life alm

THE NATIONAL HEALTH MAGAZINE

THE SLIGO

May, 1914

TEN CENTS A COPY - - ONE DOLLAR A YEAR

WASHINGTON, D. C.

IF COMING TO NEW YORK WHY PAY EXCESSIVE HOTEL RATES



THE CLENDENING, 202 W. 103 St., New York. Select, Homelike, Economical, Suites of Parlor, Bedroom, Private Bath for two persons, \$2.00 daily. Write for de-

scriptive booklet LH with fine map of city.

Forthcoming Issues of Life and Health

JUNE — The Tobacco Habit. Every one of your tobacco-using neighbors should have a copy.

JULY — A Children's number, a copy of which should be in every family where there are children.

AUGUST — A Temperance number, — facts, figures, cartoons, showing the evils of the liquor habit and the curse of the liquor traffic. Good ammunition.

SEPTEMBER - A Vacation number.

If you are not a subscriber, send twenty-five cents, coin or stamps, for these four numbers; or if you are a subscriber, you can have these four numbers sent to a friend for twenty-five cents.



Mt. Vernon Medical and Surgical Sanitarium

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

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

MT. VERNON, OHIO

Something's Going to Happen!

You realize, dear reader, as well as any one else, that the present deplorable conditions in human affairs cannot last much longer:—

The calamities on every hand
The unmentionable sins and vices
The wanton extravagance of the rich
The strained conditions among nations
The unbearable oppression of the poor
The ungovernable grafting municipalities
The church appealing to the government
The dissolution of the Turkish Empire
The increasing desire for "cheap" amusement
The general tendency to lower morals
And hosts and hosts of others

These things are ominous; they mean something; they are signs of the times. Of what benefit is a sign to you if you pay no attention to it? If you disregard these signs and do not know their meaning, you will be unprepared for, and cannot survive, the events to which they point. Knowledge of the way gives choice to the right course.

There is only one place, ONLY ONE, where the meaning of these things can be learned. That is in the Bible—the Word of God. There they are all made as plain as A B C, easily understood by any thinking person. They are there for you, YOU PERSONALLY. Why not take a few minutes' time and look them up? They mean everything to you. You need a knowledge of them in your business, your pleasure, and your home.

We can help you study them. The SIGNS OF THE TIMES MAGAZINE was designed for and is accomplishing that very thing, and is almost alone in the field—a student of fulfilled and fulfilling Bible prophecy—the most entertaining, interesting, instructive, and important study in this world. We invite you to study with us. A dollar will place your name on our list for a year.

Ten cents in coin or stamps for sample copy

SIGNS OF THE TIMES MAGAZINE Mountain View, California

OUR GENERAL AGENCIES

Kindly order "Life and Health" or any other publication advertised in this magazine from our agency nearest you

UNITED STATES

abama Tract Society, 1700 N. Seventh Ave., Birmingham, Ala. Alabama

Arizona Tract Society, Box 172, Mountain View, Cal.

(§ !

3:

\(\frac{1}{3}\)

0000

(3) (3)

(5):

<u>0</u>:

Arkansas Tract Society, Fayetteville, Ark. California Bible House, 537 Twenty-fifth St.,

Oakland, Cal. California Missionary Society, 341 E. Lodi

Ave., Lodi, Cal.

Ave., Lodi, Cal.
California Bible House (Central), Box 1304,
Fresno, Cal.
California Tract Society (Southern), 417 W.
Fifth St., Los Angeles, Cal.
Chesapeake Tract Society, 1611 Ellamont St.,

Chesapeake Tract Society, 1611 Ellamont St.,
Baltimore, Md.
Colorado Tract Society (Eastern), 1112 Kalamath St., Denver, Colo.
Colorado Tract Society (Western), 122 South
Elghth St., Grand Junction, Colo.
Connecticut (see New England, Southern).
Cumberland Tract Society (E. Tennessee),
Graysville, Tenn.
Delaware (see Chesapeake).
District of Columbia Tract Society, 708.

