG	CO.
Room	Н,	100	Boylston	St.,	BOSTON,	MASS	5.

TROUGHTAN WANNAWAYA STUDIED STUDIES ST

# CALIFORNIA CLIMATE

¶ That the warm, dry air of the California valleys means health is testified to by the brown cheek, the vigor of childhood, and the improvement of the invalid. There are no heat prostrations; the sun never strikes the worker down in the field or on the street.

¶ Winter, in the Eastern sense, is unknown. Every year during the holidays of December and January floral fiestas are held in various parts of the State. Think of it—battles with roses instead of snowballs.

¶ Spend the coming winter in California, and be sure to go by the popular route.

## SOUTHERN PACIFIC

¶For folders and full particulars address W. G. Neimyer, General Agent, 120 Jackson Boulevard, Chicago, Ill.



## SANITARIUMS

The following institutions are conducted in harmony with the same methods and principles as the Battle Creek Sanitarium.

- BOULDER-COLORADO SANITARIUM, Boulder, Colo. Howard F. Rand, M. D., Superintendent,
- CALIFORNIA SANITARIUM, Sanitarium, Napa Co., Cal
- NEBRASKA SANITARIUM, College View, Lincoln, Nebr. W. A. George, M. D., Superintendent.
- PORTLAND SANITARIUM, West Ave., Mt. Tabor, Ore. W. R. Shamons, M. D., Superintendent, NEW ENGLAND SANITARIUM, Melrose, Mass.
- C. C. Nicola, M. D., Superintendent, CHICAGO SANITARIUM, 23 33d Flace, Chicago, Ill. Frank J. Otis, M. D., Superintendent, IOWA SANITARIUM, 603 E. 12th St., Des Moines,

- IOWA SANITARIUM, 603 E. 12th St., Des Molnes, Jowa.
   J. E. Colloran, M. D., Superintendent.
   TRI-CITY SANITARIUM, 1213 15th St., Moline, Ill.
   S. P. S. Edwards, M. D., Superintendent.
   PARADISE VALLEY SANITARIUM, City Office and Treatment Rooms, 1117 Fourth St., San Diego, Cal. Sanitarium, Box 308, National City, Cal.
   GARDEN CITY SANITARIUM, San Jose, Cal. Lewis J. Beiknap, M. D., Superintendent.
   MADISON SANITARIUM, Madison, Wis C. P. Farnsworth, M. D., Superintendent.
   SIGN SANITARIUM, Spokane, Wash. Silas Yarnell, M. D., Superintendent.
   TREATMENT PARLOKS, 137 Oneida St., Milwaukee, Wis.

- TUIA
- TREATMENT ROOMS, 201 Granby Block, Cedar Rap-
- lds, lowa R. L. Mantz, M. D., Superintendent, BUFFALO SANITARIUM, 922 Niagara St., Buffalo, N. Y.
- A. R. Satterlee, M. D., Superintendent. NASHVILLE SANITARIUM, Cor. Church and Vine Sts., Nashville, Tenn. O. M. Hayward, M. D., Superintendent. PROSPECT SANITARIUM, 1157-1161 Prospect St.,

- Cleveland, Ohlo. F A. Stahl, Superintendent. TACOMA SANITARIUM, 426 S. C St., Tacoma, Wash. T. J Alben, M. D. Superintendent. COLORADO SPRINGS SANITARIUM, 126 N. Cascade
- Ave., Colorado Springs, Colo. T. J. Evans, M. D., Superintendent. KANSAS SANITARIUM, 3200 W. Douglass Ave.,
- Wichita, Kans.
   B. E. Fulmer, M. D., Superintendent.
   UPPER HUDSON SANITARIUM, Hadley, N. Y.
   E. F. Otis, M. D., Superintendent.

- HINSDALE SANITARIUM, Hinsdale, Ill. David Faulson, M. D., Superintendent. TREATMENT ROOMS, 44 E. Main SL., Middletown, N. Y. A. J. Read, M. D., Superintendent.
- ROCHESTER TREATMENT PARLORS, 156 Monroe Rochester, AVE.
- SEATTLE SANITARIUM, 1313 3d Ave., Seattle, Wash. Alfred Shryock, M. D., Superintendent,
- PEORIA SANITARIUM, 203 3d Ave., Peorla, III. J E Heald, M. D., Superintendent.
- LONE STAR SANITARIUM, Reene, Texas, D. C. Ross, M. D., Superintendent.
- GLENDALE SANITARIUM, Glendale, Cal. J. A. Burden, Superintendent.
- PENNSYLVANIA SANITARIUM, 1929 Girard Ave., Philudeiphia, Pa.
- II. B. Knapp, M. D., Superintendent. SURREY HILLS HYDROPATHIC INSTITUTE, Cater-
- ham, Surrey, England, A. B. Olsen, B. S., M. D., M. R. C. S., Supt. LEICESTER SANITARIUM, 80 Regent St., Leicester,
- England. F. C. Richards, M. D., M. R. C. S., Supt. CALCUTTA SANITARIUM, 50 Park St., Calcutta,

- CALCUTTA SANITARIUM, 50 Park St., Calcuta, India.
   R S. Ingersoll, M. D., Superintendent.
   PLUMSTEAD SANITARIUM, Cape Town, So. Africa. Geo. Thomason, M. D., L. R. C. S., Supt.
   CHRISTCHURCHI SANITARIUM, Papanul, Christ-ohurch, New Zealand.
   KOBE SANITARIUM, 42 Yamanoto-dori, Nichome, New International Science Kobe, Japan.

- Kobe, Japan.
  S. A. Lockwood, M. D., Superintendent.
  GUAD-LAJARA SANITARIUM, Apartado 138, Guadalajara, State of Jalisco, Mexico.
  J. W. Erkenbeck, M. D., Superintendent.
  INSTITUT SANITARIES, Basie, Switzerland,
  P. DeForest, M. D., Superintendent.
  SKODSBORG SANITARIUM, Skoksborg, Denmark.
  J. Carl Ottowen, A. M., M. D., Superintendent.
  SYDNEY SANITARIUM, Wahroonga, N. S. W., Australia. tralla.
- D. H. Kress, M. D., Superintendent, FRIEDENSAU SANITARIUM, Post Grabow, Beg. Magdeburg, Germany, A. J. Hoenes, M. D., Superintendent, KIMISFILEY BATHS, 32 Old Main St., Kimberley, So.
- Africa.

J. V. Willson, Mgr.

## Health Food Restaurants

Eating-houses where food prepared in accordance with the principles of rational dictetics and scientific cookery may be obtained are now open in the following places: -

#### RESTAURANTS.

The Pure Food Cafe, 13 S. Main St., Salt Lake City, Etah

Ctab. Hyglenic Company, 1209 G St., N. W. Washington, D. C. Diaing Room, Church and Vine Sts., Nashville, Tenn. Hygein Dining Rooms, 5759 Drezel Ave., Chicago, Ill. Hyglenic Cafe, 426 State St., Madison, Wis. Pure Food Cafe, 607 Locust St., Des Moines, Iowa. Pure Food Cafe, 403 E. 11th St., Kansas City, Mo. Good Health Cafe, 45 S. 13th St., Lincoin, Nebr. Yegetarian Cafe, 19 East Bijou St., Colorado Springs, Colo.

Vegetarian Restaurant, 555 Boylston St., Boston, Mass.

Vegetarian (afe, \$14 Fine St. B., Louis, Mo. Vegetarian (afe, 1519 Stout St., Denver, Colo, The Vegetarian, 756 Market St., San Francisco, Cal. Vegetarian Dining Rooms, 317 W. 3d St., Los Angeles, Cal

Portland Sanitarium Rooms, Mt. Tabor, Oregon.

Vegetarian Cafe, 214 Union St., Seattle, Wash. White Hose Restaurant, W. H. Nelson, 36 W. 18th St.,

New York City. Vegetarian Cafe, S. 170 Howard St., Spokane, Wash. The Laurel, 11 W. 18th St., New York City. Hygela Cafe, 202 Id Ave., Peorla, III. Vegetarian Cafe, 105 5th St., Portland, Oregon.

#### STORES.

Pure Food Store, 2129 Farnum St., Omaha, Nebr. Health Food Store, Herman M. Walen, 16 Finchon St., Springtield, Mass. Health Food Store, J. H. Whitmore, 118 Miami Ave., Detroit, Mich.

Derfolt, Mich.
 Boston Health Food Store, W. F. Childs, Room 218, 100 Royiston St., Boston, Mass.
 N. 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.





# SPECIAL OFFERS



#### **BIBLES, Remit us \$2.50**

And we will send you GOOD HEALTH ODE year, and a \$3.85 HOLMAN BIBLE, bound in Egyptian morocco with divinity circuit, red under gold, BiBLE, bound in Egyptian morocco with divinity circuit, red under gold, size  $5\frac{1}{4}x7\frac{3}{4}$ . The type is bourgeois, 8vo., easy to read. Contains column references, fifteen maps, four thousand questions and answers on the Bible, concordance of nearly fifty thousand refer-ences, and a new illustrated Bible dictionary. We will send a smaller Holman Bible, size  $4\frac{3}{4}x6\frac{1}{2}$ , with fine minion print, 16mo., in place of the larger size, if desired. Thumb index, 50e extra.

Send for our 1905 Catalogue.

#### COMBINATIONS

We will send GOOD HEALTH one year with the following for price set opposite each:

Life Boat	\$1.00
Medical Missionary	1.00
Little Friend	1.10
Bible Training School	
Atlantic Union Gleaner	1.00
Home, Farm and School	. 1.00

Life Boat and Medical Missionary	.\$1.25
Vegetarian	. 1.25
American Motherhood	
Youth's Instructor	
Southern Watchman	
Signs of the Times	. 2.00
ny of the shove offers by adding \$1.50	Morr

The Review and Herald may be included in any of the above offe adding \$1.50. or renewed subscriptions accepted. All sent to different addresses if desired.

#### HEALTH BOOKS

We will send you any of the following named books, written by J. H. Kellogg, M. D., Superintendent of the Battle Creek Sanitarium, with one year's subscription to GOOD HEALTH and Medical Missionary for the prices set opposite each :

The Stomach, its Disorders and now to	
Cure Them, cloth	\$2.00
Half-buff	2.50
Art of Massage, cloth	2.75
Half-leather	3,50
Ladies' Guide, cloth	
Half-buff	4.00
Library	4.25
Miracle of Llfe, cloth,	2.00

Man the Masterpiece, cloth	
Half-buff	4.00
Library	4.25
Home Hand-Book, cloth	4.75
Half-duff	
Library	5.75
Library Or Science in the Kitchen, by Mrs. E.	E.
Kellogg, in Oilcloth	2.25
Healthful Cookery	

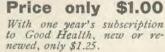
## **DO YOU SUFFER WITH CATARRH?**

HAVE YOU A COLD?

#### TRY OUR MAGIC POCKET VAPORIZER

A simple, convenient instrument for the treatment of Catarrh, Colds, and all diseases of the nose, throat, and lungs.

Write for descriptive booklet and terms.



Address GOOD HEALTH PUB. CO 115 Washington Ave. N. BATTLE CREEK, MICH.



## THE SIGNS OF THE TIMES OUR FORTHCOMING SPECIALS

The Signs of the Times is set for the purpose of giving the last gospel message of Revelation 14 to the world. And it gives it week by week, number by number. Yet that message is so broad, so comprehensive, that it is impossible to scarcely more than touch it in one issue. In fact, it takes an entire volume of the paper to develop that great message at all adequately.

I Yet there are many who wish it presented, in its various phases, briefly. To do this, we propose to issue, beginning with the first week in October, four "Special Message" numbers, as follows : ---

- I. THE SURE WORD OF PROPHECY AND CHRIST'S COMING.
- 2. The Sanctuary, The Gospel in Type and Antitype. 3. The Law, the Gospel, and the Sabbath,—" The Whole Duty
- OF MAN."
- 4. THE CHURCH TRIUMPHANT.

The above titles express only a part of that which each number will contain. On the opposite page is a suggestive list of the main articles so far as developed.

I Besides these our Home Department will be full of precious instruction. There will be Bible-readings, poems, music, if there is room, many illustrations. Each number will have a specially prepared front-page cover design, attractive and appropriate to that issue.

This series ought to have a circulation, at the least calculation, of half a million.

These special numbers will bear the following dates: October 4 and 18; November 1 and 15. Prices will be as follows: -

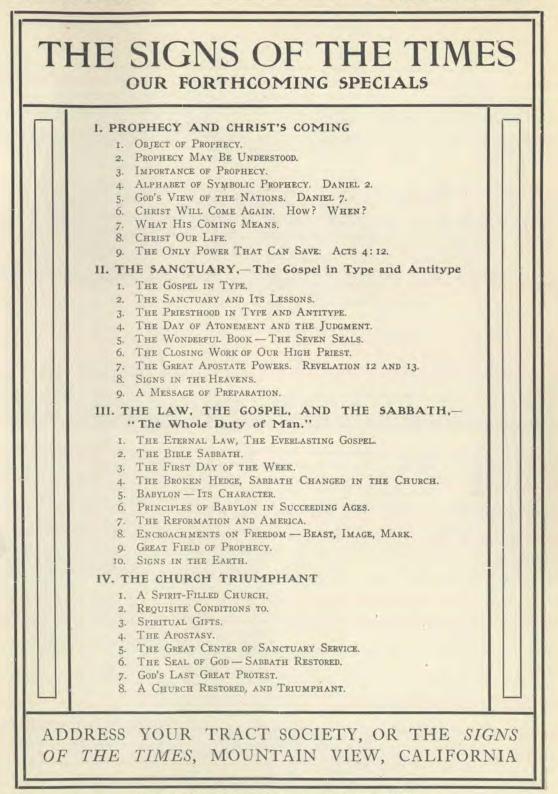
I to 4 sets to one or more addresses..... 20 cents a set 5 or more sets to single names and addresses... 15 cents a set 25 to 500 sets to one address..... IO cents a set 500 and upward to one address..... 9 cents a set

These papers will be published somewhat in advance of their dates, and will be sold in sets only. Address your tract society, or Signs of the Times, Mountain View, California.

THIS SERIES OUGHT TO HAVE A CIRCULATION, AT THE LEAST CALCULATION, OF HALF A MILLION









# Will You Try The Battle Creek Life For 30 Days?

Will You Eat the Foods and Live the Life Our Experts Recommend?

Do you really want, to be <u>perfectly</u> well? Tell us, then, if you are ailing—or if in good health, that you wish to remain so.

Let us send you our offer. It is very interesting. The life it recommends you can live in your own home. You ought to read about it.

Nowhere else are so many specialists studying this one thing alone—how to get well and how to stay well. No organization anywhere has been so successful. None other is so near the truth. And the basis of all this is right food—right living—keeping the stomach right.

> All this we explain in our offer. Explain clearly-logically-interestingly, so that you may understand. Isn't it worth the mere effort of writing us simply to know? Won't you ask for our offer today?

> > The Battle Creek Sanitarium Co., Ltd. Battle Creek, Michigan.

Creek Sanitarium Co., Ltd. Please send me full

Dept. 86.

Battle

Information concerning "30 Days of Battle Creek Life in Your Own Home."

Name ... Address





AUTUMN LEAVES

# GOOD HEALTH

A Journal of Hygiene

VOL. XL

NOVEMBER, 1905

No. 11

#### EATING UNWORTHILY

BY J. H. KELLOGG, M. D.

I T is well known that what we eat, bears some relation to what we are. We can see ourselves beforehand on the table. According to the old Saxon saying, "Every man hath lain on his own trencher." The food that we see on the table to-day, to-morrow will be a part of ourselves.

This transformation of food into living, active, sentient human beings, is one of the greatest marvels that can come under our notice. It is an evidence that the Creator is still at work converting dust into humanity. Out of the dust of the earth, organized life is developed in the shape of food. Man eats that food; and the same life that developed it from the soil, transfigures it into sentient human flesh.

When we look at life in this way, the act of eating is no longer a common thing, but a sacrament; we sit down to the table, not simply to gratify our palates, but to partake of those bounties that the Creator has provided; to do our part in the replenishing of our wasting bodies, that they may be prepared to glorify their Maker.

Eating must not be regarded as a pastime. For many generations the palate has been made a source of pleasure, and to the great detriment of the race. A large share of the physical degeneracy that is increasing on every hand may be traced directly to unworthy eating,— to the eating of things never designed to be eaten, and which no one would ever think of eating except for the fact that they momentarily give an agreeable sensation to the tongue and palate. No thought or consideration is given to the possible effect of these palate-tickling substances upon the stomach after they have entered it. A gentleman once said to the writer, "I eat mustard, pepper, and similar hot substances because I like things that give my palate a twist." This gentleman, with thousands of others like him, guite overlooked the fact that those things which "twist" the palate are equally able to "twist" the stomach, the liver, the nerves, the brain, and every organ and tissue with which they come in contact in their journey through the body.

With many the question raised when palatable things are presented, is not, "Am I in need of food?" or, "Is this food adapted to my wants?" but, "Will it taste good?"

The amount of money expended in the mere gratification of the palate is immensely greater than that devoted to any other kind of sense indulgence. The old Roman emperors wasted enormous fortunes in a single feast. On visiting the ruins of Rome, some years ago, the writer was shown a spacious apartment which was once the dining-room of Nero. A small room adjacent, easy of access, was pointed out as the place where this unspeakably unclean monarch retired from the banquet-room at intervals to empty

#### EATING UNWORTHILY

his stomach, so that he might continue his swinish excesses. Thousands of persons to-day do little better. Though suffering daily from their dietetic abuses, they refuse to turn away from their wrong habits, and continue to swallow pastries, rich sweets, ices, confections, pickles, and other dietetic abominations, though knowing well enough by experience the certain consequences of indulgence.

An unperverted palate is a wise and ever-wakeful sentinel, which says promptly to the eater, "Enough," when he has taken a sufficient amount of nutrient material to meet the present requirements of the body.

The palate was given man, not as an instrument of pleasure, but as a guide whereby he might select in proper quantities food substances of the quality suited to his needs. The debasement of this function to the ends of pleasure is the beginning of a prostitution of the body which ends only in abandonment to the grossest forms of self-indulgence, and tends to premature exhaustion of the vital resources, early decay of the body's forces, and ignominious death; for no death can be considered honorable which is the direct consequence of one's own acts, or suicide. Said an eminent French writer, " Man does not die; he kills himself."

#### HEALTHFUL OCCUPATIONS FOR THE AGED

#### BY KATE LINDSAY, M. D.

#### Boulder (Colo.) Sanitarium

Q UAIN, in his Medical Dictionary, arbitrarily defines advanced life as the period between sixty-two and eighty-two, and the time of old age beyond the latter period. But the infirmities of age are measured, not so much by length of days as by the integrity of bodily functions and the soundness of organic structures.

The man of fifty with fatty degeneration of the heart and liver, the walls of his arteries hardened, and with chronic nephritis, though ruddy and fair to look upon, and bringing down the scales at over two hundred, may in reality be a much older man than some lean, wrinkled, active man of fourscore or more.

Moses went up to Mount Nebo to die, one hundred and twenty years old, with every organ sound, and with no impairment of either mental or physical func-

tions. The last eighty years of his life had been spent in the open air: forty years in the mountains tending Jethro's flocks and herds and guarding them from dangers by night and day; mind and body active in caring for the young and weak, searching for those of the flock that wandered, lost and bewildered, in the wilderness, and guarding Jethro's live-stock from being stolen by robbers or devoured by wild beasts; sleeping in the air, living on simple food, and drinking of the mountain streams. No wonder that Moses, clean and stalwart of body, strong mentally and pure morally, was fitted to lead the chosen people, stiffnecked, perverse, and rebellious though they were, into the "promised land." In the wilderness life, still in the open air, satisfied with simple fare, Moses was unlike his countrymen, whose palates were spoiled and pampered by Egypt's fleshpots and dainties. Manna and pure water from the rock satisfied this meek leader of Israel of old. Heavy burdens, sorrows, cares, even the depression and disappointments due to human fallibility and errors,— all failed prematurely to wear out or wreck either mind or body of this man of God.

Had Moses spent these middle forty years of life at the courts of the Pharaohs amid the debasing luxuries of Egyptian high life, what would he have been but a decrepit, weak-minded old man, with the grasshopper a burden to him? Or, perchance, more likely long years before he would have reposed, a lifeless mummy, in some stately royal tomb.

Moses' work in his old age no one can hope to equal now; yet as an ideal to inspire others to qualify for an old age of helpfulness instead of weakness and imbecility, his life is a most perfect example.

The practical questions, How shall one work? What shall he do? How much work is normal and rational for each? must be answered according to the past life of each individual old man or woman. All men at threescore or fourscore vears are not alike. Many are weak and diseased, with hardened, fragile artery walls ; unsound, degenerate vital organs; joints stiffened with gout and rheumatism; nerves shattered, intellect impaired, and nerve energies almost destroyed by too much physical work, mental strain, or the use of stimulants and narcotics. For such there may be little work that they can do. Yet even when compelled, as are so many, to accept the shelter of a home or charitable institution, it is best to have some work to do which will insure, if possible, some income. Money honestly earned and wisely spent, promotes health.

For old people there is no employment better than work in a garden in which they have a commercial interest. The hoeing, weeding, trimming, gathering, and marketing of the fruits and vegetables or flowers; the open-air life, exercise in the sunshine and amid growing things; the healthy stimulus of planning this work, studying and reading up, and talking to others of the best methods of gardening,— what is most profitable to plant in that region, how the land should be fertilized, and where and when to sell the products,— all this keeps the mind active.

Poultry raising and bee culture are also employments well adapted for those advanced in life who need to make work remunerative.

There would seem to be little need in old age of destitution and dependency on the county were all the working classes to plan for a home in the country and a few acres of land by saving money uselessly spent for such diseaseproducing, health-destroying articles as tea, coffee, tobacco, and alcohol, to say nothing of other injurious table luxuries. By a wise economy in the expenditure of money, and rational investment in a home, the old workingman and the workingwoman would find themselves with a fund of health and strength equal to their day, and when no longer able to compete with a younger generation, they would still have useful remunerative occupation on their own premises. Thus would they maintain a noble independence and their self-respect, which suffers more or less when they are compelled to live in some place by sufferance of others, hedged in by laws and regulations: or in the private home of a child or some relative, conducted on a plan so different from their own household customs and ideals that every day is a weariness to them.

The old Jewish laws gave every man

back his landed inheritance each fiftieth year — a wiser provision for the old than building homes and poorhouses. It left the whole people with something really their own, even in old age; something to work on, and some incentive to impel the man of years to exercise mind and body sufficiently to maintain a healthy activity.

The man of moderate income, as a government pension, a farm or a house to rent, or a moderate investment of money, can profitably pursue the out-ofdoor employments suggested, and also find occupation looking after his property interests.

The aged farmer can ride around his farm and look after fences, gates, houses, and barns, and see to it that his tenants are making the most of the land by proper planting, sowing, and stocking.

The man who owns tenements can interest himself in the welfare of his renters, and in making the needed repairs and improvements and keeping the residence and surroundings clean, comfortable, and sanitary.

For the stricken, even, some employment can be found. If they have the use of their hands and eyes, many things can be done to keep mind and body occupied: the cultivation of house plants — some living thing to care for and help to grow and blossom, and to brighten their own lives and those of others; knitting, crocheting, and the use of the needle in the homely, commonplace work of darning and mending, or plain sewing or fancywork.

Those who have had a useful hobby can improve the leisure of advanced life to cultivate it. The amateur botanist can take time for plant study and collections. The geologist may study the world's history as written on the rocks; and the ornithologist and entomologist increase their knowledge of birds, butterflies, and beetles.

The superannuated minister and teacher may still help on the work of education with pen and by counseling with those who are still active in the battle against sin and ignorance.

The old doctor can keep up with the advance in medical science and practise, and help lessen human suffering by using pen and voice for the spread of the knowledge of disease prevention and the prolonging of life and increasing of its usefulness and happiness.

In the city many vocations are open to the healthy, wise, temperate old man or woman; such as the care of a yard or house-janitor work for those who have the health and strength. The elderly woman who has cared for and loved children can often find a home and employment in some motherless household, or can care for young children where mothers are busy wage-earners.

During the fruit- and vegetable-picking and canning seasons many can secure work which is not too difficult for them in picking berries, peas, and the like, or sorting them over and getting them ready for canning.

The neat little shop or fruit-stand affords occupation for many old men and women in the cities and towns of the land. All recall the happy old cobbler who sang merrily at his shoe mending, cheering all who passed by his little shop door.

The main points for the employed aged to consider are: To avoid disease and premature failure of strength, not by increase of foods and stimulants, as is so often advised, but by cutting down and simplifying the diet in proportion to decreased wear and tear of tissue, so that the intake will not exceed the output; to still maintain an interest in current

550

activities and thought; and to select some occupation suited to their physical strength and their previous training and skill.

The secret of a healthy, useful, active old age is to know how to wear out life's waning energies normally, not to exhaust them prematurely by overwork, or, worse still, waste them by the rusting of needless inactivity.

To the wealthy, who can choose their occupation, the same hygienic laws apply. The Vanderbilts are an example of wealth's depreciation of physical energy. The old "Commodore" was still active in mind and body at fourscore. It is said that his present descendants grow prematurely old, beginning to lose energy at fifty, and do not reach sixty years of age. Money can not purchase the health which made Moses' eyes undimmed and his mind and bodily organs sound and vigorous at one hundred and twenty. But all, by spending life's physical and mental energies wisely, by spending their days in conformity with the principles of health, may to some extent approximate this ideal of a hale, useful decline of life.

#### AN EGYPTIAN DINNER

#### BY J. M. KEICHLINE, M. D.

#### Cairo, Egypt

[THE writer of the following article is an American physician practising in Egypt. His picturesque account of a native dinner in which he participated, gives a good idea of the customs of the native population of Cairo.]

WE first wash our hands with soap and water, the water being poured by a servant from a metal pitcher, and received into a metal basin. Each guest has been provided with a towel.

We then sit around a large tray,— a loaf of bread, round and flat, being at each place. In the center of the tray is a soup tureen with a fowl floating therein. The fowl is lifted out by the host and placed upon a plate. Pieces of bread are then dipped into the soup and conveyed to the mouth.

When the soup is finished, the host tears the fowl in pieces, and hands a portion to each. Then comes a goose or a turkey nicely stuffed and garnished, or it may be a lamb. We are handed the different parts of his anatomy, which has been dissected without the use of other instrument than the hands of our host. There are several dishes of salads and pickles on the tray, and the guests help themselves by the clever manipulation of pieces of bread.

Dishes of vegetables cooked with flesh, and dishes of different kinds of fowl and flesh, follow one another in rapid succession. All are well buttered and peppered, so that the servants are kept busy handing cups of water. After each cupful is drunk, some one says, "*Haneeyan*" (Health), and the one who drank replies, "*Allyahaneek*" (God give you health).

After the many dishes of vegetables and flesh, come dishes of sweetened stuffs, and lastly, a dish of plain cooked rice, which is called the "Showish" (policeman), a gentle hint that it is time to quit. Then comes the fruit, and most leave the table after taking a small piece of fruit.

After grunting, "*El Hamdul'lah*" (God be praised), the washing of hands and mouths begins, after which all sit around expelling air from their over-

#### AN EGYPTIAN DINNER



A STREET RESTAUMANT IN EGUPT

loaded stomachs, and await the small cups of coffee and the cigarettes. Being sleepy, they lie down and fall into stupid and generally unsatisfying slumber.

On awaking, they wash their feet,

forearms, hands, mouth, ears, nose, eyes, and face, and perform their afternoon devotions.

Both the native Christians (Copts) and the Moslems are required to observe fasts, and to abstain from flesh and fatty foods. This is really a necessary observance physiologically.

The poor eat very simply, sitting on the pavement or road if away from home. For breakfast they eat beans and bread and a little salt mixture. At noon they take a salad, or pickles, cheese, and bread, and raw vegetables. If anything at all is taken at night, it is either bread and cheese or soured milk.

It is strange to see them munching the leaves and stalks of radishes, onions, beets, etc. The parts that are eaten by Americans, they use in the making of pickles.

#### THE WINTER WARDROBE

#### BY DINAH STURGIS

THE success of the winter wardrobe depends upon wise selection. The best selection for a winter in North Dakota is not the best for Florida. The best for the housewife in Maine is not the best for the school-teacher in California.

Fashion is a heedless and selfish jade. She promotes each season, at the instance of commerce, a great number of new or revised styles. There her interest in us women ceases. We flock at her heels, however, like a parcel of silly sheep, and catch up with avidity just as many of the new offerings as we can possibly lay our hands on, without much, if any, regard for their real use or beauty.

Now, I am a firm believer in the doctrine that it is a woman's duty to look, as well as be, as attractive as possible. We have not been surrounded by natural beauty and endowed with our senses by accident. A pleasing personality is a possession to be proud of, and an agreeable appearance is a credit to any woman's good sense, as well as to her good taste.

The hitch comes on what constitutes an agreeable appearance. Most women

552

seem to think it is covered by putting on just as many as possible of the articles offered for sale by dealers in women's apparel. The fallacy of this belief need not be insisted upon. Simply look at the next hundred women you meet, and ask yourself how women can possibly dress themselves with so little regard for comfort, health, and beauty.

There is the tall, thin, angular woman dressed so that every unlovely feaure is thrown into relief, until she looks like a nail that has been rasped on a saw. There is the flesh-ridden woman who has stupidly allowed herself to become a succession of mountains and valleys, dressed in such wall-paper fashion that sensitive eyes are fairly tortured. There is the tiny woman weighted down in fashions that could be carried off with distinction only by the big dowager type. And there is the — but why enumerate? We all know them. But do we know how we ourselves look?

The fashions for this season are more nearly in accord with common sense than fashions ever were. But the trouble is that so many of us show no common sense when it comes to selecting our wardrobes. We have no sense of proportion. We buy our clothes as children buy in the grab-bag corner of the bazaar. We get waists that fasten down the back with wee loops and minuter buttons, without asking whether we can afford to buy, beg, borrow, or steal the time of somebody else to fasten us up. We elect to have clothes for use of fabrics that are frail, and suited only to elegant leisure, and to have them made in such styles as to render them out of place for our particular station in society. We do not discriminate. The women of every other country except America dress with some regard for their individual relations to the society they move in. In this country



PRACTICAL AND HANDSOME LONG COAT FOR TRAVELI AND GENERAL WEAR

the shop-girl apes the multi-millionaire's wife, and the clerk's wife in a one-closet type of apartment loads herself down and the bird-nest tenement up with the knickknacks of the wardrobe, such as even the mistress of the mansion with many servants finds burdensome.

We put feathers on hats that must go out in all sorts of weather; get white apparel in regions where laundry work is troublesome and dry cleaning expensive ; pick out for our one "good " dress a fashion that is so pronounced that every one remarks its second appearance,- we do all these and many more foolish things. But chief of all our imbecilities is that we are uncomfortable in our clothes. It takes too long to put them on, too long to take them off, too long to take care of them. But even so, and adding these mistakes to that of spending much too much time in picking out the clothes in the first place and in getting them made up, it would not be so bad if we looked well and felt well in the clothes when once we got them to the wearing point. It is the fault of enormous business interests that we are saddled each season with such a weight of new styles. It is our own fault that we take whatever comes along, instead of having gumption enough to secure what is good for us.

To select a winter wardrobe or a wardrobe for any other season, a woman should ask herself what she needs, what she can afford to buy, what she can afford the time to make or the price to have made, what she can afford the time to put off and on each time she wears it, and what she will look well in not merely when she first puts it on, but all the time when and in all the places where she must wear it.

The enormous variety of trimmings produced to-day makes it easy to overtrim a dress, and with garnitures which do not wear well. The best-dressed women wear good materials becomingly cut and trimmed very little. That little trimming, whatever it is, is the best of its kind.

This is not a preaching theory. It is

a fact. Our eyes are dazzled by the great number of imported and domestic "model" gowns and cloaks set forth by the dealers. But these models are made for exhibition purposes chiefly, and it is only the silly woman who buys these clothes to wear, or models her clothes closely after them. The really elegant woman of fashion dresses to suit her own figure, coloring, manner, and social requirements. And while it is the custom to gird forever at the "Four Hundred," they set us, if we did but know it, an example in dressing which we would do very well to follow. We think sometimes we are imitating them, when as a matter of fact we are merely imitating middleclass, newly-rich "climbers."

No woman with good taste wishes to look eccentric in her dress, and many a woman is prevented from dressing healthfully and comfortably by a fear that should she do so, she would look so peculiar she would be an object of derision. This is a fear of ignorance, merely; for to-day so wide is the range of styles promoted by fashion that one may suit her own style and needs, and yet look near enough like other women not to be peculiar.

The fashions of the day are suited to a T by sensible underclothing. A union suit, the correct kind of underwaist, and a pair of worsted tights are all that any woman needs to wear under any dress which has a "drop" or foundation skirt in the dress. If the dress is made without a drop, as many of the new skirts are, then one petticoat, preferably of "jersey" from the knees up, with an added flounce of silk or some substitute from the knees down, is warm enough, and gives sufficient support to the dress skirt.

One of the most fashionable fabrics for nice dresses is again cashmere, and the prevailing mode of having skirts show

long, unbroken lines, with graceful sweep from the belt downward, is in accord with good sense and good taste. Cashmere makes a dressy gown, and with a dress of it there should be a separate cloak of another fabric. This may be fur-lined melton for the North, or of broadcloth or satin with a thin interlining for the South; but, in general, any woman who lives in a modern heated house should wear clothing indoors in winter not much different from what she wears in the same temperature out-ofdoors at other seasons, and should protect herself from outdoor cooler weather by warmer clothing only while out. " Heavy winter flannels" are all right for the woodchopper in camp, but women are apt to-day to dress too warmly indoors and not warmly enough out-of-doors.

The "best" dress should have its bodice and skirt alike in material. The runabout, general-utility suit is still best when made with a matching coat and skirt to be worn over a shirtwaist. This is the business woman's especial friend. For look's sake, the shirtwaist should be washable, and it washes best when made of white. In the coldest weather such waists are made warm enough by wearing a lining underwaist, which may be had to-day in the shops in a variety of fabrics, from woven merino to silk. Where laundry work is expensive, then the colored waists of wool or silk may be substituted, but these soil easily at business, and, considering their first cost, the wash waist is to be preferred whenever possible.

Girls' school-dresses are much more successful when there is a wool frock for a foundation, and over it a wash dress of the pinafore sort (with sleeves). Or the summer dresses may be worn without the wool dress if the petticoat and underwaist are of wool, and the waist is highnecked and long-sleeved. There is a difference between the modern city steamheated schoolhouse and the prairie school, and of course the child who rides to school in a New York street-car, from which the snow is removed as soon as it falls, must be dressed differently from the child who trudges a mile on foot, to school in the Pennsylvania snow-covered mountains.

We put too many clothes on our backs as a usual thing, and not enough elsewhere. We have been saying this so long it seems as if every one must know it by heart, and yet last winter I watched children going into a country school reached by snow-drifted roads poorly broken out, and noted their hood-wrapped heads, their muffler-tied necks, their heavy jackets, and their bare wrists, their legs covered only with stockings, their shoes protected but half way with "rubbers." Every child that goes out on foot in cold weather should wear union suits to his neck, wrists, and ankles; and when the roads are snowy, or when it rains, his feet and legs should be protected from the sole to above the knees. Then remove the muffler, and have the mittens or gloves reach well up under the coat sleeves, and note how the "colds" vanish.

The best economical coat for child or business woman who must go out in all kinds of weather is a not too heavy rainproofed wool, with an interlining from shoulders to hip line. This should be a "cover" coat, which, when on and fastened, covers the wearer from the neck to the top of the overshoes. Put an adjustable hood on such a coat for children, and there is no excuse for an umbrella; an umbrella in a schoolchild's hands is usually only an excuse for getting wet.

For a handsome gown for formal

functions,— weddings, receptions, dinners, etc.,— rich, soft, lustrous satin is not only in vogue, but much to be recommended. It trims itself. The best



USEFUL MODEL FOR SERGE, CHEVIOT, OR ANY OF THE SEASON'S WOOL SUITINGS

way to make the skirt is by one of the ample circular patterns, with merely a deep hem. A skirt thus properly cut, hangs in beautiful lines, and the effect is very handsome. The bodice of a satin dress should always be softly draped (never tight and plain); and with a very little nice lace at the neck and on the sleeves, the gown is made elegant enough for a king's drawing-room, and not too elaborate for a church social. By choosing the right coloring, such a gown may be made appropriate for the young lady or for her mother. The soft rose pinks are lovely for twenty-one, and the silvery grays and rich mauves for sixtyone.

The successful toilet is not, however, merely a matter of a pretty dress or a comfortable coat, or both. The toilet as a whole should be harmonious. The hat should match the dress or the coat. A coat of one kind, a dress of another, and a hat that has no relation to either, always suggests a rummage sale. The gloves should match the dress when the latter is black or white or gray or brown. It is well to avoid the green and purple and other deep-colored gloves sometimes to be seen. When the dress is in one of these deep colors, the gloves look best in the lightest tint of the trimming,- white if there is much white on the dress, or gray or tan, etc. There are so many shades in gloves that it is not difficult to have them in harmony with the toilet, and vet the covering of the hands so often is at variance with the gown.

Hats are too often selected because they look well in the hand or merely from the front view when on the head. The lines of the hat or bonnet should be suited to the lines of the face and head viewed from all four sides. (Let every man wishing to know what to give a woman for a Christmas present give her a triple mirror. Every woman ought to have one, and but few do.)

The woman with thin hair and an agelined neck should wear hats or bonnets with soft outlines, fairly small in size, and should always have soft tulle strings, or else wear a lace veil that is put on in loose soft-draped effect about the hat. The colors this season include many rich but softly toned dahlia and plum shades which are especially becoming to women no longer young. Velvet in these tints is very lovely, and although a velvet dress or coat is to be recommended only to those who have several other dresses and coats, it is the prettiest of all fabrics for a "best" winter hat or bonnet, and when draped about a brim to give a gracefully easy effect, it takes years from the apparent age of the woman who has been wearing stiff, plain-edged hats. If women only knew how much younger and how much more charming they look in pretty, rather close bonnets with softly tied strings, they would renounce forever shovel-shaped hats.

And if they knew that a transparent stock, higher under the ears than under the chin, formed in one with a little chemisette, takes years off the effect of a neck bound about with a dog collar of something stiff the same width all the way round, I wonder if the latter abomination would disappear forever. I wonder.

#### THE ESSENTIALS OF HEALTH\*

A S I look out over this beautiful water, look up at the sky, and breathe the sweet air, I am reminded that here we have in their purity the three great essentials of health. We look out upon this beautiful water which has been distilled thousands of times, and we see it clear, fresh, and pure as God made it, We may say it is life-giving, one of the great essentials of life.

One can live but four or five minutes without air, a week without water, and a month or six weeks without food; so these are the three essential things. In this pure water we have life, nothing but life; but men sometimes put something in it which spoils its purity — coffee, tea, alcohol. It seems as if the larger part of the business in which men engage themselves nowadays, is to spoil the things God has made. This pure air is sometimes spoiled, polluted with sewer gas and other things. And this pure food, how often it is polluted, especially when we take it second-hand.

Carlyle wrote in one of his books about Dr. Alcott's "potato gospel." Dr. Alcott was a vegetarian, and a member of that little community organized down in Massachusetts some sixty years ago, - the so-called Brook Farm experiment. It was a wonderfully interesting little place, and a wonderfully interesting experiment. There was a little brook running through the woods out there. Thoreau, Emerson, and Dr. George Ripley discovered the spot, and thought it a good place to get close to nature. Margaret Fuller, Horace Greelev, Hawthorne, Dana, and numerous others of the leading lights in New England gathered there, and lived in this community for the purpose of studying natural modes of life, of getting near to nature, of living the simple life. They lived well and happily together, and made great progress in discovering principles, and finding out nature's ways.

<sup>\*</sup>Abstract of a talk by Dr. J. H. Kellogg at the Ohio Outing of Sanitarium patients at Goguac Lake Villa.

One Sabbath afternoon I was in the woods, talking with some of my little girls. One of them said, "Papa, these trees seem to be alive and talking back to you." Many of you doubtless have a feeling akin to this, and that is why you are gathered here in one of God's temples, out of doors, where we are close to nature; and close to nature, means close to God. country, was a guest at his father's house. He had an old uncle at the table who was a vegetarian. He was praising the natural regimen as making one strong and enduring. When he had finished, Carlyle said, "I once tried the vegetarian diet for three whole months, and at the end of that time I had lost in flesh and strength, and I didn't write with my usual vigor. When I came to look over



THE ORIO GATHERING

I have no sympathy with the artificial in religious life, which gets us so far away from the things that are real and tangible. My idea is that true religion is a natural thing, and to be truly spiritual is to be truly natural. To be natural in the true sense is to be in the highest sense spiritual. To be near to nature is to be near to God, because what we call nature is simply the visible expression of the great Power behind. I did not quite understand why Carlyle should have had so much objection to Alcott's "potato gospel" until I met a gentleman who told me of an incident that happened many vears ago when Carlyle, on a visit to this

the things I had written, I found they lacked meat, and so I returned to the flesh diet again." Now, many of you know from his writings the kind of meat Carlyle meant. When he abandoned his flesh diet for a while, I suppose his writings seemed to lack something of the sharp sting of sarcasm which usually appeared in them.

I have been trying this natural way in diet, of which you have a taste to-day, for something like forty years. The longer I travel this road, the more I see how this principle of getting close to nature enters into all our life, and as I study men and women who come under my care professionally, I see how turning away from nature, cultivating the artificial, and bringing ourselves under the influence of abnormal and artificial conditions, is responsible for almost all our ills.