District of Columbia Tract Society, 708
Maclachlen Bidg., Washington, D. C.
Florida Tract Society, Drawer 28, Orlando.
Georgia Tract Society, 169 Bryan St., At-

Georgia Tract Society, 169 Bryan St., Atlanta, Ga.
Idaho Tract Society, Box 643, Boise, Idaho.
Illinois Tract Society (Northern), 3645 Ogden
Ave., Hawthorne Station, Chicago, Ill.
Illinois Tract Society (Southern), 304 West

Illinois Tract Society (Southern), 304 West Allen St., Springfield, Ill. Indiana Tract Society, 521 East Twenty-third St., Indianapolis, Ind. Iowa Tract Society, Nevada, Iowa. Kansas Tract Society (East), 821 West Fifth St., Topeka, Kans. Kansas Tract Society (West), 508 Fifth

St., Topeka, Asia.

Kansas Tract Society (West), 508 Fifth
Ave., East, Hutchinson, Kans.

Kentucky Tract Society, Nicholasville, Ky.
Louisiana Tract Society, 810 Jackson Ave.,
New Orleans, La.

Maine Tract Society, 75 Grant St., Portland,

Maryland (see Chesapeake)

Maryland (see Chesapeake),
Massachusetts Tract Society, South Lancaster, Mass.
Michigan Tract Society (East), 426 Trumbull Ave., Detroit, Mich.
Michigan Tract Society (North), 510 Petoskey St., Petoskey, Mich.
Michigan Tract Society (West), 1214 Madison Ave., Grand Rapids, Mich.
Minnesota Tract Society, 336 East Lake St.,
Minneapolis, Minn. (Exchange case 45.)
Mississippi Tract Society, 932 Union St.,
Jackson, Miss.

Mississippi Tract Society, 932 Union St., Jackson, Miss. Missouri Tract Society (North), Hamilton. Missouri Tract Society (South), 520 West Lynn St., Springfield, Mo.

Lynn St., Springfield, Mo.

Montana Tract Society, Box 118, Bozeman.

Nebraska Bible Supply House, 905 North
California Ave., Hastings, Nehr.

Nevada Mission, Box 172, Mt. View, Cal.

New England Tract Society (Northern), 136

N. Main St., Concord, N. H.

New England Tract Society (Southern), 51

Whitmore St., Hartford, Conn.

New Hampshire (see N. New England).

New Hampshire (see N. New England).

New Jersey Tract Society, 200 Columbus

Aye., Trenton, N. J.

New Mexico Tract Society, Box 286, Albuquerque, N. Mex.

New York Tract Society (Greater), Room
904, 32 Union Square, New York, N. Y.

New York Tract Society, 317 W. Bloomfield St., Rome, N. Y.

LIFE AND HEALTH

New York Tract Society (Western), 8 East Jefferson St., Salamanea, N. Y. North Carolina Tract Society, 711 W. Lee St., Greensboro, N. C. North Dakota Tract Society, Drawer N. Jamestown, N. Duk. Ohlo Tract Society, Box 187, Mt. Vernon. Oklahoma Tract Society, Box 644, Oklahoma City, Okla

Oklahoma Tract Society, Box 644, Oklahoma City, Okla.
Oregon Missionary Society (Western), 508 E. Everett St., Portland, Oregon.
Oregon Tract Society (Southern), 1164 Military St., Roseburg, Oregon.
Pennsylvania Tract Society (Eastern), 4910 Arch St., Philadelphia, Pa.
Pennsylvania Tract Society (West), 7155 Mt. Vernon St., Pittsburgh, Pa.
Rhode Island (see New England, Southern).
South Carolina Tract Society, 821 Fourth St., Columbia, S. C.
South Dakota Tract Society, Drawer R, Redfield, S. Dak,

field, S. Dak. Tennessee River ennessee River Tract Society (Western Tennessee), 509 Cole Building, Nashville,

Tenn Texas Tract Society, Keene, Tex. Texas Tract Society (South), Box 392,

Austin, Tex. Texas Tract Society (West), Abliene, Tex. Utah Tract and Bible Society, 776 E. Sixth

St., S., Salt Lake City, Utah. Vermont (see Northern New England). Virginia Tract Society, 2705 West Main St..