But if the things talked and practised here, are useful only in the Sanitarium, if it is impossible to take these Sanitarium principles into the home and set them in operation there, they are not real; they are artificial, and must pass away with other fads and fancies. But that will not be. These principles came up from humble places. We have them now elaborated in the Sanitarium, but everything we employ here came from simple sources - not from great laboratories. Take water, for instance; where did our use of water come from? The water-drinking we recommend every one of you to follow,- several pints daily as an internal bath,-where did that originate? Not here; we can trace it back thousands of years. It was brought into more systematic practical use over a hundred years ago, in Silesia, in the mountains of Græfenburg, by a peasant boy named Priessnitz. He, though a peasant boy with no learning, who could not write his name until he was forty years old, originated these ideas of the use of water which we are now using at the Battle Creek Sanitarium, though in a much more elaborate form.

The use of light for healing was known to the old Romans. If you will watch a sick dog, you will notice that he goes off and lies in the sun. A sick animal seeks the sun. This is an instinctive knowledge of which all animals are possessed.

In the matter of food, we are but returning to the simple diet of our ancestors. We have only to follow nature, and to follow nature means simply to follow God. If we had followed the instinctive leadings in ourselves before they became perverted and obscured, we would have lived right in this matter of diet. A child never eats beefsteak until he is persuaded to do so. Give a year-old child a piece of meat, and he will taste it and throw it away. Give that same child an apple, and he accepts it at once; a strawberry, and it goes to his stomach immediately. These principles are natural. They have their foundation away down deep in the very nature of things.

Some of you will be going back to your homes soon. We do not expect to cure you here. This idea of getting close to nature is a gold mine, and we are working this mine along with you. You must keep on working it at home.

Let me make some more suggestions. In the first place, about diet. How are you going to eat at home? You say, perhaps, "I can not afford all these Sanitarium foods. It is difficult to get them." You can get them if you want them. Our Food Department has recently organized a very complete mail-order system, whereby the foods can be delivered to you at your home at ordinary retail prices. But you can live as healthfully as you need to live without any of these manufactured foods. You can make just as good granola right in your own home. Take ordinary bread and slice it, put it in the oven and leave it until browned clear through. Take this zwieback and grind it up in a coffee-mill, and you have just as good breakfast food as you can buy. All the good and wholesome vegetables can be prepared at home. There are simple preparations of milk and eggs, and especially fruits and nuts. There is no preparation of nuts in the world better than the nuts themselves.

Another word about the home itself. One of the most essential things about any home is to make that home to breathe.

#### THE ESSENTIALS OF HEALTH

The house needs to breathe. Fresh air and sunlight are purifying. Let the bright rays of the sun shine in at the parlor windows. These rays are deadly to germs. Sunlight kills every germ. No germ can live in the sunlight. This is the thing that saves the tropics; otherwise the warmth and moisture of the tropics would soon render life impossible. So when you return, if your home is not open to the sunlight, cut away some of the shade trees from about the house, make more windows if necessary,— let the sunlight in. The house where fungus grows must be an unhealthful house. There must be perfect ventilation. Open the windows, and leave them open.

Don't forget the cold morning bath, and live out of doors as much as possible. Ohio air is just as wholesome as any in the world. Be sure you get enough of it.

#### A THANKSGIVING DINNER WITHOUT MEAT

#### BY GEORGE E. CORNFORTH

Crême de Poturon Soup

Roast Nuttolene with Apples

Celery

Baked Sweet Potatoes

Health Cocoa

Baked Hulless Beans and Rye Gems

Cream Chicken Salad (Vegetarian Style)

Cheese Straws

Hygeia Saratoga Potatoes

#### Fruit Cake Apricot Tart - Hard Sauce

Crême de Poturon Soup.— 1 cup strained pumpkin, 2 tablespoonfuls nut meal, 1 teaspoonful sugar, 2 quarts milk.

Mix all together, heat, and add one teaspoonful of salt. Serve.



RYE GEMS

Baked Hulless Beans.— Cook one cup of hulless beans in three and one-half cups of water till the beans begin to get tender, but are not broken. Add one level teaspoonful of salt, one tablespoonful of malt honey, and one-half pound of protose cut in cubes. Put the beans into a basin, cover them, and set the basin in a dish of hot water. Bake till the beans are thoroughly tender.

Rye Gems.— Beat together one cup of cold milk, one egg, and one-fourth teaspoonful of salt. Beat in one-half cup of Graham flour, one-half cup of rye flour, and one-fourth to one-half cup of white flour, or sufficient to make a batter stiff enough to pile up in the dish as it flows from the batter whip. Beat for five minutes. Pour into heated gem irons, and bake about forty minutes.

Hygeia Saratoga Potatoes.— Slice raw potatoes about three-sixteenths of an inch thick. Lay them on an oiled pan, and sprinkle a little salt over them. Cover

#### 560

#### A THANKSGIVING DINNER WITHOUT MEAT

closely, place in the oven, and bake till tender. Remove the cover, and brown.

Roast Nuttolene with Apples.— Cut the nuttolene, as it comes from the can, in halves, lengthwise. Lay the halves, flat side down, in a dripping-pan. Wash some tart apples, and slice enough of them, with the peeling on, to cover the nuttolene. Sprinkle lightly with sugar, add a very little salt, and a few bits of cocoanut or dairy butter. Pour a little hot water into the pan, cover, and bake until the apples are tender.

Cream Chicken Salad (Vegetarian Style).— Cut nuttolene in one-fourthinch dice, lay it on an oiled pan, and toast in the oven till lightly browned. Add to it an equal quantity of diced celery, and serve over it the following:—

Cream Salad Dressing.— I cup sweet fresh cream, I tablespoonful flour, 2 egg whites, 3 tablespoonfuls lemon juice, 2 tablespoonfuls olive oil, 2 tablespoonfuls powdered sugar, ¼ teaspoonful salt, ½ teaspoonful celery salt.

Stir the flour smooth with some of the cream. Heat the remainder to boiling, and stir in the flour. Cook for a minute or two. Add the sugar, and take from the fire. When it has cooled a little, beat in the whipped whites of the eggs. Cool, then beat in the oil, salt, celery salt, and lemon juice, and pour it over the mixed nuttolene and celery.

*Cheese Straws.*— I cup pastry flour, 3⁄4 cup nut meal, 1⁄2 teaspoonful salt, 1⁄2 teaspoonful sugar, cream to moisten, 1⁄2 cup cottage cheese.

Mix the flour, nut meal, salt, and sugar. Moisten with sufficient cream to make a dough. Roll out, sprinkle a little of the cheese on the dough, fold together, and roll out again. Do this till the cheese is all used. Roll out as thin as a knife blade, cut in one-eighth-inch strips, and bake in a quick oven.



FRUIT CAKE

Fruit Cake .- Scald a pint of thin cream, and cool to lukewarm. Add twothirds of a cake of compressed yeast dissolved in one-half cup of warm water, one-half cup of sugar, and two and onehalf cups of flour. Beat all together thoroughly, and let rise till light. Then add one-half cup of warm sugar, onehalf cup of warm molasses, and one cup of warm nut meal. Beat well, and let it rise again. When risen, add one cup of seeded raisins, one-fourth cup of chopped citron, one-half cup of currants, two wellbeaten eggs, and two cups of flour. Mix well. Fit a piece of oiled paper into the bottom of a bread pan. Pour in the cake mixture, let it rise till very light, and bake. Bake at least a day before needed.

Apricot Tart.—Cook dried apricots till tender and not very juicy. Rub through a colander, sweeten, and flavor with a little vanilla. Line a shallow baking pan with nut-meal pie crust, fill with the apricot pulp, and bake. Cut in squares, and serve with —

Hard Sauce.— 1/3 cup sugar, 2 egg whites.

Add to the sugar just enough water to dissolve it, and boil it till it hairs. Have the egg whites beaten stiff, and pour the hot syrup slowly over them, beating all the while till the sauce is cold.

561

#### THE CROWNING OF THE YEAR

The rose is dead, but still the bee has sipped The honey that was held within its heart,---

The heavy sweetness of the dew that dripped From petals that the sun had coaxed apart.

The grass grows dark in valley and on hill, And through it lazy zephyrs seem to creep,

As though it dreamed of summer noontides still,

And bowed before the breezes in its sleep.

The orchard trees are bare; their lacing limbs Trace web-like patterns on the graving sky;

The northern winds creep through like murmured hymns

Or sober chants that softly rise and die; And yet the ruddy apples that they bore

Have caught and held the sunshine, and they bring

The morns and nights of June to us once more And all the blossom breath of early spring. The fields are still; where once the wheat and corn

Laughed in the gladness of the summer noon, And waved saluting banners to the morn,

And whispered softly in a twilight croon-There, now, the barren stubble meets the eye,

And there the end of harvest days is told; But granaries are heaped both wide and high,

As crucibles that catch the finer gold.

So sun and rain have wrought their yearly task, Have given of their bitter and their sweet;

The earth that yields us freely when we ask, Has left her summer fruitage at our feet:

And now the trees and fields have earned their rest.

And we may read the message that is sent: When we have done our all and done our best,

We, too, may fold our arms and be content.

- St. Louis Globe-Democrat.

#### RATIONAL TREATMENT OF TUBERCULOSIS OF THE LUNGS

BY HERBERT OSSIG, M. D.

#### (Continued)

TAVING given these thirty-seven kinds of movements and exercises a thorough trial for several years, and having derived such decided benefit therefrom, I can highly recommend them. However, the variety of manual Swedish movements and physical culture exercises being so very great, the patient is by no means obliged to confine himself to the ones I have suggested; for it is quite immaterial which exercises are selected from the numerous possible combinations, the chief requisite being that they use and strengthen the weak parts. Varied circumstances, different opportunities, and individual inclinations, must guide in the selection of them. Don't let any physical culture "professor," so deeply interested in you that he will graciously offer his assistance to carry the burden of your pocket-book, swindle you into

the absurd belief that "his" system of exercises is the only one leading unto physical salvation.

Besides the thirty-seven movements just described, there are four great exercises, also suited to the first class of consumptives, that deserve special mention and praise because of their extraordinary, beneficial effect on the development of the chest and lung capacity. These are:—

1. Walking, combined with rhythmical forced deep breathing.

2. Running, also combined with rhythmical forced deep breathing.

3. Mountain climbing.

4. Swimming.

Let us consider, then, the indications and modes of application for each one: — I. Walking.

(a) The very feeble invalid, whom I

classed under the first type, has no strength left to stand erect, and therefore can not possibly walk.

(b) But the patient of the second type can and must make a determined effort to emancipate himself from the bed, and gradually learn to walk. At his first endeavors to arise from the recumbent position, the patient feels dizzy and faint; the heart beats rapidly and feebly, so that the desire to give up such an unequal struggle and lie down again, is almost irresistible. Nevertheless, the patient must rise superior to these trials; for if he never makes a beginning, when will he relinquish his dependence on a never-ending bed-life? Let him remember the German proverb which he learned at school: "Aller Anfang ist schwer," and gather together all his courage to overcome his awful lethargy.

Those of us who have ever gone through a siege of severe illness, can sympathize with the weak consumptive and feel truly sorry for him, because we know from personal experience what fierce battles the bedridden patient has to fight just to conquer the unwillingness of his flesh to obey his mind. This surrender to the very inviting ease of the bed or wheel-chair is due partly to a real inability to put forth nervous and muscular force, but also - and this is well worth remembering - to a progressive weakening of the will. Correspondingly, we find that the man who before his sickness was of an effeminate character, listless, and with no goal in his life, being swept hither and thither by the opinion of others stronger than himself, can not arouse himself to bid the body obey his mind. Not experiencing the accustomed strength in his limbs, he meekly gives way to his feelings, and, lying on his back, stares dreamily into the void, wondering what would happen to the

world if he should dare to shift his position to the right side, or whether anybody would feel happier should he perchance roll to his left side. While the man who in his pre-consumptive days was resolute, determined, and accustomed to grapple with difficulties, who led others rather than allowed himself to be led by them, - such a man, though he also suffers from a weakening of the mind, has yet sufficient will power remaining to bend all his energies toward overcoming the ever-increasing tendency to submit to this dreadful feeling of weakness. Realizing the fact that no man ever became an athlete by merely contemplating athletics, and that no student ever learned his lessons by placing his books under the pillow over night, he makes at least a beginning; and although his first endeavors are apparent failures, he, like the spider in the tale about King Robert Bruce of Scotland, tries and tries again, until finally his efforts are crowned with success. There, yielding, gradual decline, and lingering death. Here, resolution, steady improvement, and final recovery.

Now, if you belong to this second type, and have fully decided not to become discouraged in trying to learn to walk, you may proceed as follows: At such time of the day when your temperature is nearest the normal, preferably two hours after a meal, because then you possess the maximum amount of strength, let a nurse assist you to a sitting and standing posture. Should this change from a prone to an upright position make you dizzy, and provoke a coughing fit, sit down and expectorate. Then get up again, and, placing your right arm around the waist or over the shoulder of the nurse, walk with him to an easy chair or a bench, 5 meters distant, and sit down for several minutes; then walk back to your bed and

rest. Do the same on the following day. On the 3d and 4th days venture to journey 10 meters. On the 5th and 6th days you may try 15 meters, and on the 7th and 8th days, 20 meters. On the 9th and 10th days use two chairs; the first one 20 meters from the bed, and the second one 30 meters. On the 11th and 12th days place the first chair 20 meters from the bed, and the second one 40 meters. Noticing a gradual return of the old-time strength, you can wax bolder and add 20 meters every other day, so that on the 19th and 20th days you will require six chairs: —

The first one 20 meters from the bed. The second one 40 meters.

The third one 60 meters.

The fourth one 80 meters.

The fifth one 100 meters.

The sixth one 120 meters.

During the following ten days you probably will be able to dispense with the nurse altogether, and traverse the 120 meters by the aid of only three chairs : —

The first one 40 meters from the bed. The second one 80 meters.

The third one 120 meters.

Encouraged by your steady improvement, you will surely lay aside all remaining fear, and lengthen the distance as your strength increases; so that by the end of the second month you may find yourself surprised at your ability to cover 300 meters without a single stop.

I take it, of course, for granted that you do not eke out a miserable existence in a modern fashionable house, with its small bedrooms and those large fancy parlor windows that can never be opened, and those costly carpets which are abominable breeders and incubators of filth, dust, and germs. And I assume all the time that you don't shrivel up and wither away in this terrible prison and merciless destroyer of man's health and of his strong, God-given longings for freedom, expansion, breathing, and elbow-room; but that you live, like a free man, in God's beautiful house, where such excursions which I just described, are possible; where the horizon forms your four walls and the sky your ceiling.

As you walk from chair to chair, breathe rhythmically; that is to say, breathe in while you take one step, and breathe out while you take the next one. After some days, endeavor to fill your lungs while you count two steps, and to empty them during the next two steps. By and by, if you try hard, you may succeed in raising your count from two to three steps. Practise this deep breathing with the arms swinging naturally at your sides, holding the chest high up, as far as your strength permits; and when you reach the next chair, go through the breathing exercises illustrated in Figs. 8-11. Attempts at deep breathing at first invariably provoke quite annoying coughing spells; but these must not discourage you; they are for your own good, since vigorous coughing will enable you to expectorate large quantities of phlegm, which, had you not undertaken the walk and practised deep breathing, would have remained in your lungs, and thus have become one of the sources of an obscure fever. Besides, deep breathing exercises, though at first producing a peculiar, vague, and raw feeling all over the lungs, if combined with a nutritious and wholesome diet, soon improve the nutrition of the whole body so effectively that both this uncomfortable raw feeling and the necessity for coughing and expectoration of phlegm will disappear; with the result that deep breathing will become free and easy, and give a decided relief, filling you with a delightful lightheartedness, and causing the very finger tips to tingle with pure, warm blood,

Thus we see that an invalid must imitate the child. Possessing, like it, only a very small amount of reserve energy, each dose of exercise must be small, and always followed by a liberal period of absolute rest.

(c) When, by dint of perseverance and much toil you have worked your way up to the third type, you will then be sufficiently enthusiastic to no longer need any coaxing. You will be your own pusher from now on, and hence see to it that you master more difficult feats. A walk of half a mile, or even one or two miles, will probably not fatigue you overmuch, but afford you real pleasure; and to take a deep inspiration with every 4th, 5th, 6th step will doubtless become easy.

(d) If you have at last reached the fourth type, you can be heartily congratulated: for henceforth you will sail in smooth waters, never again to become a consumptive. Your nervous and muscular system will by this time have become so strengthened and trained that even severe exercise will be hardship no longer, but equivalent to play. Of a 3, 4, 5, or even 10 or 15 mile walk you think nothing any more, and to fill your lungs and swell your chest with every 7th, 8th, oth, 10th, 20th step will not be beyond your ability. Visions of a tramp over long distances, perhaps from New York to San Francisco, will keep crowding upon your imagination, and remind you of those venturesome days when you were a happy youngster.

(To be continued)

# THREE DEADLY DISEASES

#### BY DAVID PAULSON, M. D.

#### Hinsdale (Ill.) Sanitarium

W HY do so many of our most promising men die prematurely from apoplexy, heart failure, or Bright's disease? These three common disorders are closely related, and have common causes.

Our high-tension life,—with its prolonged nervous strain, increased mental activity with a corresponding decrease of physical activity, which means earning bread by the sweat of the brain instead of the sweat of the brow,— together with prevailing dietetic errors, produces a gradual contraction of the smaller blood vessels. As a consequence, the heart pounds away trying to force the necessary amount of blood through these contracted blood vessels. This raises the blood pressure, and so the heart increases in size in order to stand the strain.

As the unnatural care, worry, emotion, and high living continue, the contraction of the blood vessels and the blood tension increases. The heart thumps harder at its ever-increasing load, and lo! on an ill-fated day the pressure becomes too great for some weakened artery in the brain, and it bursts; this means a stroke of apoplexy, with paralysis of one side of the body, or perhaps almost instant death. But if the blood vessels are sounder than the heart, then some day when such a man forgets himself and runs to catch a street-car or makes some other unusual exertion, putting an extra strain on the heart, its weakened walls suddenly stretch, and instead of the strong beats which before could be felt against the chest wall, there is now only a flutter, the lips are blue, the man gasps

for breath, and more than likely his days will soon be numbered.

Then again, the strength of the heart may be as great as the demands that are made upon it, but as the pressure in-



DETERMINING & PERSON'S BLOOD PRESSURE

creases, the already crippled kidneys begin to allow the albumin of the blood to pass through, and the doctor pronounces the ominous verdict —" Bright's disease." In either case the man is dangerously near the "scrap-heap" stage.

Proper treatment may even at this stage accomplish wonders in such a case, but it is only a tithe of what might have been done a few years before, when there were no signs of the present trouble except a suspicious rise of blood pressure.

Formerly, this important fact was difficult to determine, but, thanks to modern inventive genius, an instrument has been perfected by which the blood pressure can be determined as accurately as can the temperature of the body. An average normal has been agreed upon for men, women, and children, and any excess of this should be regarded as a red-lantern signal warning the individual that apoplexy, Bright's disease, or heart failure are the next stops a little further down the track unless he switches off on to a safer road. Now is the golden time for him to heed not only spiritually, but also physically, the admonition to "keep" the "heart with all diligence."

It has been found that the smoking of

a single cigar can raise the blood pressure for nearly an hour.

Dr. Cook, who has perfected a blood-pressure instrument that bears his name, and who is one of the greatest authorities in the United States on this subject, says that a meat diet seems to have a very strong and direct influence in establishing and maintaining a rise in blood pressure. The man who leaves off flesh foods and an excess

of other proteids from his dietary, is thereby lessening many fold his chances of dying from any one of these three deadly diseases.

In those engaged in sedentary work, two-thirds of the blood is in the abdomen, chest, and brain. When engaged in active physical work, the conditions are reversed, and two-thirds of the blood is circulating freely in the dilated blood vessels of the muscles and skin.

Cold mitten friction or any short cold treatment, followed by vigorous friction to produce a good reaction, increases the activity of the blood vessels, and so relieves the heart of some of its work. These various cold applications, whenever there is any danger of chilling, should be preceded by some short hot application which will bring the blood thoroughly to the surface.

Alcohol paralyzes the blood vessels, causing them to dilate, and so temporarily brings down the blood pressure. The waste products in juicy beefsteaks, condiments, and spices, as well as tobacco, raise the blood pressure. Saloonists,

# THREE DEADLY DISEASES

with their free lunches, reason from cause to effect better than the mothers who feed the same kind of food to their boys, and then wonder *what* drives them to drink. When a man gets the *cause* for drink inside of him, it is almost as natural for him to drink as it is for the consumptive to cough.

Family trouble, worry, spiritual condemnation, likewise raise the blood pressure. Many a man has burst a blood vessel in a fit of anger on account of the rise of blood pressure which such a state of mind produces.

In our Chicago Life Boat work we have often found that if the reclaimed drunkard gets into some deep trouble,

thereby producing high tension, he is in the greatest danger of returning to his old habit. The blood pressure that is produced by wrong diet, by tobacco or other physical causes, is generally improved when the error is corrected ; but he who has a high tension due to cares, worry, fretting, or discouragement, needs to have extended to him that beautiful invitation, "Come unto Me, all ye that labor and are heavy laden, and I will give you rest." Lord Kelvin, the famous English scientist, recognized this when he said to a company of physicians : "Your patients can not get well on splints and drugs alone; they must have spiritual consolation."

# FLESH EATING FROM AN EAST INDIAN'S STANDPOINT

THE following interesting paragraphs are quoted from a "Textbook on Science," by P. G. Sundaresa Sastri, B. A., of Trichinopoli. Our readers will be interested in this view of the subject from an East Indian vegetarian, doubtless a Brahman. Some of the arguments deduced are certainly novel. On the whole, the article is an excellent summary of the arguments against the use of flesh foods, and indicates a careful study of the subject by the writer.

"Flesh Food.—An anatomical examination of the teeth and the digestive apparatus of man, and a contrast of the same with that of carnivorous animals, conclusively show that man is not a carnivore, but only a graminivore and a frugivore by nature. Flesh eating is a vice that is not inherent in man. A section of mankind was accidentally driven to the necessity of having recourse to flesh eating, at a time when, owing to a cosmic revolution, all the available foodstuff was blighted by a snowstorm or some such catastrophe.

"What flesh eaters call animal food is none such, but it is really a corpse food, or rather a carcass food which occasionally becomes carrion food when the meat becomes stale and putrid. Flesh eaters live actually on the dead bodies of animals. The true animal food is that which is obtained from the living animal, and consists of articles like milk, butter, cheese, ghee, and buttermilk. Good food makes good blood, good blood makes good flesh, good flesh makes good brain and nerves, and good brain and nerves give good intelligence. The calm, quiet, reflective, and forbearing temper of a vegetarian can never be expected in a flesh eater. Doctors affirm that he who lives upon bull's flesh becomes bullish in temper like the European soldier, and he who lives on pig's flesh becomes piggish. Hence it is that we hear of cases in which punka pullers who happened to get sleepy while pulling, were thrown over the window, or cases of carelessness of servants being punished with beating unto death by beef-eating white masters.

# 568 FLESH EATING FROM AN EAST INDIAN'S STANDPOINT

"It makes man furious like a wild beast and highly sensitive, though this is often interpreted to be high moral indignation and consciousness of self-respect. The white planter tying an Indian coolie woman, almost naked, to a tree, and beating her to death for non-attendance at work during the days she was in childbed, is perhaps the effect of beef eating : for such unfeeling barbarities by the socalled civilized men can not be otherwise explained. The following details of the lynching of a negro by the American white men, who profess to have imbibed the principles of love and forbearance from Christianity, which is preached to be the only religion inculcating these noble qualities, will be enough to show the difference between the flesh food recommended by Christianity and the yegetable food recommended by unassuming, non-proselvtizing Hindu religion: 'A white planter was murdered at Doddsville, Miss., and a negro named Holbert was charged with the crime. The negro fled, and his wife, who was known to be innocent, fled with him to escape the fate which she knew awaited her if she remained. The two negroes were pursued and captured, and the following account of the tragedy by an eye-witness appeared in the Evening Post. When the two negroes were captured, they were tied to trees, and while the funeral pyres were being prepared, they were forced to suffer the most fiendish tortures. The blacks were forced to hold out their hands while one finger at a time was chopped off. The fingers were distributed as The ears of the murderers souvenirs. were cut off. Holbert was beaten severely, his skull was fractured, and one of his eyes, knocked out with a stick, hung by a shred from the socket. Neither the man nor the woman begged for mercy, nor made a groan or a plea. When the

executioner came forward to lop off the fingers, Holbert extended his hand without being asked. The most excruciating form of punishment consisted in the use of a large corkscrew in the hands of some of the mob. This instrument was bored into the flesh of the man and the woman in the arms, legs, and body, and then pulled out, the spirals tearing out big pieces of raw, quivering flesh every time it was withdrawn. Even this devilish torture did not make the poor brutes cry out. When finally they were thrown on the fire and allowed to be burned to death, this came as a relief to the maimed and suffering victims.'

"In the first three months of 1904 alone, thirty-one negroes were lynched in America. This vice is slowly spreading to South Africa also. All that we can say in the face of such savage cruelty by men who profess to be Christians and to be civilized, is that their Christianity and civilization do not exercise any influence over them, except when they are overpowered or resisted by physical force. The savage respects the savage; and the white man would seem to treat properly only those who have the power of resisting and chastising him. Surely !! Should Christ happen to incarnate once again to see the effect of his noble teachings, he would be sorely aggrieved at heart to see the outrages committed by his devotees, in the name of his religion, on the poor colored races of the world.

"The good nature, the keen intelligence, the high sense of duty, and the obliging temper of domesticated dogs, especially when they are not fed on meat, and the calm, friendly, harmless nature of the domestic pussy and other pet animals, are due to their giving up carnivorous food. Even the lion and the tiger can be domesticated thus. Flesh food is further a constipating food, as all food

# FLESH EATING FROM AN EAST INDIAN'S STANDPOINT 569

containing nutrition in a condensed form would naturally be. Liebig's meat extract and beef extract and bovril are very highly constipating. Flesh eaters are liable to catch very serious diseases from the animals whose flesh they eat. Intestinal worms, such as the thread worm, round worm, and the horrible tapeworm, are more common in flesh eaters, and especially pork eaters.

"Flesh food is nasty by nature, and it has to be enveloped in a paste of condiments, sweets, and spices, and then fried in ghee (butter) to be easily devoured without aversion. All the virtues that its advocates claimed for it have been disproved. Its strength-giving and endurance-causing properties have been proved to be a mirage, as flesh eaters can not even approach strict vegetarians in the matter of marvelous feats of strength or intellectual achievements and powers of endurance. The Japanese, who are not flesh eaters, have given a practical demonstration of this truth. The most famous pedestrians, acrobats, generals, scholars, administrators, and reformers have all been strict vegetarians. The ancient Hindus achieved their intellectual conquests only after giving up flesh eating. Newton and several other scientists are said to have abstained from meat while writing the best of their works.

"Flesh food has the further defect of containing the filthy waste matter carried away by the rapidly circulating blood from the different parts of the system of the animals. Vegetable food is the purest food. Even the true animal food comes only next to it. The carcass food is obtained at second hand from the animals feeding upon pure vegetables. Poor, ignorant, and misguided man!! Instead of living upon pure vegetable food obtained at first hand from the earth, why should he expect other animals to feed upon this pure food, digest and assimilate it on his behalf, and supply it in the form of flesh, which is of course coupled with the disease germs, and the filthy poisonous waste matter floating in the blood.

"A study of the valuable books written by Dr. Kellogg and Dr. Nichols, and similar works of other eminent doctors. will convince the reader of the horribleness, the unreasonableness, the unsympathetic behavior, and the murderous nature of flesh-eating man, who not only kills and devours the dumb animals, but justifies the same by saying that he is the acme of creation; that he, therefore, has a right to ill-treat them, and that the other animals are created for being killed and eaten by him. The very same logic will be adduced and the same decision would be arrived at unanimously in a representative parliament of lions, tigers, bears, wolves, jackals, and other carnivorous animals. If the flesh eaters are enjoined to kill the animals with their own hand, or personally have a look at the horrors of the slaughter-house vividly described by Dr. Nichols, nearly ninety per cent of them will give up this sinful habit without requiring a second moment for reflection. Fishes live mostly on the filth that is found thrown into water, and consequently they are ugly creatures. Further, they have an unbearable stench. Fish eaters are the first victims to the ravages of pestilential diseases. Salted fish is much worse, and it produces scurvy."

It is better to fence the precipice at the top than to wait with an ambulance at the bottom.—*Ellice Hopkins*.

# METHODS OF MODIFYING THE BODY

V ARIOUS definitions of beauty have been given. Michael Angelo regarded it as "the expurgation of superfluities." The Greeks likewise considered beauty to be "the mean" between two extremes,— the perfect "balance between too much and too little."

Whatever beauty may be in the abstract, it is certain that that which in general practise is considered beautiful is, as Darwin has shown, "a very pronounced form of whatever form of feature or hue we are most accustomed to." "The African savage," he says, "considers the Englishwoman hideous, with



HEADDRESS OF 1780

her front teeth unextracted, and white, 'like a dog's,' her lips untorn by either a copper ring or a piece of wood, and her cheeks colored 'like a potato flower.' The Englishman recoils from a Nubian lady, whose smile brings her lips on a level with her eyebrows, and draws her nose back to her ears."

This tendency of humanity to regard as beautiful the exaggeration of characteristic peculiarities, has led to the adoption of various methods of modifying the human form, and creating hideous deformities. Some of these methods of modification are described in the *Chautaugua Herald* by Prof. Frederick Starr.

"The first method of modifying the body is by bandages. The most familiar illustration, perhaps, is the case of the Chinese women's feet. As is well known, the little girl's feet are bound up in cloths when the child is still small, and the feet are cramped into a most abnormal shape, so that walking becomes next to impossible. There is a tribe in the Philippine Islands whose women bind cloths around their arms so as to develop artificially large fists, large fists being considered signs of beauty. Then there is the American woman with her small waist, which is no more beautiful than the Chinese woman's foot or the Philippine woman's hand.

"Of the method of modifying the body by piercing there are many cases to be found. In the Queen Charlotte Islands a little girl will be taken out into the woods by her mother, aunt, or grandmother, who will prick a little hole in her lower lip, by means of a piece of shell, perhaps. Then she will stick into the hole thus made a little tuft of grass to prevent the hole from healing. After a few days, when the inflammation has gone

\$70

# METHODS OF MODIFYING THE BODY



PAPUAN DANDIES

down, she will stick into the hole, in place of the tuft of grass, a little peg of wood, thereby stretching the hole. Then from time to time larger and still larger pieces of wood will be inserted, until the girl, or woman it may be by this time, has an immense stick of wood in an immense hole in her lip. I have seen one of these women with a stick of wood five inches wide, one and one-half inches thick, and three-quarters of an inch long, all beautifully inlaid with pearl shell from the sea.

"There are other parts of the body that may be pierced; the nose perhaps, either the middle portion, or the wings. In the latter case, several holes may be made, and rings or flowers may be inserted. A woman with a flower in her nose might very properly be said to have a nosegay. The ear, also, is a favorite subject of mutilation. Sometimes the ear is slit by a knife, parallel to its outer edges. Then weights are suspended to the loose portion, so that at times the ear stretches clear down to the shoulders. The immense holes thus made are sometimes used for receptacles for necessary articles, such as knives. Ear-piercing, however practised, is a relic of barbarism, and of the worship of heathen gods.



FROM WALL PAINTINGS, ST. STEPHEN'S CHAPEL. WESTMINSTER

"The third method of modifying the body is by color patterns. These patterns may be put upon the face or body in various ways, by painting, or by the application of powder, or by tattooing. Among the South African tribes, many of the natives cover their bodies all over with the marks of tattooing. The permanent tattoo may be performed in several ways. We are all familiar with the method by which it is pricked into the skin with a sharp point. Patterns may be cut in the flesh with knives, and the colors placed in the fresh wounds. The colors may be sewed right into the flesh. Hot irons may be used to burn in the colors.

"The last method of modifying the body is by means of dressing the hair. Great attention is paid to this matter by certain peoples. The Fiji Islander will spend ten hours at the hair dresser's, waiting patiently until his hair is made into great cones and pyramids. The South African tribes also love to build their hair in rings and halos. The Chinese queue is another familiar illustration. The Burmese likewise prepare their hair in a fantastic manner which they call the lotus blossom."

# THE ETHICS OF GOOD COOKING \*

#### BY MRS. S. T. RORER

#### Washington, D. C.

) ULLETINS are issued by the government of the United States that are very accurate as far as the chemistry of foods is concerned. I should like to say one word on the other side about their digestibility. Study the analysis carefully, but study also the digestive analysis of those foods, and find out whether or not they are the particular things for you to eat. A man should learn to select just the foods that will keep him warm and healthy in the climate where he happens to be. In the Southern States, where the climate is the most delightful in the world, they have more fried foods and use more animal fats than anywhere else in America. This is contrary to all scientific study. In good cookery there is no place for the frying-pan, but it is especially bad in the South. In cold climates, if people wish to eat fat foods, perhaps they can digest them, on account of the severe cold

weather they have, and the conditions under which they labor; but in the South, and in all hot climates, fats and fried foods are especially to be avoided. Rice, which grows in the South, is a good food for the South. The foods that grow there, an abundance of fruits and vegetables, are the proper foods to eat.

Study variety in methods of preparing, rather than variety of foods. For instance, those who use potatoes should not eat them cooked in the same way every day. There are hundreds of ways of cooking potatoes, that will give you a great variety without any change of materials at all. If you find yourself in some country place where the supply of food is very scanty, with a little ingenuity you can serve that food in such various forms that no one will think of complaining, even though the variety of food is very limited. We can always get variety in our food when we have this variety of cooking.

I believe most fully in raw foods, by

<sup>\*</sup> A talk given in the Battle Creek Sanitarium Gymnasium,

which I mean foods that do not contain starch, such as raw apples, oranges, and almost all fruits and nuts, and such raw vegetables as lettuce and celery. These things can be made into a thousand attractive dishes, and they help to keep the intestines in a good peristaltic condition and the whole system in good order.

When the Pennsylvania Railroad was doing its heaviest work, a few years ago, I spent two months on an Italian ranch for the purpose of studying the food of the Italians. I asked the foreman why they did not employ Irishmen or Americans, and he told me it was for the simple reason that the Irishmen gave out the first hot day, and the Americans were no good at all except as foremen ; the Italians and Hungarians were the only people that could make railroads. He told me I would soon find out the reason, and I was not two hours finding out exactly The Italians used the simplest why. kind of food,- food exactly adapted to their work. They boiled their macaroni carefully in water, using a very little salt. Each of them took an onion in his hand and ate it with his macaroni, and that, with an abundance of fresh fruit, was their food, day in and day out. They always eat large quantities of fresh fruit and lettuce and things of that kind.

But look into an Irishman's dinner kettle. First of all he had a piece of pie, which was an abomination. Second, he had a fried egg between two pieces of bread and butter, and that egg was fried as hard as sole leather and was just about as digestible. He had four ginger cookies and another bread-and-butter sandwich. between bread-and-butter Sometimes sandwiches he would have a piece of fried ham. That was his dinner in August, and do you wonder that he gave out? When I had looked into the Irishman's dinner kettle. I could tell exactly what would happen to him within twenty-four hours if he tried to do hard work.

Let your dining-room be attractive, and every meal you serve in your house be almost like a family reunion. Let the food be well served, and your table beautiful. Always have just as many pretty things on the table as possible. Do not think every time you eat, of just what you are eating. When you are well, see that you eat just enough to satisfy your appetite, and not one grain of food over. Remember that every particle of food that you eat more than you actually need is worse than wasted, because it overtaxes the system in getting rid of the poisonous excreta. Suppose we have four ounces of blood in the head. When we eat a hearty meal, that blood goes to the stomach to be used for digesting our food, and if we work our brains immediately after, we must also use a portion of this blood for brain work. Suppose we eat a meal that is sufficiently heavy to require three ounces of blood and then try to do brain work. We are burning the candle at both ends, and sooner or later something must give way, and that something is health, of course. Eat the most economical amount of food you can. If you want only two ounces of nitrogen, get that two ounces from food that is most easily digested, and food that gives you the least waste of energy in getting the nerve forces to operate.

When the Spanish-American War broke out, I happened to be near one of the camps. In less than three weeks every house in that neighborhood was thrown open to receive sick men. They were from a mountainous district, and when they came into camp, they soon got sick. A pie and candy shop and a beer saloon were all opened in three days after they arrived in camp, right in the same neighborhood. They did not eat the rations they had, but would go out and buy as

long as their money lasted. I have seen voung men sit down and drink a quart of whisky at one sitting, and eat, perhaps, a pound of candy. Their systems were so run down as a result of the awful conditions under which they lived that they got sick very fast with typhoid fever, Now and then I ran across a sturdy man, and I asked him how it was that he remained so well. He would always reply, "I live on the rations the government gives us, with the exception of buying a little milk at a farmhouse." I have had that same thing told me twenty times by the men who remained healthy. Our soldiers died by the thousands, because they thought they must have meat, and it had to be sent down into that warm climate in tin cans. They suffered and died, not from any necessary cause at all. Most of the deaths were preventable.

During the entire Russian-Japanese War the Japanese have had only a few hundred deaths from sickness. That is a tremendous lesson to a Christian country. Study the diet of the Japanese soldiers, and you will see why they are not dying from disease. They carry rice, rice flour, bean meal and pea meal, and soybeans. Sov-beans contain the greatest amount of nitrogen of all the beans, and with their bean meal and their rice they have no necessity for anything else; they have a perfect diet. If there is any one good thing that has come out of the Japanese War, it is that the way they cared for and fed their soldiers must certainly be a lesson to the entire civilized world.

Don't give your children ill-selected food, even if you eat it yourself. Remember that life is a thing you can not give, but which you can take so easily. Every mouthful of food you take yourself, and every mouthful of food you give your children, ought to be a higher thing to you than simply satisfying hunger. Let us feel that we ought to build our bodies well, to give us nerve force, to urge us on to doing better things. Do not let us sit down to the table simply for the pleasure of eating to satisfy our hunger. In every mouthful that we take, let us remember that nutrition is a divine process.

Do not eat a great variety of things at one meal. A perverted palate is never satisfied. It is only the natural palate the palate that is kept perfectly free from stimulants all the time — that goes heartily to the table and feels that every crust of bread is just as good as it can be. There is a delight there that many have never known, and if only for that reason, select a simple diet. But see that everything which you eat is of the highest grade.

Those who can afford to pay high prices, can get perfectly pure foods, but in these days of food adulteration the poor people get a mixture that has never seen anything wholesome. These adulterated foods are really doing more harm in New York and Chicago and in all other large cities than almost anything else — except the frying-pan. Liquor has been and is ruining thousands of lives, but I believe the frying-pan beats it every time.

The maple sugars in our market are all, except a very small percentage, adulterated, and I am told by some men that there is scarcely any maple sugar that is pure; that almost all of it is made from corn, and scarcely any from maple trees.

Cane-sugar is a positive irritant. You may get a great deal of heat out of it, but that does not mean that sugar is a good food for you. I think last year, in my house I did have two pounds of sugar, but this was for the guests. We use about two pounds a year. There are other things you can substitute for sugar if you really feel that you need sweets. Sugars and starches, of course, are heat-giving foods.

We can eat starch and get sugar from it. Every mouthful of starch we take is converted into maltose. Starch is not found in the body as starch; it is all converted into maltose before it passes into the blood as nourishment. Maltose is the first step in the digestion of starches, and that is one of the forms of sugar that can be made. You can buy malt-sugar (meltose or malt honey), and malt-sugar does not ferment like glucose. Glucose ferments very easily, and therefore should not be eaten.

Two-thirds of the canned goods in the market are sweetened with saccharin — a coal-tar product. I have just been doing some work along these lines, and I have bought can after can and found that almost every one contained saccharin. I do not believe that any one can take saccharin any length of time without very serious results. Some people can not take sugar, and the doctor advises them to substitute saccharin.

We do not need substitutes. We can buy maltose if we want it, but every pound of starch is converted into maltose when it is eaten, and so we get all the sugar nature needs. Maltose can be made from grains for commercial purposes. It will take the place of cane-sugar if you wish it.

May I ask what you want sugar for? Somebody says, "Because it is good." But let us put a higher stamp upon our morality. Let us eat for a purpose; let us eat because we desire to have excellent health, but do not let us do things merely because we like to.

# The "American Habit."

At the present time a vigorous campaign against spitting is in progress in New York and other large cities, as the most effective means of checking the dissemination of the germs of tuberculosis. A writer in the *Western Journal of Education* says that this, the nastiest of public habits, is commonly called the "American habit," and it is certainly much more in vogue in this country than in others.

"If this habit can be suppressed in the schools," suggests this writer, "it will within a few years be suppressed in general public life, because the adult will not, as a rule, take up a practise made abhorrent to him by teaching in childhood. All children who cough in schools should provide themselves with paper receptacles designed for the reception of sputum, which are to be subsequently burned. Parents must be instructed in the necessity of this procedure." Not as an esthetic duty merely, but in the interests of hygiene also, it is the duty of teachers to strive in every way possible against the habit of expectoration.

## Out of Respect.

A small boy owned a little white hen, to which he was greatly attached. But on a certain day, company unexpectedly arrived at the house, the butcher failed to deliver an order, and the boy's mother, being sorely pressed, and thinking, anyhow, that her son's affection for the fowl was on the wane, had the white hen, the only chicken on the place, killed and served fried at supper. It was only after the boy had partaken with the others that a sudden, dreadful suspicion dawned in his mind.