Virginia Tract Society, 2005 Richmond, Va. Washington Missionary Society (Western). Box 328, Auburn, Wash. Washington: Upper Columbia Tract Society. College Place, Wash. West Virginia Tract Society, Fairmont. Wisconsin Tract Society, Box 57, Grand Wisconsin Tract Society, Box 57, Gr. Rapids, Wis. Wyoming Tract Society, Crawford, Nebr.

UNITED STATES POSSESSIONS

Hawailan Tract Society, 767 Kinau St., Honolulu, Hawall.

Panama Tract Society, Cristobal, C. Z. Philippine Islands Mission, 613 Nezaleda. Manila, Philippine Islands.

CANADIAN AGENCIES

Ontario Tract Society, Box 308, Oshawa, Ont., Canada. Eastern Canada:

Canadian Pub. Assn., Oshawa, Ontario. Maritime Tract Society, 161 Botsford St.,

Moneton, N. B. Newfoundland Tract Society, Box 217, St. John's, Newfoundland.

John's, Newfoundland.
Western Canada:
Alberta Tract Society, Lacombe, Alta.
British Columbia Tract Society, 1708
Maple St., Vancouver, B. C., Canada.
Manitoba Tract Society, 290 Bannerman
Ave., Winnipeg, Man., Canada.
Saskatchewan Tract Society, 1930 Angus
St., Regina, Sask., Canada.

FOREIGN AGENCIES

Great Britain: International Tract Society. Stanborough Park, Watford, Herts., England. India Union Mission: 17 Abbott Road, Luck-

now, India. Mexico: Imprenta de la Verdad, 1420 Aven-ida 20, Tacubaya, D. F., Mexico.

ida 20, Tacubaya, D. F., Mexico. South Africa: International Tract Society, 56 Roeland St., Cape Town, South Africa. West Indies: Watchman Press, Riversdale, Jamaica, B. W. I.

WASHINGTON, D. C.

MY SUBSCRIPTION FREE

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

GENTLEMEN:-

	I desire to take advantage of your special offer to send me your i	magazine
free	for one year. Enclosed you will find \$2, for which please enter i	ny name
and	two others upon your mailing list for one year, as follows:-	

First Name

Address

Second Name

Address

My Name

Address

APPLICATION FOR AGENCY

GENTLEMEN:-

I hereby apply for agency for your magazine, LIFE AND HEALTH. I desire to solicit subscriptions, and also to sell a supply regularly each month. Kindly send me your terms to agents, etc. Find enclosed recommendation from vouching for my character and ability properly to represent your magazine.

AGENT'S ORDER BLANK

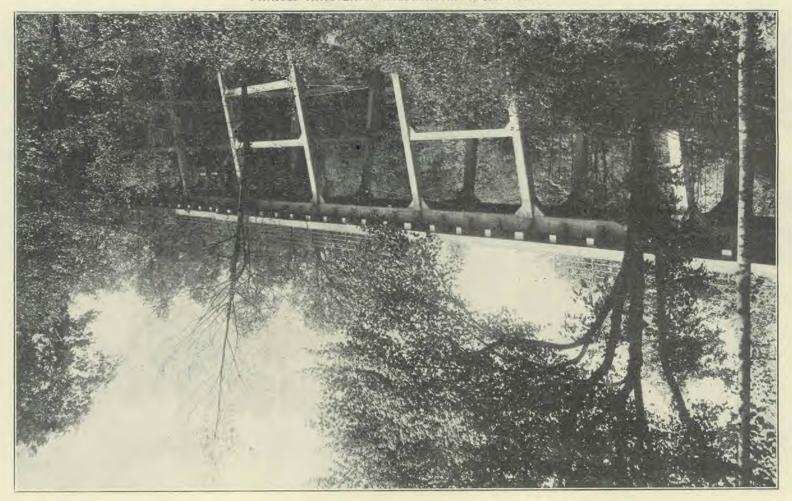
CONTENTS FOR MAY

FRONT COVER - The Sligo, Grounds of the Washington Sanitarium.
FRONTISPIECE - Sligo Bridge, Washington Sanitarium Grounds.