"Mother," he inquired, "where did we get that chicken?"

"Hush!" she whispered, "that was the white hen."

This confirmation of his fears reduced the boy to a condition bordering on despair.

"Mother," he exclaimed tearfully, "did I really help to eat my little white hen?"

"Yes, yes," she replied hurriedly, "but it's all over now, and too late to cry about. Please be quiet."

The boy dried his tears, but sank into a profound and gloomy meditation. After a time, however, his face brightened. He had discovered a way by which he might square his conscience.

"Mother," he said, "I may have eaten part of my little white hen, but, you bet, I'm not going to digest her."—David Bruce Fitzgerald, in Lippincott's.

# Paper Cooking Utensils.

The freedom from sickness in the Japanese army is thought to have been in some measure due to the practise of boiling all the water used for drinking purposes. A large proportion of deaths from infectious diseases would be prevented if this custom were universally followed wherever the water supply is not above suspicion.

Every soldier in the Japanese army carried with him a supply of kettles made of ordinary thin Japanese paper. The kettle was filled with water, and water was poured over it. It was hung over the fire, and in ten minutes the water was boiling. The same kettle could be used eight or ten times, and the cost was only two cents.

# A Natural Cure for Drunkenness.

Mr. Horace Fletcher, of "Fletcherizing" fame, says: "Some years ago in Chicago I picked up a number of bleareyed tramps, and fed them myself, and got them to chewing properly, to see what would happen. In a few weeks they looked wonderfully better, and said they never knew food to taste so good. One day one of them said to me, 'Boss, think of me with a dollar in my pocket and not wanting beer!' He could not understand it. Never in his life before had he had money and not wanted beer. That was the first time it occurred to me that there is some relation between the way people eat and the desire for stanulants."

## Educating the Taste.

Sir Michael Foster, of Cambridge University, stated as the result of various experiments carried out on individuals that "the adoption of the habit of thorough insalivation of the food was found in a consensus of opinion to have an immediate and very striking effect upon appetite, making this *more discriminating*, and leading to the choice of a simple dietary, and in particular *reducing the craving for flesh food.*"

## How to Clean Paper Money.

Money, especially paper money, passing from hand to hand and from pocket to pocket among all sorts and conditions of men, can not fail to convey disease germs, and sometimes prove a source of infection. A teller in a savings bank, remarking on the crumpled and dirty condition in which many of the notes are handed in, told of one depositor whose bills were always in immaculate condition. "It puzzled me," he said, "to account for the crispness of the old notes she brought along-notes that by appearance had been in use long enough to make them as limp as rags. I remarked about it, and found that the old lady carefully ironed all her bank notes. I thought her fad somewhat foolish at first, but later it occurred to me that it would be a good thing if people everywhere

ironed their bank notes. It would kill the germs."

#### Soap as a Disinfectant.

Soap and water have long been recommended as an important means of grace, since cleanliness is so closely akin to godliness. It is not so generally known, however, that common soap, which is constantly within the reach of every one, is one of the best disinfectants. Dr. A. P. Merrill gives in the Scientific American the results of some experiments made by him on behalf of the State Board of Health of New Hampshire. He made careful bacteriological study of seventy-five cakes of soap obtained from as many different sources, including hotels, machine shops, railroad stations, a sewage disposal plant, etc., and was unable to find living germs on any of them. Another series of experiments was conducted to find how long germs would live in soap. With but three exceptions, the germs were all dead in less than half an hour.

#### Simple Fare and Hard Work.

Striking testimony to the value of pure food and hard work for promoting and maintaining health and strength, is given by a writer who spent four years on a coffee plantation in San Paulo, Brazil.

The slaves employed, numbering one hundred, began work at five in the morning, and continued until six at night. In this country the summer climate is scorching, while in winter there are frosts so severe that whole plantations are destroyed by them.

The food of the slaves consisted of cooked maize, rice, brown beans, oranges, lemons, and a few bananas. The men, who worked with bare feet and legs, were exceedingly muscular, intelligent, and tractable. During the four years there was no sickness among them, and but one death, which was the result of an accident.

PRESERVE and treat food as you would your body, remembering that in time food will be your body .- B. W. Richardson.

AN OPEN-AIR HYMN

Not for rich gifts of gold or gems, Not for the gauds but few afford, But for thy sunshine, pure and free, I thank thee, Lord. For those deep drafts of air I quaff When, shoulders squared and blood aglow, I swing along the country road Where daisies blow. And in the sultry noonday heat, For wayside rest, lulled by the breeze, As, shaded by the sheltering oak, I take my ease. For every winding forest-path, For every stretch of sedge and sea,

For every pebbly brook that rills Its song of glee. For that glad radiance when the sun His crimson cloud of glory spills; For every violet mist that veils The distant hills. For every bloom the summer brings, For every sheaf the harvest binds, For spring's first bud, for winter's snow And bracing winds; For these thy gifts - for earth and sky, Mingling their moods in sweet accord, For health, and for the seeing eye, I thank thee, Lord. - Beatrice Hanscom, in the Outlook.

# YOUTH RENEWED BY REFORMED DIET

# Youth Renewed by Reformed Diet.

It is maintained by some that a change of diet made late in life is peculiarly liable to cause disturbance of nutrition and to result in injury. That this is not the case, if wisdom and care are exercised, is proved by the following testimony given by Dr. Karl Oppel, a distinguished schoolmaster of Frankfort, in one of his books: —

"As I was acquainted with many vegetarians, who were models of good health, and who had developed a remarkable power for mental work, I considered it my duty to read the literature of vegetarianism and inform myself about its principles. . . . When I went over to a purely vegetable diet I was sixty-six years of age. The new mode of living has not caused me the slightest inconvenience. The much-honored Viennese anatomist, Professor Hyrtl, said after becoming a vegetarian that he could think more clearly and calmly, that he felt gladder and fresher, and could work better than in the days of his youth. I can bear testimony to exactly the same experience. . . . Work is a pleasure to me; neither walking nor mountaineering tire me unduly."

The same happy effect of a change to a natural dietary was experienced by Dr. Adam Ferguson, of Edinburgh. After more than one stroke of paralysis, he became a Pythagorean at sixty, eating nothing but vegetables, and drinking water and milk. He got rid of every paralytic symptom, became robust and muscular, and lived to ninety-three. Sir Walter Scott described him as having been, "long after his eightieth year, one of the most striking old men it was possible to look at. The mixture of original thinking with high moral feeling and extensive learning, his love of country, contempt for luxury, and especially the

strong subjection of his passions and feelings to the dominion of his reason, made him perhaps the most striking example of the Stoic philosopher which could be seen in modern days."

# Cruelty as an Investment.

"The cruelty of man," says Ruskin, "recoils, as it ever does, like a viper upon man, and they who invest in the Bank of Cruelty receive back their capital with compound interest at a high rate, and to the uttermost farthing."

# "Warrior's Bread."

What the Indians of Eastern Ohio called their "warrior's bread," was simply parched corn pounded into meal and sifted, with maple sugar added. This food is so light and so nourishing that a brave could carry with him, without inconvenience, enough to enable him to travel an incredible distance.

## Perils.

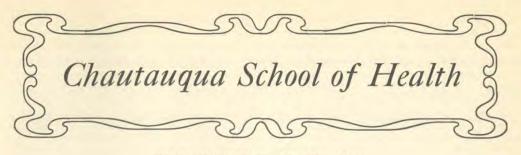
"You Americans face serious perils by your carelessness in eating."

"Yes," answered the man who was figuring on his meat bill. "I believe the two principal dangers are indigestion and bankruptcy."—Washington Star.

# A Good Sanitary Measure.

There is a law in Bermuda requiring every part of every building on the island to be whitewashed yearly, as a sanitary measure to insure the purity of the rainwater, which is altogether depended upon for drinking and cooking.

THE French have a proverb which runs, "To rise at five and breakfast at nine; to dine at five, to bed at nine, will make you live till ninety-nine."



SEASONABLE CLOTHING

BY J. H. KELLOGG, M. D.

M ORE clothing is of course necessary in winter than in summer, but the difference in the amount of clothing required is less than the difference in temperature. We are all conscious of the fact that we suffer more from a temperature of forty in the summer than from a much lower temperature in winter. This is due to the fact that the system undergoes a change with the season, by which it adapts itself to the new conditions. This change produces what is termed a "winter constitution" for winter, and a "summer constitution" for summer.

The winter constitution is well adapted to resist cold; while the summer constitution is prepared to resist heat. Consequently, the reverse of the conditions for which the body is prepared is severely felt.

On this account, we need more clothing in summer than in winter, at the same temperature.

The custom of putting off and resuming winter or summer clothing at certain

"THERE are too many Esaus who sell their birthright of health for a mess of pottage; and it is difficult to realize how much suffering and ill humor is due to not having learned to do without in the matter of eating and drinking." dates, regardless of the weather, is a pernicious one.

In cold weather the underclothing should reach to wrists and ankles. The feet should be protected with thick warm shoes with tops high enough to afford extra protection to the ankles, which are easily chilled, having less tissue than other parts of the legs.

In winter several suits of undergarments afford more warmth than the same weight or thickness in a single garment, as the warmth of a garment is due, not so much to its thickness as to the amount of air which is entangled in the meshes of the fabric or between its layers. An extra suit of flannel affords almost as much warmth as an extra coat or cloak. and is both cheaper and less cumbersome. A change from warm to cold weather, or the reverse, at any season of the year, should always be met by a corresponding change in clothing. Observance of this rule will amply repay the slight trouble involved, in the saving of sickness and consequent expense and loss of time.

WHISKY is a good thing in its place. There is nothing like it for preserving a man when he is dead. If you want to keep a dead man, put him in whisky; if you want to kill a live man, put whisky in him,— Henry Ward Beecher.

# WINTER CARE OF THE HOUSE

#### BY MRS. E. E. KELLOGG

THE sanitary condition of a house in winter involves special thought and care, since with the advent of cold weather the doors and windows are closed, largely shutting out the purifying influences of the fresh air which has so freely circulated through the house during the warmer season.

While for the purpose of warmth this enclosing of the dwelling is made necessary, it is imperative that the housekeeper make sure of some plan of ventilation whereby a sufficient amount of the life-giving oxygen shall be admitted to every occupied room, both day and night, to keep the indoor atmosphere pure and healthful.

Air contamination is, however, occasioned not alone by lack of ventilation, but also by lack of care in removing the germ-laden dust particles which find their way into every nook and corner. Dust demands careful attention at all seasons, since frequently it is the vehicle by which disease enters the home; but in winter, when the tendency is to spend most of the time indoors, occupying as small a portion of the house as possible, to economize heat, the importance of cleanliness from dust becomes a matter of vital import.

The dust, when collected, ought to be burned; to sweep it or shake it out of doors is merely to change its location. A good way to do is to empty the dustpan or the sweeper into pieces of newspaper to be rolled up and put into the stove or furnace.

Another point to be borne in mind if one uses a broom for collecting dust and dirt from a floor, is to divide an ordinary-sized room into a number of small areas, taking up the dirt in each as

soon as swept, thus avoiding the dustscattering procedure so unavoidable when a broom is used over a whole floor before taking up the dirt. A dampened cloth should be used to wipe it from its every lodging-place; and if the house be heated by a hot-air furnace, this dusting should include the register, if in the floor, and the pipes as far as can be reached. The open register is likely to become the depository of the mud and filth brought in upon the footwear and clothing of those who hover over it. If allowed to remain, this dust soon becomes dry, and is wafted by the current of warm air back into the room, to be breathed by the inmates.

Various gases and vapors, the product of the household heating, lighting, and cooking, are another source of indoor-air contamination; and, if not removed by proper ventilation, they permeate the house, condensing upon all surfaces, carrying the dust in the air along with them, and fastening it securely to whatever they come in contact with. This forms the "soil," visible or invisible, upon articles and fabrics that gives to the house and the clothing of its inmates a characteristic odor.

No one can keep in perfect health and maintain resistance to disease without a plentiful supply of fresh air. The rude habitations of our pioneer ancestors, with their capacious, open fireplaces, were superior to our modern palatial dwellings in that there was always possible an abundant supply of fresh air. Houses of the present day in our civilized land are made as nearly air-tight as architectural skill can secure, and unless provided with some systematic mechanical means of ventilating, the indoor air is constantly

contaminated with breath poisons and other impurities resulting from the heating and lighting and cooking within the house, so as to be a constant menace to the health of the occupants. Probably the best means of providing the needed supply of fresh air is the open fire with a wide-mouth chimney to act as a ventilator. The open grate is likewise the most healthful means of heating a house; although so far as fuel alone is concerned, it is not the most economical. Weighed in the balance with the saving in health, it may be considered a matter of economy.

If other means of heating be employed, good ventilation can be secured only by some special arrangement for the ingress of fresh and the egress of foul air. How this may be well accomplished is best told in the words of a well-known authority on the subject: "The foul-air outlet should be constructed on the plan of the fireplace - an opening near the floor connected with the chimney or an upright ventilating shaft. The size of the opening must depend upon the number of people for whom air is to be supplied. An opening of two by twelve inches should be provided for each individual. This would require a space ten by twelve inches for five persons. It should be remembered that this must be free space. If a grating is put over the opening, as is usually the case, the size of the opening must be at least one-half larger, or, for five persons, twelve by fifteen inches. This opening should communicate as directly as possible with an upright shaft of equal size, the top of which should extend above the roof like a chimney. The ventilating shaft should always be located in an inside wall, and, if possible, should be placed next to a chimney which is always warm. The chimney heats the duct and increases the draft. The opening for the outlet of impure air should be at the bottom of the room when the house is heated by a furnace or by any other means which warms the fresh air before it is admitted to the rooms. If the fresh air is admitted cold, the foul-air outlet should be at a higher level. The best point is perhaps at about four feet from the floor. This will secure a thorough admixture of the air. If the outlet is at the floor, the cold fresh air admitted to the room will pass out before it has been warmed and used, while the hot foul air will accumulate in the upper part of the room, and thus the change of air will be imperfect.

"Two openings must be provided to secure proper ventilation: one for the entrance of fresh air; the other for the exit of foul air. It is in every way better that the air should be heated, at least partially, before it enters the room, as this will to a large degree prevent the formation of a cold layer about the floor."

"Gas heaters and oil burners used for heating purposes, not connected with the chimney, are a source of danger. The carbonic acid gas produced by the burning is left in the air, and may accumulate in such quantities as to produce deadly effects. The heaters sometimes used for burning natural gas are open to the same objection. Such heaters are often used for a long time without ill effect, for the reason that there always happens to be left open a door or a window whereby sufficient air is admitted to prevent immediate ill consequences; but more or less injury is being continually produced, and sooner or later manifests itself. Coal stoves furnished with dampers are also a frequent source of air contamination."

"Probably a combination of the furnace with open grates, a duct being arranged to bring direct to the furnace a supply of pure air from out of doors, is the most perfect system by which a house may be heated, and at the same time supplied with pure air. But under no circumstances should the air supply for a furnace be taken from the basement or any other portion of the dwelling."

The amount of air contaminated by each individual is reckoned as one cubic foot per second. It is evident, then, that the amount of fresh air needed for any given room is dependent upon the number of persons occupying it, as also upon any other sources of contamination which may exist. At a rough estimate, three thousand cubic feet of fresh air per hour should be provided for each occupant, and for each gas jet or kerosene lamp while burning in the room.

To secure that freshness and sweetness which should be an attribute of every dwelling, requires not only good ventilation, but an abundance of sunlight in every room. Strong sunlight, nature's own purifier, destroys the disease germs to which it has access. Every occupied room, the bedrooms, and the closets should be opened to the air and sun each day. Rooms not in constant use should be given frequent sun baths. The steam from the tea-kettle, or the boiling foods in the kitchen, or the clothes boiling in the laundry on wash day, keeps diffusing through the house until it finds some portion where the atmosphere is cold, and there it condenses upon walls and furnishings, making the room damp and unhealthful. Parlors, reception rooms, and guest chambers not heated every day. need a frequent drving out to make them wholesome. Beds in unoccupied rooms not heated are better not made up in winter, as the compact mass of bedding catches and retains the dampness, and, when used, unless carefully aired and dried beforehand, becomes a menace to the life and health of the occupant. To

give a look of order to the room, cover the mattress with the spread, leaving off the blankets, to be subjected to at least a weekly exposure to the sun to keep them in condition for use when needed.

No parts of the house need more careful watching during the winter than the kitchen and the cellar. Ventilation is as necessary for the cellar as for any portion of the dwelling. The air from the cellar will ascend to the living rooms above it, with every opportunity, whether it be pure or foul air. If it be air contaminated by germs and gases from decaying vegetable matter or any manner of decomposing substance, it becomes a source of danger to the occupant of the dwelling. Hence the importance that means be provided for the ingress of a plentiful supply of fresh air, and that care be taken that nothing be permitted to remain within the cellar to taint the atmosphere or to breed disease germs. In the kitchen every closed cupboard and closet should receive a thorough airing several times daily. It is a misfortune to have an enclosed sink, for it is likely to become the repository of damp scrubbing-cloths, brushes, and pails, which foster mold and other micro-organisms. That ordinary article of furniture, the woodbox, is in many kitchens a veritable germ-breeder. As is often the case in winter, it is the receptacle for sweepings, various bits of garbage, and other odds and ends, besides the fuel, which, being often wet or damp, adds moisture to the miscellaneous contents, thus affording, with the warmth from the fire, the best possible conditions for the rapid growth of a bountiful crop of bacteria to poison the air and cultivate disease.

Whatever the means of providing warmth for the house, the temperature should be so regulated as to produce as nearly as possible an even-tempered atmosphere between 70° and 75°. Too much warmth in winter is as enervating as the same degree of heat in summer. Many housekeepers who "feel tired all the time" would speedily renew their vigor if they did their work in a cooler, fresher atmosphere, especially those who spend a large portion of time working over a heated range in an almost air-tight kitchen. People too commonly rely upon the house rather than clothing by which to keep warm. If one's kitchen is not provided with a plentiful fresh-air supply, it is better to wear felt slippers to keep the feet warm, and other extra garments if necessary, and then open doors or windows as much as is needed to insure fresh air in continuous supply and a cool atmosphere to work in.

Every one should so plan her day's program as to include some exercise in the open air in winter, as well as at all other seasons. The cold, crisp air of winter has a special value. Cold air contains more oxygen to the cubic inch than does warm air. This is why the fire burns with a brighter glow on a cold winter evening. Fully one-seventh more oxygen-fuel is supplied it for combustion. The vital fires likewise burn more briskly in a cold atmosphere, and the whole tide of life moves with increased activity. Cold air aids in the elimination of the poisonous matter all the time forming within the body. It increases the number of red corpuscles in the blood, and improves all the functions of the body. Outof-door exercise in cold fresh air is a most effectual means, not only of creating a good appetite, but of encouraging digestion. One other special thing it does, which every housekeeper will appreciate .- it rests one. Feelings of weariness and exhaustion are the effects of an accumulation of poisons and waste products generated by work and retained

within the system. One who exercises briskly in cold out-of-door air breathes with greater rapidity, thus obtaining a larger supply of oxygen, by which the wastes are burned up, the body cleansed, and thus a feeling of relief is experienced.

All kinds of artificial light, except electricity, are more or less injurious to health, consuming the oxygen in the air, and emitting mephitic gases. Two particularly dangerous gases - carburetted hydrogen and carbon monoxid - are evolved from illuminating gas, especially what is termed "water gas;" from thirty to fifty per cent of carbon monoxid being generated and mixed with the atmosphere when this latter, undiluted, is made use Coal gas, kerosene lamps, and of. candles, all consume oxygen, and evolve impurities in the atmosphere in so much that if a dwelling is to be lighted by any of these means, special allowance of ventilation should be made for the lights.

For an equal amount of light, candles and kerosene-oil lamps consume more of the oxygen of the air in a room than does gas. Flat wicks consume more than round ones, and Batswing burners more than Argand burners. A common Batswing burner consumes three or four cubic feet of gas per hour. Every cubic foot of coal gas burned gives off at least two cubic feet of carbon dioxid, besides other poisonous products, and requires, to dilute the products of such combustion effectually, eighteen hundred cubic feet of fresh air; hence a Batswing burner creates a necessity for from five to seven thousand cubic feet of fresh air hourly to dilute the atmosphere of a room in which it is used. In other words, such a gas burner in a room deteriorates the air as much as would two adult persons. If gas is to be employed for lighting, it is well to use a burner known as the Welsbach, which is so arranged as to mix a large proportion

of air before the burner is reached, thus insuring complete combustion of the carbon dioxid. Such a burner deteriorates the air much less, while at the same time it is more economical, and provides a much better light. It is also essential for health and for good light that burners, whether for gas lights or illuminnating oils, should be kept clean and in perfect working order.

# THE AFFUSION BATH

HE French divide baths into two classes, according as to whether the water employed is in motion or quiescent. Affusion is the simplest form of the bath in which the water employed is in motion. It is one of the oldest of hydriatic procedures. It was employed by Hippocrates in the treatment of syncope, puerperal fever, delirium, and in swollen joints, as well as in other affections. Sir John Chardin, the noted English traveler, found it in use for fever in Persia in the seventeenth century; and it is said to be still a custom in Persia to keep pails of cold water standing upon the street corners during a cholera epidemic. The natives so thoroughly under-

stand the use of water in these cases that when a man falls with cholera, the cold water is immediately poured over him by the bystanders, who afterward rub him vigorously until thorough reaction is produced.

General affusion is of very great value, especially in fever cases in which pulmonary or cerebral congestion or cardiac weakness is a prominent symptom. In capillary bronchitis in children, when the air-passages are clogged with mucus, and the respiratory centers so overwhelmed by the retained carbon dioxid that there is insufficient power to expel the accumulation, cold affusion to the chest, by stimulating the respiratory center, and



FIG, I. AFFUSION

thus provoking powerful breathing movements, renders valuable service.

Affusion, preceded by a short hot a p p l i c ation, is one of the most powerful of a l 1 means for rallying the v it a 1 for c e s in case of collapse.

# THE AFFUSION BATH

The requisites for an affusion bath are:—

A tub, which may be an ordinary washtub if the patient is able to stand, or if it is preferable to sit, a full bathtub.

If the patient is una b l e to sit or stand, he may lie upon



FIG. 2. LOCAL AFFUSION

his face on a cot over which a large piece of rubber has been spread. The head of the cot should be raised, so that the water will run off its lower end into a tub properly placed for the purpose.

Several pails of water (three to ten) should be conveniently placed for use; a wet towel for the head, a Turkish towel, and a large linen or Turkish sheet are also required. The temperature of the water employed may vary from 50° or 60° to 105° or 110°, according to the effect desired. The application may extend to the whole body or to a portion only. When employed as a general application, the sitting position in a full bathtub is usually to be preferred.

Before the bath the patient's head, face, and neck should be thoroughly cooled with water a few degrees lower than that to be employed in the affusion. A towel wet in very cold water is then wrapped about his head; he seats himself, with legs extended, in an empty bathtub with the plug left out; the requisite number of pails of water are then quickly poured over him. The water should not be simply poured upon the patient, but should be dashed upon him from as great a height and distance as arrangements will permit. The attendant, grasping the pail to be emptied upon the patient, gives it a little swing backward, then tilts it in such a way as to empty its contents upon the patient as the pail swings forward and upward (Fig. 1). The patient sits with his hands folded over his chest for the protection of the heart and the lungs. The first pailful of water is thrown upon the folded hands; the next is dashed upon the upper part of the back. The front and back of the body are thus treated in alternation until the required number of pails of water have been employed. After the last pail is emptied, the attendant vigorously rubs the trunk and limbs of the patient for twenty to thirty seconds, then removes him from the bath, wraps the sheet about him, and rubs him dry. Special attention should be given by the attendant to the back, legs, and feet, while the patient, if able, is rubbing the arms and the anterior portions of the trunk.

Local affusions are made to the spine, head, extremities, and other parts. When it is desired to confine the application to the spine, the patient sits on the edge of a bathtub while the water is allowed to flow from as great a height as the pail can be held by the attendant, down the whole length of the spine.

When the application is to be made to the arm, leg, or foot, the part is simply held over the bathtub and the water poured over it from the desired height. The quantity of water employed, the temperature, the duration of the application, and the size of the stream must be regulated to suit the patient and the conditions present. Numerous effects may be obtained by variation of the several factors named. (See Fig. 2.)

In patients who dread the contact of cold water, and in whom reaction does not readily occur, the feet may be immersed in water as hot as can be borne. In the treatment of chronic cases it is best to prepare the patient for this bath by heating the skin by means of some hot application, as the hot blanket pack, electric-light bath, or other appropriate means.

In the case of young children suffering from bronchitis, or broncho-pneumonia, the patient may be seated in a tub partially filled with water at 102°, and cold water poured over the chest and shoulders. After two or three pailfuls have been thus poured over the patient, a Turkish sheet and warm blankets should be quickly wrapped about him; he should be thoroughly dried, and the surface circulation stimulated by rubbing. J. H. K.

# SCHOOL OF HEALTH SEARCH QUESTIONS

#### SEASONABLE UNDERCLOTHING

 Explain why we need more clothing in summer than in winter, at the same temperature.

2. Why are several suits warmer than the same thickness in a single garment?

3. What parts of the body need special protection from the cold?

#### WINTER CARE OF THE HOUSE

I. Describe the best method of disposing of dust. 2. What is the effect of illuminating gas upon the atmosphere?

3. What kinds of artificial light consume the most oxygen?

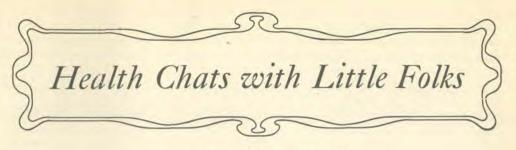
4. What is the most healthful means of heating a house?

5. Describe the best system of ventilation.

## THE AFFUSION BATH

I. In what cases is the affusion bath of value?

- 2. How is this bath given?
- 3. Describe its effect upon the system.



# A FOOD INSPECTOR

H OW wonderfully these bodies of ours change! When your friends have not seen you for some time, they say, "How she has grown!" or "How he has changed!"

This change is not in appearance only. Your body, though it seems the same, is really an entirely new one every few years. Every minute, little particles of your body are dying. Your life is like a fire, which is gradually burning up the material of which your body is made.

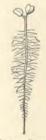
These dead particles are the ashes of the fire, and must be gotten rid of as quickly as possible, in order to keep the life-fire burning clear and bright.

The skin, with its multitude of little pores or openings, is one of nature's beautiful arrangements for getting rid of the dead, waste matter of our bodies. This is one reason why it must be kept clean, so that the little pores will not get choked up, and unable to do their work properly.

If the little particles of our body are dying every moment, why do we not die altogether? — Because new particles are all the time being formed to take their place. Every moment you are making new flesh, new bones, new skin, new substance to take the place of the old matter that is being cast off. In a few years' time your whole body is entirely changed.

But you can not make something out of nothing. You have to take into your body something to build it up. Food, water, and air are the materials out of which your body is being made.

But it is not enough that you should merely take food into your mouth and swallow it into your stomach. Is a piece of bread or an apple or a potato like your flesh? — No; it has to pass through a won-



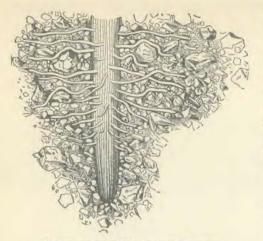
PLANT SHOWING SUCRERS OR "ROOT-HAIRS"

derful change before it is made into like substance with your body.

The plants, although they have no mouths such as we have, really grow by feeding in the same way that we do. Their roots have little suckers called "root-hairs" that draw up their food from the earth. Plants are like little babies; they can not take solid food. Their food is all melted up in the water that their rootlets suck up from the soil.

A baby has no teeth to chew its food with, so nature provides liquid food for it. Little babies take milk, which is food in a liquid form. But when one has teeth, he can take in solid food, and by chewing it thoroughly and mixing it with the saliva in the mouth, make it into a liquid that is ready to pass into the stomach.

At the back of the mouth there is a gatekeeper whose duty it is to inspect the food and see if it is ready for the stomach. The little solid particles are not allowed to pass the gate. They are sent



MAGNIFIED ROOT TIP, SHOWING SUCKERS

back to the front of the mouth to be chewed until they are liquid.

The liquid food passes into the stomach, and there very strong acid juices are poured out upon it, and it is changed and prepared for the use of the body.

When the food passes out of the stomach into the intestine, it is taken up by little suckers called "villi," something like those on the roots of plants, and it then passes into the blood stream, which carries it wherever it is needed to build up the body.

So you see we are like the plants, after all. Our food has to be liquid before it can really get into our bodies to do us good. But we have mouths and stomachs to prepare it for use.

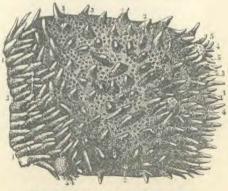
Sometimes, when people are in a hurry, they take no notice of the gatekeeper at the back of the mouth. They force the passage open, and send the food down into the stomach in little chunks, instead of chewing it carefully until it is liquid. When this is done often, the gatekeeper gets discouraged, and after a time stops work altogether.

Then the poor stomach has no safeguard. The way is open for anything and everything to be poured into it, just as the owner may choose. The stomach is distressed. It has no teeth to chew the food into a liquid; but it works hard, and does its best to do the work of the mouth as well as its own. But after a time it is worn out, and has to let the food pass out not properly prepared for the little suckers to take it up into the blood. A great deal of it is wasted, and poisons the body instead of feeding it.

So you see how much depends upon the mouth doing properly the work it was made for — chewing the food thoroughly until it is liquid. When the work of the mouth is well done, the stomach and other organs can do theirs easily and quickly. But when the mouth shirks its duty, it throws a great burden on the stomach, and everything goes wrong, and sickness and trouble follow.

> "Then masticate your food, And chew it fine and good. So do not be in haste, Take time the food to taste, And chew, chew, chew, That's the thing to do.

"When one eats so very fast, His chance to masticate is past, For the stomach can not chew; Hence the proper thing to do Is to chew, chew, chew, When you have a chance to chew."



MAGNIFIED VILLI IN THE HUMAN BODY

# TABLE MANNERS

- THE bluejay is a greedy bird; I often watch him eat;
- When crumbs are scattered from our door, he snatches all the treat;
- He drives the smaller birds away, his manners are so rude,—
- It's quite a shocking thing to see him gobble down his food;
- And sometimes when I'm not polite, I hear my mother say:
- "Why, now I see a little boy who's eating bluejay way!"
- The sparrows are a noisy set, and very quarrelsome,
- Because each hungry little bird desires the biggest crumb.
- They scold and fight about the food, all chirping, "Me! Me! Me!"

- And sometimes when we children are inclined to disagree
- About the sharing of a treat, my mother says, "Why, you
- Are acting now the very way the silly sparrows do!"
- The jolly little chickadees are perfectly polite; They never scratch, they never bolt, they never, never fight,
- They hold the crumbs down daintily with both their little feet,
- And peck off tiny little bites we love to watch them eat!
- And when my sister's good at meals, my mother says, "I see
- A little girl that's eating like a darling chickadee."

- Hannah G. Fernald.

# Training in Gluttony.

A wise physician gave as a rule for the thorough mastication of food, that one should chew every morsel as if it were his last, and the length of his life depended upon how long he chewed it. If this rule were generally followed, it would doubtless increase the average length of life. Hasty eating leads to the most prevalent of physical sins, overeating, which does more than anything else to shorten human life.

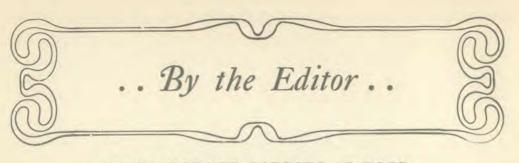
Of all the contests of modern times, the most pernicious — the one in which there is no element whatever of good to recommend it — is the eating contest, when human beings devote all their energies for the time being to seeing which can stuff himself with the largest amount of food in a given time. That intelligent people can look on and applaud such swinishness is almost incredible. How the ambition to excel in this line may get its inception is shown in the following incident: —

Not long ago a society which is doing

much to save and build up the poor of the large cities, gave its annual picnic to the thousands of the boys and girls of the streets of Chicago. The paper which contained the report of the picnic mentioned incidentally that "the serious business of the day was a pie-eating contest, in which six boys were contestants, selected because of their peculiar fitness for the task." Six large pies were handed out, and "while the spectators stood about breathlessly watching the contest," the boys fell to devouring with all their might. In two minutes and eight seconds, "three seconds less than the world's record," the winner stood up for the prize.

Think of the effect, not alone upon the contestants, but upon the thousands of children who were thus taught that gluttony is a mark of distinction!

"IT is difficult to say whether those who have had too much pleasure in their lives, or those who have had too little, are more to be pitied."



COLD-STORAGE CORPSES AS FOOD

THE cold-storage process is as necessary for the butcher as for the undertaker, and for the same purpose. It is not expected to prevent decomposition entirely, but to delay it. A peep into the cold-storage plant connected with a great slaughtering establishment instantly suggests a city morgue after some terrible railway accident. The mutilated corpses lying about are waiting, however, not for identification, but for men and women who are willing to offer their bodies to be the tombs of the unfortunate creatures which have perished to satisfy man's lust for blood. The risk that men and women run in thus making themselves the burying places of these slaughtered beasts, which, like the frozen mammoths of Siberia and the mummies exhibited in Egyptian museums, are of unknown pedigree, is well set forth in the following extract from a New York paper published a year ago, just before the national Thanksgiving period, when ancient turkeys are always in demand : --

#### BEWARE OF THE COLD-STORAGE TURKEY

## Claims More Victims than Bubonic Plague, Says Physician

Beware of the cold-storage Thanksgiving turkey! Because the turkey is scarce up-State, and the price is going close to thirty cents a pound, New York is threatened with year-old meat for its Thanksgiving dinner.

There are turkeys in some of the coldstorage warehouses in this city that last saw the light of day twelve months ago. With the New England bird bringing from twenty-five to thirty cents and the cold-storage brand consequently bringing ten or twelve cents profit, it is certain that the dealers will not miss the opportunity to unload all they can.

A dealer in Washington Market said today that he had no doubt the entire supply of cold-storage turkeys in New York would be consumed in the next ten days. "The cold-storage people," said he, "buy

"The cold-storage people," said he, " buy up turkeys and chickens, or any other meat, when it is plenty and the price is low. Probably they got turkeys for fourteen or eighteen cents; perhaps less. The price is now twenty-five, and no doubt will be thirty. They take out the turkeys they paid fourteen cents for, and get one hundred per cent profit. That's the way they do all the year around. They keep fish, eggs, meat, anything, almost indefinitely, or until the supply is limited, and they can rake in a big profit by selling.

by selling. "Of course, if fresh-killed turkeys were plenty, the price would be low, and coldstorage meat would have no market. But with the supply limited, the demand has to be made up in some way, and unless people are careful, they will be forced to eat cold-storage turkey, or go without.

"I would advise them to go without. In the first place, cold storage destroys the flavor entirely, not only in meat, but in eggs and fish. Few persons seem to care what they eat so long as it doesn't taste bad, and, the year round, people in New York eat this cold-storage stuff.

"Go into a cheap restaurant, or even one that isn't cheap, and get an omelet. It tastes about as much like the omelet you would get up in the country, where the eggs were laid the day before, as a dried apple tastes like a plum. The eggs of that omelet were laid in February.

"I've gone into these cold-storage places right here in New York and seen shad packed in the frost that covers these ammonia pipes. They've been there a year. Aside from the microbes that must be in them, think of the flavor. As soon eat

shoe leather. But that's what people are doing."

That there is danger in the cold-storage turkey was shown by the testimony of Dr. M. Cayana, of Oneida, N. Y., who spoke at the meeting of the New York and New England Association of Railway Surgeons recently. He asserted that the practise of eating cold-storage turkey had more victims than the bubonic plague.

"Imagine the dangers that lurk in the Thanksgiving turkey," he said, "after it has hung in cold storage for a twelvemonth without being dressed."

The proprietor of a cold-storage establishment in Chicago told the writer a few years ago that he had a customer who had at one time in his plant more than twenty

# Tobacco Smoking a Cause of Bright's Disease.

When Alexander III of Russia, the father of the present czar, was found to be suffering from Bright's disease, a number of persons became anxious on their own account. A French medical journal described what happened in Paris at that time. A large number of the business men of Paris went to their physicians and asked for an examination. This resulted in the revelation that ten per cent of the active business men of Paris who were apparently in good health already had Bright's disease.

Dr. Munro, of Scotland, an eminent Scotch physician, some years ago tested the urinary secretions of one hundred smokers, taking them just as they came, and he found that ten per cent of them had albumin in the urine. These smokers were already subject to Bright's disease without knowing it.

When a man smokes, the nicotin that he takes in must be eliminated somehow. Some of it passes out through the lungs, and the odor can be detected in the breath. It is also eliminated by the skin. If a habitual smoker is given a wet-sheet pack, a vapor bath, an electric-light bath, or any sort of sweating treatment, the bathroom has the odor of a smoking room. The thousand pounds of duck which had been in storage nearly three years. Fine eating, those ancient birds! Tender they were, beyond all peradventure! Toothsome, too, when seasoned so as to hide the flavor and the odor of putrefaction, and teeming with death and disease, liver troubles, kidney troubles, nerve troubles, all maladies which depend upon nerve and tissue poisoning,the most potent and deadly of all causes of chronic disease. Those who choose their sustenance from natural and rational substances, which teem with life instead of reeking with death, have no occasion to fear death from cold-storage turkeys or any similar cause.

nicotin is eliminated in the perspiration and in all the secretions.

When the nicotin is not eliminated almost as fast as it is taken in, the man is in a dangerous condition. He has reached the point where the power of the liver and the kidneys to destroy and expel poison is almost expended, and he is liable to have acute congestion of the kidneys, and finally Bright's disease. Every man who has been a habitual smoker until he is fifty years of age, is walking close to the edge of the precipice, and may topple over at any moment.

The bullet that penetrated the body of President McKinley was not the real cause of his death. It was his smoking that killed him. He smoked until he had reached the point where he had no reparative power. A skilful operation was performed upon him which should have been successful in saving his life. But when the body was examined after death, it was found that nature had not made the slightest attempt to repair the tissues. Instead of being bound together by the natural healing processes, the wounds were just as the surgeons left them, a black line having formed along the edges.

Every one knows that the quick healing of a wound is an evidence of good blood. The blood is the healing power of the body. The man who smokes, keeps his blood continually saturated with poison, and the recuperative, healing, creating power of the blood is so paralyzed that the life current flows with a very feeble movement. If disease attacks such a man, he is very ready to fall a victim to it,

# Temper Powders.

Sir Lauder Brunton, a famous English physician and surgeon, is quoted by a special London cable to the *New York Herald* as recommending a "temper powder," consisting of bromid of potash and other drugs, which should be taken whenever one is subjected to "some irritating occurrence," or "some depressing news," "to take away the sting of either, so that in the place of being much worried and unable to turn attention to other things, a person feels as if he had slept over the bad news or worry, and is able to obtain relief by turning his attention to something else."

According to this despatch, Sir Lauder Brunton recommends the "temper powders" as a means of preventing those "constant explosions of temper on the part of a member of a family" which "may affect the health of the other members, who have their appetites spoiled, their digestion impaired, their nerves shattered, and their pleasure in life destroyed by the mental suffering induced by the irritable temper of another. For these patients the best treatment is to administer 'temper powders' to the offending person, when the distressing symptoms of the other members of the family will be relieved."

This is, indeed, an easy way out of trouble; but it is a dangerous expedient, and in the end will only make worse trouble, for the effects of bromid of potash and other stupefying drugs are to leave the subject in a state of increased irritation when the effects have worn off. In order to cure bad temper, then, by this plan, the only effective method would be to keep the patient under the constant influence of the bromid of potash, opium, or some other nerve-depressing drug. Bad temper, in a great proportion of cases, has for its foundation indigestion, nervous exhaustion, or some other physical ill, which may be relieved by the removal of causes and the adoption of suitable physiologic measures. In certain cases moral remedies are necessary, as well as physical.

## Milk and Eggs vs. Flesh Foods.

There is a difference between the eating of animal products, such as butter, milk, and eggs, and the eating of flesh foods. In the first place, the eating of the animal necessarily implies the killing of the animal. There is a sentiment against the slaying of animals unnecessarily for sport. Hence, the question arises, Should we slay them unnecessarily for food, when we have other food which is far superior? Is it any better to slay an animal for fancy, to please the appetite, than it is to slay an animal for fun, for the pleasure of killing?

But besides this ethical difference, there is a physiological difference. The flesh of the animal contains the waste matters which have been formed within its body by muscular activity. All flesh contains more or less of this waste matter, while milk is entirely free from it. Butter is simply a product of milk, and of course does not contain these poisons. It has been proved by actual chemical analysis that there is no uric acid in milk, while beefsteak contains fourteen grains to the pound. Eggs also contain no uric acid unless they have been incubated for two or three days. A healthy, new-laid egg is entirely free from it.

Why is it that milk and eggs contain none of these animal poisons? — The reason is that both are intended for food. Milk is secreted for food for the young animal, and the egg is food for the chick. The white of the egg is that portion out of which the chick is formed. It goes through the process of transformation by which cellsare formed, bones developed, membranes, skin, etc., created. This development at last results in the skeleton and the various structures of the little chick. But the yolk of the egg is the little lunch put up by the mother hen for the little chicken to live on while it is in the shell. The yolk of the egg is much more valuable as food than the white. The white is all albuminous, but the yolk contains both fat and albumin. The yolk will sustain life, while the white will not. The yolk of egg is, like milk, a complete food. The young animal can live on milk or egg volk. These foods are produced without poisons. Eggs and milk are natural foods intended for animals to eat, and hence they can be utilized by human beings for that purpose if they choose, although they are not the ideal food. The natural products of the earth - fruits, grains, and nuts - are the ideal food.