GENERAL ARTICLES	Page
The Nerve Garden, Alden Carver Naud The Shrunken School Ground, James Frederick Rogers, M. D. Mountain Climbing as an Exercise, G. H. Heald, M. D. The Function of Play, Henry G. Hale School Gardens, Bienisto Resanigita A Frequent Cause of Back Strain, Delila B. Derrick	198 201 206 210 21% 217
HEALTHFUL COOKERY	218
Menus for a Week in May, George E. Counforth	3
EDITORIAL _	990
National Fight for Health.	
AS WE SEE IT	223
Disease Transmission — The Spread of Infectious Diseases — Tuberculosis No Longer a Buga boo — The Cow and Tuberculosis — Treatment of Malaria — Treatment of Pellagra — Th Effect of Coppered Foods.	
QUESTIONS AND ANSWERS	229
Catariet — Comparison of Animal and Vegetable Fats — Remedy for Alcohol or Tobacco Addiction — Cartilage Treatment — Food Regulation for a Child — Indigestion — Indigestion i a Child — Remedy for Hemorrhoids — Headache.	
SOME BOOKS	2.31
Geriatrics; the Diseases of Old Age and Their Treatment — School Janitors, Mothers, an Health — The Secret of Success for Boys and Young Men — A Preface to Politics — Th Home Nurse — Success With Hens — The Back Yard Farmer.	4
To Abort a Felon — Eryslpelas — For Tapeworm — An Antidote to Alcohol — Care of th Mouth During Illness — Measles and Scarlet Fever — To Remove Warts, etc. NEWS NOTES	234
Entered as second-class matter May 1, 1998, at the post office at Washington, D. C., under to of Congress of March 3, 1879. Published monthly by Review and Herald Publishing Washington, D. C.	ne Act Assn.,
PRICES, POSTPAID	
Yearly subscription \$1.00 Three years Six nonths (subscriptions for less than six nonths not accepted) 50 Single copy 10 Five or more copies, mailed by publishers to five addresses or to one address, postpaid, each	3.00
NO EXTRA CHARGE ON FOREIGN SUBSCRIPTIONS	
HOW TO REMIT.—Remittances should be made by Post-office Money Order (payable at Waton, D. C., post office). Express Order, or Draft on New York. Cash should be sent in tered Letter.	Regis-
DATE OF EXPIRATION.—Your address on the wrapper shows the date of expiration of you scription. To avoid missing any numbers, please renew early, for we stop all subscriptomptly upon expiration. CHANGE OF ADDRESS.—When a change of address is desired, both the old and the new a	iptions
must be given. The publishers should be notified six weeks in advance of the desired d change.	ate of
SUBSCRIPTIONS GUARANTEED.—Our authorized agent will present signed credentials from agency nearest you, also receipt for subscription money. If requested, he will also delly first copy to commence your subscription.	er the
TERMS TO AGENTS.—5 to 40 copies, 5 cents a copy; 50 or more copies, 4 cents, postpaid, to more addresses. Foreign orders, 5 or more copies, 5 cents a copy, postpaid. Special di on subscriptions quoted upon application.	scount

ADVERTISEMENTS GUARANTEED .- The reliability of every advertisement found in Life and

Health is guaranteed.



VOL. XXIX No. 5

THE NATIONAL HEALTH MAGAZINE

MAY 1914

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

George Henry Heald, M. D., Editor

WHY EXERCISE?

A I

N winter we are apt to hibernate. Driven in by the piercing blasts, we hover around a radiator, or over a stove, or possibly occupy the air shaft of a hot-air furnace, in our efforts to shun the all too friendly embrace of the winter king.

In summer we seek a shady grove, or plant ourselves before the business end of a motor fan; or, if more fortunate, we forget for the time, in a near-by bathing pool, the persistent attempts of the sun to scrape an acquaintance.