#### Steamship Diarrhea.

In a recent conversation with Professor Keene, United States consul at the capital of Siam, we learned that a large number of the passengers on one of the great Pacific steamers were ill with diarrhea for a considerable part of the voyage. Some were very ill indeed.

The cause of the illness was, without doubt, the serving of unwholesome food. Such neglect on the part of the steamship officials ought not to go unpunished. The serving of infected meat to a whole shipload of passengers is a crime which certainly ranks closely alongside of offenses which are punishable by imprisonment. If there are no laws on the statute books which provide for investigating and properly dealing with cases of this kind, such laws should be enacted.

## Physical Causes of Truancy.

Dr. MacMillan, who has the supervision of the truant department in connection with the public schools of Chicago, declares that his investigations covering several years have shown that a large proportion of the boys who run away from school do so because they are discouraged on account of not being able to keep up with their classmates. Inquiry has shown that a fre-

quent cause of this is defects of sight and hearing, from which he concludes that one of the first things to be done in these cases is correction of the physical defects, which are discouraging to youthful ambition.

This is an excellent illustration of the relation of physical to mental and moral conditions which is well worthy of careful study, and in other departments of life than the public school. Men and women, as well as boys and girls, are influenced in their conduct by diseased physical conditions arising from bad food, which may often be shown to be the cause of serious moral degeneracies.

# Report of the English Royal Commission on Tuberculosis.

When Koch announced some four years ago that bovine tuberculosis and human tuberculosis were two entirely different diseases, and hence that human tuberculosis was in all probability not contracted from the milk or flesh of tuberculous animals. there was at once a demand for relaxation of sanitary regulations respecting the use of the flesh of tubercular animals. Scientists differed from the views expressed by Koch, and the British government was led to appoint a commission for the purpose of ascertaining the truth. This commission has made a long and painstaking investigation of the subject, and in their recent report 

"We have most carefully compared the tuberculosis set up in bovine animals by material of human tuberculosis with that set up in bovine animals by material of bovine origin, and so far we have found the one, both in its broad, general effects and in its finer histologic details, identical with the other."

## The Good Results of Sanitation.

Recent reports show that sanitation has reduced the annual mortality in Mexico City from 49 per 1,000 to 41. Pneumonia is one of the most frequent and fatal maladies of Mexico.



10,255. Grain Foods – Constipation – Apple Julce – Browned Rice. – O. B. M., New York: "I. Is it true that all your grain foods are constipating, except granose biscuit and flakes? 2. Is apple juice the same as sweet cider? 3. How is it preserved? 4. Browned rice, prepared according to "Science in the Kitchen," has a strong, malt-like odor and taste. How may this be prevented?"

Ans.— 1. No. Gluten is, of course, a preparation which, when digested, leaves no residue, and hence should be used in connection with other foods which have a laxative tendency. Sweet foods and acid foods are naturally laxative elements.

2. Apple juice differs from ordinary sweet cider in the following particulars: First, it is prepared from sound apples. Second, the apples are carefully washed. Third, it is preserved without boiling and without the addition of any chemical agent.

3. By Pasteurizing; that is, heating to a temperature of 165° to 170°.

4. The rice is probably browned a little too much,

10,256. Pinworms.—A subscriber in Ohio asks: "My little boy, six years old, is troubled with pinworms. Please give cause of and treatment for the same."

Ans .- Quassia is one of the best remedies with which we are acquainted. Soak half a pound of quassia chips in a gallon of water over night. Boil for one hour. Then apply as follows: First empty the bowels thoroughly with a soap and water enema. A sufficient amount of water should be used to fill the entire bowel. One quart will probably be sufficient in the case of a child. This is necessary because the headquarters of the parasite is found in the cecum or first part of the colon. After thoroughly emptying the bowels, inject a quart of the quassia solution. This should be retained as long as possible. To prevent immediate expulsion, the temperature of the solution should be about that of the body.

10,257. Heartburn – Hot Water – Diet – Charcoal Tablets – Pressure at Vertex – Pan-Peptogen – Homesickness – Dry Hair. – A. B., Wisconsin: "I. What causes a feeling of heaviness in the stomach and heartburn for two or three hours after eating? Diet consists of milk and granola, buttered bread, beans, corn, and plenty of fruit. 2. When I drink hot water half an hour before meals it causes hiccough. Please prescribe. 3. Would you recommend charcoal tablets? 4. Is one movement of the bowels daily enough for a hearty workingman? 5. What causes a feeling of pressure on the top of the head? 6. Are pan-peptogen and malt honey materially the same? 7. What places in the West and Southwest would you advise for a person with a tendency to tuberculosis? 8. Do you consider homesickness a great drawback? 9. Is the following recipe for dry hair harmful: 1/2 oz. lanolin, 2 oz. cocoanut oil, 3 drs. glycerin?"

Ans.— I. An irritation of the mucous membrane of the stomach or disordered gastric nerves.

2. Drink carbonated water instead of ordinary water.

 We should not expect the charcoal tablets to be of special benefit in your case.

4. Yes.

5. This is a nervous sensation probably due to gastric disorder.

6. Pan-peptogen is more highly peptogenic than malt honey, and less saccharin.

7. All places in the West and South are suitable for a person with a tendency to tuberculosis provided he takes the pains to live out of doors. The same might be said with reference to places of the East and North. The important thing is to live out of doors. Climate is not a matter of great importance, except so far as it facilitates the out-of-door life.

8. Yes. It is so much of a drawback that it should not be permitted to exist. Homesickness is a thing which can be cured by proper effort of the will.

9. The application might be beneficial, provided it is accompanied with vigorous rubbing, which is the important thing. 10,258. Blackheads. - D. P., Texas, would like a remedy for blackheads and pimples.

Ans .- Two things are necessary - improvement of the blood and improvement of the skin. The recurrence of pimples indicates a state of low vital resistance. The alkalinity of the blood is diminished from the accumulation of waste material. Every measure by which the blood may be improved must be employed. A proper diet is essential. Avoid all meats. For a time milk and eggs may be discarded with advantage. A diet of fruit and bread is the best. Nuts in moderate quantity may be added. The amount of proteids in the food should be reduced to the lowest point. From one hundred to two hundred calories a day should be the maximum. A general sweating bath should be taken two or three times a week at night. Be careful that the bowels are kept in good condition. A large enema of soap and water taken at a temperature of about 75° may be employed daily for a short time, or every other day. Take a cold bath every morning. Take an abundance of exercise out of doors daily. The food should be masticated very thoroughly. Mustard, pepper, vinegar, pickles, tea, coffee, and all condiments must be avoided; also overeating.

Bathe the face with hot water for ten minutes three times a day. At the end of the bath apply cold water for a minute or two. The skin should be carefully massaged daily. Blackheads should be squeezed out; any suppurating pimples should be emptied of their contents thoroughly and the discharge carefully removed, as it spreads infection. After each treatment it is well to apply to the face a lotion consisting of resorcin, twenty grains; alcohol, one ounce.

**10,259.** Warts.—H. B., Texas: "What can be done for warts under the breast which have an offensive odor?"

Ans .- They should be removed.

**10,260. Raisins.**—H. F., Missouri: "I. What is the nutritive value of raisins as compared with prunes or dates? 2. Do raisins aid digestion?"

Ans.— 1. One ounce of raisins as found on the market contains 100.6 food units. An ounce of prunes contains 88 food units. An ounce of dates contains 101.5 food units.

2. Raisins eaten with care to discard skins and seeds are easily digested; they promote the secretion of digestive fluids, and so aid the digestion of other foods.

**10,261.** Fumigation for Consumption.— F. X. G., New Jersey: "How should a room where a consumptive person has lived, be cleaned and fumigated?"

Ans.— Formalin is the most convenient agent for the purpose. Formaldehyde candles may be obtained at almost any drug-store, with instructions for use; or ordinary sulphur may be used. Three pounds of sulphur should be burned for every thousand cubic feet of air. Sunlight is perhaps the best of all disinfectants. A room that is freely exposed to the sun and left open to fresh air will, in the course of a few weeks, be thoroughly purged of any germs of tuberculosis which may be present.

**10,262.** Straining of Muscles. — Mrs. C. H. C., New Jersey: "Please advise treatment for a strained muscle or ligament of the left side, which also affects the muscle of the leg; same contractions appearing in the ankle and sole of the foot. There is no misplacement of internal organs."

Ans.— A competent physician should be consulted, so that a careful examination may be made. It is impossible to know just what is the difficulty from the symptoms given. The discomfort may be relieved by a hot fomentation followed by rubbing with a cloth wet in cold water. The duration of the fomentation should be ten or twenty minutes, and the cold rubbing five minutes.

10,263. Rupture — A Day's Ration. — E. J. K., Colorado: "I. Would the removal of a truss while swimming be detrimental in case of rupture? 2. Will physical culture strengthen the muscles around a rupture sufficiently to produce a cure? 3. Will two meals a day, at 6:00 A. M., and at noon, of vegetables, fruits, nuts, and very little meat, supply the nourishment and energy necessary for an ordinary day's work?"

Ans.— I. This would entirely depend upon the gravity of the case. Removal of the truss might be unsafe if the rupture is very bad; that is, if the intestine comes down easily. It should also be remembered that small ruptures are in certain cases much more dangerous than large ones.

2. Sometimes in young persons, but very rarely and almost never in adults.

3. Yes.

THE public is thoroughly interested as to the importance of pure and wholesome foods, says **Good Housekeeping**. What we eat profoundly influences our physical well-being, our mental powers, and our morality. The profession and the laity have come to agreement upon this vital point. The slogan, "Tell me what you eat, and I will tell you what you are," is a forcible, if somewhat exaggerated, statement of an evident truth.

Certain it is that the health of the household, and especially the health of growing children, depends upon the most scrupulous care in the selection and cooking of food products, as well as the manner of eating, amount consumed with reference to individuality, occupation, and weather, and proper attention to the whole organism. Just as certain is it that good health is the most vital physical fact of existence. Neither learning, money, position, religion — nothing can take the place of health. Doctors, nurses, medicine, surgery, rest, nature, may sometimes restore health, but too often their combined efforts only succeed in part, or fail altogether.

Destiny has turned many a man down while he was waiting for something to turn up.— Success Magazine.

It would be a good idea for every city, town, village, and hamlet along the line of any railroad to put up a sign or two somewhere in proximity to the railroad station, setting forth the name of the town, and whatever claim it has for historic, residential, and industrial interest. Travelers often wonder, when a train comes to a stop, what the town is that spreads out before them, and wherein lies its excuse for being. True, the railroads are doing a great deal to exploit and advertise the attractions, scenic and commercial, of most of the more important places, but it wouldn't be an altogether bad idea for the towns to do a little something themselves, if only to set up a bulletin of facts for the enlightenment of the passing traveler .- From " The World's Progress," in Four=Track News for October.

Japan, China, Africa, New York, Portland (Oregon), Assam, are among the places dealt with in special articles in the October number of The **Missionary Review of the World**. It is a strong number, interesting, varied, timely, and of permanent value. Dr. William (596) Ashmore opens with a thoughtful and intelligent consideration of the "Probable Effects of Japan's Success on Missions in Asia." He throws on the subject the light of fifty years' experience and study. Another timely article is on the "Missionary Aspects of the Lewis and Clark Exposition in Oregon." It presents an important side of this great World's Fair that Christians should not forget.

Many of the articles are illustrated, and there is an abundance of important news items that are no less valuable than the longer articles and editorials.

"Nerves in Order," by Alfred T. Schofield, M. D., is a companion volume to his former work, "Nerves in Disorder." The author evidently believes in the "ounce of prevention," and it is to be hoped that the issuing of this work will lessen the demand for its companion volume. This later work is a book for the healthy, designed to enable them to continue so. It is a treatise in general personal and domestic hygiene, pointing out the most common causes of disordered nerves and how they may be avoided.

Funk and Wagnalls Company, 30 Lafayette Place, New York. 1905.

"The Fountain of Youth," or Personal Appearance and Personal Hygiene. By Grace Peckham Murray, M. D. Published by Frederick A. Stokes Co., New York.

A book on beauty culture by the latest and most approved methods. The author recommends in this work only those methods which can be carried out by any woman in her own home. True beauty is the expression and stamp of perfect health. Anything which permanently improves the looks must go deeper, and benefit the health also. This book is therefore a valuable contribution to health literature.

The extract appearing on pages 567-569 is taken from a "**Practical Text-Book of Science**," by P. G. Sundaresi Sastri, B. A., Manager and Teacher, National High School, Trichinopoli, India. The work discusses every phase of personal hygiene from the Hindu standpoint, but it will be found both entertaining and suggestive by the general reader. Price, 6 Annas. Srirangam: Sri Vani Vilas Press. 1904.

# PUBLISHERS' DEPARTMENT

# GOOD HEALTH

# A Journal of Hygiene

J. H. KELLOGG, M. D., EDITOR

Subscription Price, \$1.00 a Year Single Copies 10 cents PUBLISHED MONTHLY BY

# GOOD HEALTH PUB. CO.

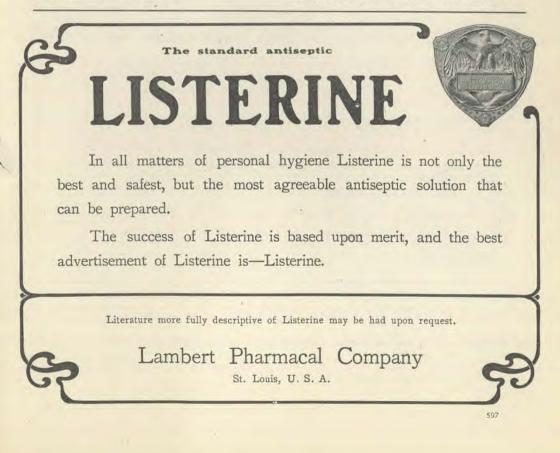
115 Washington Ave., N. BATTLE CREEK, - - - MICHIGAN

## A GOOD WORD FOR ALLEN'S DEVICE FOR HOME BATHING.

"We are pleased to call the attention of our readers to the advertisement of the Allen Manufacturing Co., Toledo, Ohio. This firm has advertised with us more or less during the past two years. We believe that their device and system for home bathing is one of the best in the world. Its construction is perfect, its usefulness indispensable. "The real design and merit of this method is entitled to careful consideration from the fact that it puts into the home the most hygienic and perfect bathing privileges that it is possible to effect; and all this is done without even city water in your home or a bathtub; in fact, that is the reason it appeals to every home without bathing facilities.

"The past experience of this firm in placing this device has led them to believe that by modifying the payments it will enable them to place one of their outfits in every home; so, for that reason, they propose to sell their \$6.00 outfit for \$2.00 down and \$2.00 per month until fully paid. This is a very business-like and generous offer, and we would suggest that all our readers write this firm and obtain from them their catalogue and further information.

"We will guarantee that all of their promises will be faithfully carried out. Address the Allen Manufacturing Company, 401 Erie St., Toledo, Ohio."—*From Medical Talk.* 



T

#### GO AS YOU PLEASE

#### Lake or Rail, in Either Direction between Detroit and Buffalo

IF your ticket reads via the Michigan Central, Grand Trunk, or Wabash Railways in either direction between Detroit and Buffalo, it is available for transportation via the D. & B. Line, and you can enjoy the delights of a lake ride.

Send two-cent stamp for illustrated pamphlet.

Address, D. & B. Line, Detroit, Mich.

#### FREE UNEEDIT! A WATCH

And we are prepared to furnish it. This watch is guaranteed by a responsible Watch Manufacturing Company, as follows: ---

I. To be in perfect running condition when it leaves the factory.

2. To be correct in material and workmanship.

3. The manufacturers will make repairs, not necessitated by carelessness or abuse, during one year from date, free of charge, provided the watch is returned to them with five cents enclosed for return postage.

enclosed for return postage. This watch will be sent free by registered mail to any boy or girl, or other person, sending us five subscriptions to Good HEALTH, at \$1.00 per year. This offer will remain open for a limited period. We hope that many will take advantage of it. Now is your opportunity to get a watch free that you will not be ashamed of.

Send your orders to the publishers of this magazine.

#### MAGAZINE OFFERS

Your attention is called to our magnificent magazine offers. No such offers have ever been made before. Please examine every one before making up your order. You will find the various offers scattered through our advertising pages. Send all orders to the publishers of GOD HEALTH.





#### STUDIES IN CHARACTER BUILDING

By Mrs. E. E. Kellogg, A. M. 368 pages, 20 full-page illustrations. Price, postpald.... \$1.25

#### HEALTHFUL COOKERY

By Mrs.	E,	E.	Kelle	ogg.	А,	м.	300	Dages.	
Nearly	600	ren	ipes.	Pri	ce,	post	paid,	paper.	.30
Board .								******	.50
Cloth									.75

#### ARISTOCRACY OF HEALTH

By Ma	ry Foote	Hen	de	rson	(wife	of E	x-Sen-	
ator	Henders	on, (	1 ic	Miss	ouri).	772	pages.	
Net ,	*******							1.50
Price	, postpal	d .,					******	1.68

#### THE BLUES, CAUSES AND CURE

#### PERFECT HEALTH

By H. B. Weinburgh, 330 pages. Illustrated. Price, postpaid ...... 1.25

Add 50 cts, to your order for any of the abovenamed books except Healthful Cookery, to which add 70 cts., or 75 cts. to any of the following, and we will enter your name for one year's subscription to Good Health,

SOCIAL PURITY.	By J. H. Kellogg, M. D., 82 pages,	
paper cover.	Price, postpaid	,25
SHALL WE SLAY	TO EAT ? By J. H. Kellogg, M. D.	

175	DAG	es, paper	Price, postpaid	.25
ALMOST	A	WOMAN	. By Mary Wood-Allen, Board	,50
ALMOST	A	MAN.	Wood-Allen. Paper, .25; Board,	.50

#### ART OF LIVING LONG

The famous work of Louis Cornaro,	the Venetian	
centenarian. Price, postpaid		1.50
With GOOD HEALTH, one year		2.00

# FIVE REMARKABLE BOOKS BY HORACE FLETCHER . .

#### ALL \$1.00 NET

THE A. BZ. OF OUR OWN NUTRITION. 462 pages. Price, postpaid	1.14
THE NEW MENTICULTURE, OR A. B. C. OF TRUE LAVING. 310 pages. Price, postpaid	1.12
THE NEW GLUTTON, OR EPICURE, OR ECONOMIC NUTRITION, 420 pages. Price, postpaid	1.12
HAPPINESS AS FOUND IN FORETHOUGHT MINUS FEARTHOUGHT. 251 pages. Price, postpaid	1.12
THAT LAST WAIF: OR SOCIAL QUARANTINE. 270 pages. Price, postpaid	1.12
Any one of these books, postpaid, and one year's subscription to GOOD HEALTH for	1.75

#### ADDRESS

GOOD HEALTH PUBLISHING CO. Battle Creek, Mich.



Colds follow the wool-wearer. He is known by his ills. Prove it yourself. Ask the next man you meet with a cold, if he doesn't wear wool. Nine out of ten will say, Yes, for Colds and Wool-Wearing go together.

Wear Dr. Deimel Linen-Mesh Underwear and be free from colds and chills — comfortable and healthy always.

Send for "The Proof." Free for the asking.

#### Deimel Linen-Mesh Co., 491 Broadway, N. Y.

SAN FRANCISCO WASHINGTON 111 Montgomery St. 1313 F St., N. W. MONTREAL, 2202 St. Catherine St. BROOKLYN BALTIMORE 510 Fulton St. 107 N. Charles St. LONDON, 83 Strand (Hotel Cecil)







MAKE A STOVE of Your Round-Wick LAMP or GAS JET by attaching a



**On Mantle Burner** 

ant Heat **GETTING HEAT and LIGHT at ONE COST** T WILL HEAT any ordinary room comfortably in zero weather, by accumulating, intensifying, and radiating the heat that ordinarily goes to waste. Does not interfere with light. ECONOMICAL, as no more gas or oil is consumed with our heater attached than without.

Absolutely no danger, as heater in no way interferes with the combustion.

ATTRACTS COLD AIR on the vacuum principle, thoroughly warming, purifying, and circu-lating the air. No odor, no ashes, or trouble.

THE GIANT HEATER is easily applied to any lamp chimney, gas jet, or any mantle burner (artificial or natural gas). VALUABLE at all times of the ear for the bath-room,

How it Makes the Heat

now it makes the Heat year for the bath-room, sick-room, bed-room, den, or office; for light cook-ing, heating water for shaving, warming baby's food, etc. \$1.50

PRICE, Polished Brass Complete, Nickel plated on Brass, 2.00 BY MAIL OR EXPRESS PREPAID

You take no risk; we refund the money if not satis-factory and returned to us in 10 days. Send to day for a Heater. Pamphlet with testimonials FREE. GIANT HEATER CO., 145 Monmouth St., Springfield, Mass.



**45 Highest Awards** in Europe and America







# PURE TOILET PREPARATIONS

Our own make. Guaranteed harmless. Strictly high grade in quality.

Price	Postage
\$ .15	.05
.15	
.25	
.10	
.25	.10
.10	
.10	.04
.25	.10
.10	
.10	
	\$ .15 .25 .10 .25 .10 .10 .10 .25 .10

Our Sanitary Medicated Soap is healing, antiseptic, hygienic: made of the best materials, combined with Eucalyptus, Thymol, Benzoin, etc. Four oz. cake, ioc; 3 for 250; postage, 50 per cake.

SANITARIUM SUPPLY CO., NASHVILLE, TENNESSEE

## INTERESTING, INSTRUCTIVE "Correct English --- How to Use It"

A MONTHLY MAGAZINE DEVOTED TO THE PROPER USE OF ENGLISH

JOSEPHINE TURCK BAKER, Editor!

10 Cents a Copy \$1.00 a Year

#### PARTIAL CONTENTS FOR THIS MONTH

Suggestions for the Speaker. What to say and what not to say. Suggestions for the Writer. Errors and Models in English from Noted Authors. The Art of Conversation. How to increase one's vocabulary. Compound Words. How to write th Shall and Will. How to use them. Punctuation; Pronunciation. Correct English in the lisme. How to write them.

Send 10 cts. for a two-months' trial subscription.

CORRECT ENGLISH, Evanston, Illinois

Liberal Terms to Agents.

Not to know Niagara is not to know America

The MICHIGAN CENTRAL has deservedly won its title to "The Niagara Falls Route," because it is the only railroad running directly by and in full view of the entire panorama of the rapids of the upper river, the Horse Shoe and American Falls, and the gorge below. In going east or west one should make it a point to take the *Michigan Central*. Send four cents in stamps for Summer Vacation Tours, ready in April. Address,

O. W. RUGGLES, G. P. & T. A., Chicago.

Our Health Waist



REPLACES the CORSET, fulfilling all requirements without its harmful effects. For Gracefulness, Ease, or Comfort this garment surpasses anything ever before manufactured. For Economy this waist is cheap at any cost when compared with the old style corset, because it does not deform the body, nor destroy health, but benefits and restores instead. It is washable and adjustable. You can make it larger or smaller by adjusting the shoulder straps and oval elastic in either side. By making the former longer or shorter, the length of the skirt may be regulated.

We sell three qualities,— a medium weight jean twilled material, or lighter weight Batiste for summer wear, and a heavier weight sateen. White or Drab Jean or Batiste, bust measure 30 to 38, price \$1.25; 40, \$1.50; 42, \$1.75. White or Drab Sateen, bust measure 30 to 38, price \$1.75; 40, \$2.00; 42, \$2.25. Black Sateen 25c additional, or for any size above 42 in. in either quality, 25c extra. No odd-numbered sizes.

When sending in orders for waist take the bust, hip, and waist measures snugly over the undergarments. We have long and short waists. The latter end at the waistline, and the former five inches below, as per cuts. When ordering state which is desired.

We also carry Children's Waists in White or Drab Batiste. Price 50c. Sizes 18 to 28. The size of a child's waist is the measurement at the waistline. To determine the size required, take the measure over the clothing, and deduct two inches.

### Address DRESS DEPARTMENT

GOOD HEALTH PUBLISHING COMPANY

115 Washington Avenue, North,

BATTLE CREEK, MICHIGAN

# The Battle Creek

ADVERTISEMENTS.

## Sanitarium Training=School

## For Missionary Nurses GREAT OPPORTUNITY

Now opens its doors to all Christian young men and women who are in sympathy with the truths taught at this institution, and who desire to prepare themselves to work for the betterment of the race in the capacity of Christian or missionary 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 training-school in the world. In addition to the subjects taught in ordinary hospital trainingschools, students in the Battle Creek Sanitarium Trainingschool for Missionary Nurses are thoroughly instructed in hydrotherapy (more than two hundred applications); in massage, manual Swedish movements (several hundred different manipulations and movements); the use of electricity (galvanic, faradic, static, and sinusoidal currents); phototherapy (the electriclight bath, the photophore, the arc-light, the actinic ray).

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*.

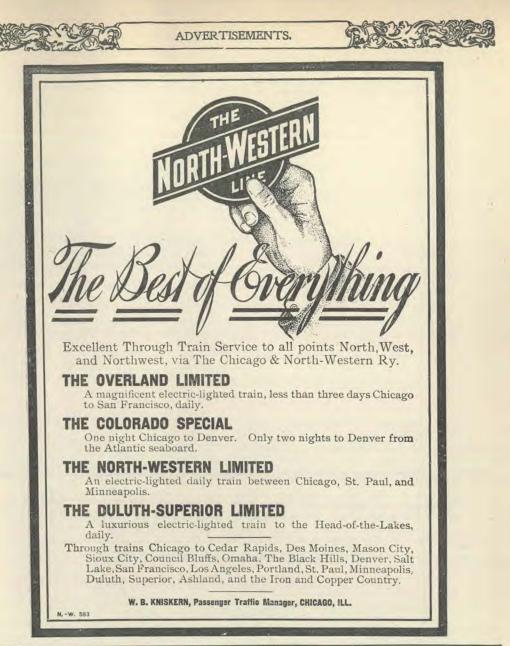
Nurses receive on an average two hours of regular class work daily besides the regular training at the bedside and in practical work in the various treatment departments.

The course in gymnastics embraces not only ordinary calisthenics, but also the Swedish system of gymnastics, medical gymnastics, manual Swedish movements, swimming, and anthropometry. There is no school of physical culture in which the opportunities are greater than those connected with this school.

The school of cookery also 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.

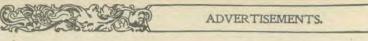
Graduates receive diplomas which entitle them to registration as trained nurses. Students are not paid a salary during the course of study, but are furnished books, uniforms, board, and lodging. Students are required to work eight hours a day, and are expected to conform to the rules of the institution at all times. Students may work extra hours for pay. The money thus earned may be ample for all ordinary requirements during the course. Students who prove themselves competent may, on graduation, enter into the employ of the institution at good wages

> Address Battle Creek Sanitarium Training-School, BATTLE CREEK, MICHICAN





od and coal bills. Will not explode. Lasts ten years. Han up. Write for free Catalogue and Special Offer. \$3.00 up. WORLD MANUFACTURING CO., 5915 World Building, CINCINNATI, OHIO. In replying to advertisements please mention GOOD HEALTH.





IT IS THE ONLY Standard Gauge Route from the United

IT IS THE ON LY Standard Gauge Route from the United States Frontier to Mexico City. IT IS THE ONLY Line in Mexico that can offer the Travel-Ing Public the conveniences and comforts of Standard Gauge Pullman Drawing Room Siepers. lighted by Pintsch Gas. IT IS THE ONLY Line by which you can travel without change from St. Louis, Mo., to Mexico City. IT IS THE ONLY Line from El Paso, Texas, to Mexico City. IT IS THE SHORT Line from San Francisco and Pacific Coast Denies to Mexico City.

. IT IS THE SHORT Line from San Francisco and Pacific Coast points to Mexico City. The Lines of the Mexican Central Railway pass through lf of the 27 States of the Republic. Eight million of the thirteen million inhabitants of Mexico are settled configuous to them. The principal Mining regions receive their supplies and export their product over it. Chihuahua, Sierra Mojada, Mapimi, Fresnillo, Parral, Guanacevi, Durango, Zacatecas, Guanajuato, Sombrerete, Pachuca, etc., etc.

#### WHEN YOU TRAVEL FOR BUSINESS, GO WHERE BUSINESS IS DONE.

There are only five citles of over 35,000 inhabitants in the Republic of Mexico that are not reached by the Mexican Central Line. The following ten citles are reached only by the Mexican

Central Railway. Cbihuahua. 30.098 inhabitants; Parral, 16.382; Zacatecas, 34.438; Guanajuato. 40.580; Leon. 65.203; Stadalajara, 101,208; Queretaro, 38.016; Zamora, 12.533; Aguascalientes, 37,816;

34.383; Gualing and Camora, 12.533; Aguascalientes, 37,816; Irapuato, 19.640.
It also reaches the cities of Torreon, 13.845; San Luis Potosi, 60.858; Tampleo (Mexican Gulf Port), 16.313; Celaya, 35.565; Pachuca, 37,487; City of Mexico, 368,777.
Daily Puliman service between St. Louis, Mo., and Mexico Daily Puliman service between St. Louis, Mo., and Mexico City, And M

City, also between El Paso, Texas, and Mexico City, and vice versa.

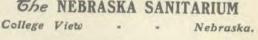
W. D. MURDOCK, G. P. A. Mexico City. A. V. TEMPLE, Industrial Agent, Mexico City. T R. RYAN, Gen. Ag/ , 328 Marquette Bldg., Chicago

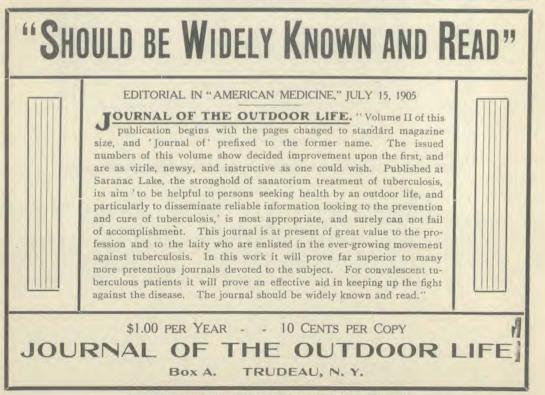
The NEBRASKA SANITARIUM



is located in the most beautiful suburb of the capital city, is located in the most beautiful suburb of the capital city, Lincoln, with which it is connected by a street railway. The institution is conducted on the same principles as the Battle Creek Sanitarium, giving special attention to the use of hydrotherapy, massage, electricity of all forms, exercise, and proper diet. A large health food factory is connected with the Sanitarium. Special attention is given to the treat-ment of diseases of women, digestive disorders, rheumatism, nervons diseases, and diseases of the eye, ear, nose, throat, and lumgs. Offensive cases not received, Surgical cases of all kinds accepted. Trained nurses always ready to send out when called. when called.

#### For further information address







and two others making the three, we will send you any Class No. 2 magazine in our 64-page catalogue. Ask for it. and

FREE Send to-day for a copy of our handsome 64-page Catalogue of the latest offers for '05-'06. It is FREE. Write to-day.

\* When this magazine is included in any club as above, 10c extra should be added to the club price.

## GOOD HEALTH PUBLISHING CO., Battle Creek, Mich.

## **OUR LIBRARY PLAN**

We want a Librarian in every town and city. Write to-day for particulars how to secure \$5.00 in cash and 22 leading publications valued at \$26.60. Ask for full particulars of the Good Health Magazine Library Plan. Address,-

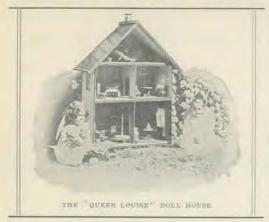
#### GOOD HEALTH MAGAZINE LIBRARY PLAN

Care of THE GRUMIAUX NEWS & SUBSCRIPTION CO., Le Roy, N. Y.





# DOLL HOUSES



Where is the little girl who would not like one? Our doll houses are made of a practical size and intended to teach little girls their first lessons in housekeeping.

#### A BEAUTIFUL BIRTHDAY GIFT

The most fascinating of toys. We also have an imported line of German doll furniture which is irresistible. Send for our handsome booklet showing pictures of both house and furniture with descriptions. Enclose slamp.

MAX L. KEITH, PUBLISHER "KEITH'S MAGAZINE" 793 Lumber Ex. MINNEAPOLIS, MINN.

## THE COUNTRY GENTLEMAN

#### Established in 1831

The only Agricultural Newspaper, and admittedly the leading Agricultural Journal of the world.

[ ! Every department written by specialists, the highest authorities in their respective lines. No other paper pretends to compare with it in qualifications of editorial staff. Gives the agricultural news with a degree of completeness not even attempted by others. Indispensable to all country residents who wish to keep up with the times.

Single subscription, \$1.50; two subscriptions, \$2.50; five subscriptions, \$5.50. Special Inducements to Raisers of Larger Clubs. Four months' trial trip, 50 cents. Specimen copies will be mailed free on request. It will pay anybody interested in any way in country life to send for them. Publishers, LUTHER TUCKER & SON, Albany N. Y.

##" Subscriptions taken at this office.

Price of GOOD HEALTH and Country Gentleman, \$1.75.

Address, GOOD HEALTH PUB. CO., Battle Creek - Mich. The American Boy MAGAZINE

The Biggest, Brightest, Best Boy's Magazine in the World



"GOOD ALL THE WAY THROUGH"

That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading, and interests boys in all manly sport games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illusstrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

PRICE \$1.00, POSTPAID

600D HEALTH and AMERICAN BOY only \$1.10

Order at once GOOD HEALTH PUBLISHING CO. BATTLE CREEK, MICH.

## The Nashville Sanitarium

In aim, methods, and principles a branch of the Battle Creek Sanitarium. It offers the quiet and restfulness of a secluded country location with agreeable climate. Also a fully equipped city branch. Prepared to give all kinds of physiological treatments. Experienced Physicians and Well-trained Nurses. A complete Dietary, suited for individual cases. All forms of Electricity, including the Electric-light Bath. X-Ray examination and treatment. Swedish Movements and Massage. Surgery when required.

Address O. M. HAYWARD, M. D., Sup't. Or NASHVILLE SANITARIUM

- - Mich. Church and Vine Streets NASHVILLE, Tenn. In replying to advertisements please mention GOOD HEALTH.





**WING PIANOS** 

Are Sold Direct From the Factory, and in No Other Way

## You Save from \$75 to \$200

When you buy a Wing Plano, you buy at wholesale. You pay the actual cost of making it with only our wholesale profit added. When you buy a piano, as many still doat retail—you pay the retail dealer's store rent and other expenses. You pay his profit and the commission or salary of the agents or salesmen he employs—all these on top of what the dealer himself has to pay to the manufacturer. The retail profit on a piano is from \$75 to \$200. Isn't this worth saving?

## SENT ON TRIAL Anywhere WE PAY FREIGHT No Money in Advance

We will place a Wing Piano in any home in the United States on trial without asking for any advance payment or deposit. We pay the freight and all other charges in advance. There is nothing to be paid either before the piano is sent or when it is received. If the piano is not satisfactory after 20 days' trial in your home, we take it back entirely at our expense. You pay us nothing, and are under no more obligation to keep the piano than if you were examining it at our factory. There can be absolutely no risk or expense to you.

There can be associately no risk of expense to you. Do not imagine that it is impossible for us to do as we say. Our system it so perfect that we can without any trouble deliver a piano in the smallest town in any part of the United States just as easily as we can in New York City, and with absolutely no trouble or annoyance to you, and without anything being paid in advance or on arrival either for freight or any other expense. We take old pianos and organs in exchange. A guarantee for 12 years againstany defect in tone, action,

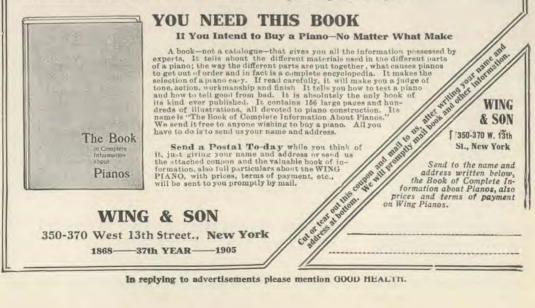
A guarantee for 12 years against any defect in tone, action, workmanship or material is given with every Wing Piano.



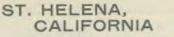
## Small, Easy Payments

In 37 years over 40,000 Wing Pianos have been manufactured and sold. They are recommended by seven governors of States, by musical colleges and schools, by prominent orchestra leaders, music teachers and musicians. Thousands of these pianos are in your own State, some of them undoubtedly in your very neighborhood. Our catalogue contains names and addresses.

Mandolin. Guitar, Harp. Zither, Banjo-The tones of any or all of these instruments may be reproduced perfectly by any ordinary player on the plano by means of our Instrumental Attachment. This improvement is patented by us and cannot be bad in any other plano. WING ORGANS are made with the same care and sold in the same way as Wing Planos. Separate organ catalogue sent on request.







# SANITARIUM



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

N

A postal will bring large illustrated booklet.

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

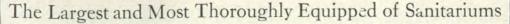
# <section-header><section-header><section-header><text><text><text><text><text><text><text><text><text><text>

DAYTON, OHIO

in replying to advertisements please mention GOOD HEALTH.

G. H.-11-05





The Battle Creek Sanitarium management were the first to organize a thoroughly complete system of physiological therapeuties. Watercures had existed betore, — eclectic institutions, mineral springs, and similar establishments, — but the Battle Creek institution was the first to organize a system and met od embodying all physiological agencies. The fire which consumed the main building of the institution Feb 18, 1962, gave opportunity for complete reorganization and new equipment. The new structure is absolutely fire-proof ; the mode of fine-proof constructions, mineral stood the test of the recent conflagration in Baltimore.

One hundred and seventy-five rooms with private baths; six hydraulic elevators; electric lights; and private telephone in each room.

Spacious parlors on every floor, roof garden, dining room and kitchen at the top. Beautiful outlook from every window.

Accommodations for eight hundred guests. Staff of thirty doctors; three hundred and fifty nurses.

Nearly forty years' experience in this institution has demonstrated that the great majority of chronic invalids of all classes, including many considered incurable, can be trained up to a state of healthful vigor by a systematic regimen based upon scientific principles, combined with a thoroughgoing application of the resources of hydro therapy, phototherapy, thermotherapy, massage, Swedish movements, Swedish gymnastics, electrother-



Swedish gymnastics, electrotherapy, and the open-air treatment, guided by the findings of bacteriological, chemical, microscopical, and other accurate methods of examination.

Special ward for surgical cases with perfect appointments.

Special departments for diseases of the eye, ear, nose, and throat, and in charge of experienced specialists. For information concerning the facilities afforded, terms, etc., address.

THE SANITARIUM, Battle Creek, Mich.



THE BOULDER-COLORADO SANITARIUM is a well-equipped and well-regulated institution for the treatment of all chronic disorders. It is the only Sanitarium in the Rocky Mountain region intelligently employing the same system of rational treatment and conducted upon the same general health principles as the Battle Creek (Mich.) Sanitarium. The buildings are equipped with all modern conveniences, including steam heating, electric lighting, elevators, gymnasium, etc. The medical appliances and equipment embrace Baths of every description, including the Electric-Light Bath; Massage and Manual Swedish movements; Electricity in every form; Classified dietary; Laboratory of Hygiene, for bacteriological, chemical, and microscopical investigations; Experienced physicians and well-trained nurses of both sexes. No contagious or offensive diseases are received into the institution. NO CONSUMPTIVE OR TUBERCULAR PATIENTS ARE RECEIVED. SPECIAL REDUCED RATES ARE MADE TO WINTER PATIENTS FROM NOVEMBER 1 TO JUNE 1. Write for catalogue and card of rates.

Address, BOULDER-COLORADO SANITARIUM, Boulder, Colo.

SECURE A MONEY-MAKING INTEREST

IN THE WORLD'S GREATEST HEALTH-MAKING INSTITUTION



Health is the greatest commodity in the world. All classes must have it. Neither financial nor market fluctuation can lower its value. No other institution in the world is equipped so well to supply it. No health-giving institution exists that is better known than the BATTLE CREEK SANITARIUM.

#### HERE IS A RECORD OF WHAT WE ARE ACTUALLY DOING

1. The gross earnings of the institution for the year 1904 were \$435,000. 2. The net earnings for the year 1904 were \$51,000.

3. The gross earnings for the first six months of the year 1905 were \$241,-300, and from these earnings obligations were reduced to the amount of \$33,000.

4. The gross earnings for the month of August, 1935, were \$83,693.

5. The daily average number of guests at the Sanitarium during the months of July and August was 900.



## THE BATTLE CREEK IDEA

There are hundreds of thousands of people who are being educated into the Battle Creek Idea – the right-living idea. And thousands of them are coming here to take treatment. Men in all walks of life – statesmen governors senators professional meneditors of national reputation, have come to this Sanitarium and know its advantages.

A chance to become a bondholder in this national health-bringing Sanitarium is as rare an investment opportunity as an investor can find.

The BATTLE CREEK IDEA is not a theory. It does not ask you to risk your money on prospects. It is a success now — to-day.

Note that some of the strongest, shrewdest financiers in the United States invested in these bonds when the earnings of the Sanitarium were even less.

To-day (September 15, 1905) there are only \$40,000 more of the bonds to be sold. It will pay you to investigate, at least. The bonds are of small denomination—\$100, \$200, \$500, or \$1,000. There are privileges that go with them—that you will be interested in. You need simply write a letter to find out.

BATTLE CREEK SANITARIUM, Battle Creek, Mich.