But in spring, coaxed or driven outdoors, we ought, now at least, to make amends for the inertia of the rest of the year. But there comes another excuse; spring fever, which means that we have continued to stoke our body furnaces for winter weather when there was not enough cold to stimulate the fires to burn brightly, and the furnace is getting clogged. Now if we give in to that spring fever, and attempt to correct it by drugs, while we continue to shirk, we may have a serious time of it; but if we lighten the fuel,— the food,— and exercise whether we feel like it or not, we will soon have an appetite for hard work. Try it.

保 保 保

FORTHCOMING ISSUES OF "LIFE AND HEALTH"

JUNE - The Tobacco Habit. Every one of your tobacco-using neighbors should have a copy.

JULY — A Children's number, a copy of which should be in every family where there are children.

AUGUST — A Temperance number,—facts, figures, cartoons, showing the evils of the liquor habit and the curse of the liquor traffic. Good ammunition.

SEPTEMBER - A Vacation number.

陈陈陈

If you are not a subscriber, send twenty-five cents, coin or stamps, for these four numbers; or if you are a subscriber, you can have these four numbers sent to a friend for twenty-five cents.



T was not a beautiful garden, it was not even moderately attractive, but it was a very remarkable garden for all that, and it proved a source of great satisfaction to its mistress, who was fascinated by her wee garden plot and exhibited it proudly to all of her relatives and friends. She would point out the tall sunflowers in the background and the sweet peas near the woodshed. She would pause to gather a few pansies from a miniature pansy bed while she called attention to the three rose bushes near at hand. Off to one side more useful plants were growing - lettuce, radishes, young onions. string beans, and butter turnips. Her entire garden occupied a space scarce larger than an ordinary veranda.

"It is my nerve garden," the owner would remark proudly. "In this little plot I have planted nervous prostration, brain fag, and other serious nerve derangements, together with a heap of other physical ills. My indigestion, headaches, and lung trouble are all buried in different nooks here and there about this little garden. These flowers and herbs and vegetables are all monuments to commemorate their places of interment."

When questioned, she explained just what her garden actually meant to her. She had been a sick, nervous, worn-out society woman. After she "went to pieces," she made a hobby of her ailments, and consulted an infinite number of physicians, and was sentenced to innumerable hospitals and sanitariums. In these different institutions she was

subjected to various treatments—electric, X ray, massage, and drugs. All the while she was still an invalid, and slowly but surely her flesh, her spirits, and her money were ebbing away.

Chancing to be at home temporarily. she was surprised by a visit from an oldtime friend. The friend brought with her a small scarlet geranium in a green flower pot. It was one of a great many she was cultivating in her own border. She was bubbling over with enthusiasm, and graphically described her attempts at gardening and the results she obtained. both pleasant and otherwise. The invalid was inspired by her animation, and after she was left alone with the scarlet geranium she resolved to plant the gift in her yard as the nucleus of a garden for herself. That was the beginning. The idea took possession of her, and she soon abandoned herself to the pursuit of her newly found happiness. Her mind. filled with a definite purpose, became more active, her interests broadened, and she grew to be less aimless and indolent. About this time her indigestion began giving her less trouble, and she forgot many of her minor ills. The outdoor air. the sunshine, the exercise, the new interests and environments, did the rest.

"Yes, it is my nerve garden," she explained to her husband's partner one evening, as she proudly exhibited her achievements in the diminutive back yard. "It means much to me, for I have taken the undesirable part of my life and I have converted it into something beautiful and useful."

The gentleman she addressed was nervous, irritable, and fussy, although presumably in good health. But at the woman's words he began a line of rapid thinking. He noted the woman before him, and contrasted her with the nervous wreck who began the little garden. He was brought abruptly face to face with his own deficiencies. And that evening at his own home he resolved that he, too, would make a nerve garden. But the strictly conventional little patch of greensward on either side of the cement walk before his door represented his all in all along the line of real estate. It would be worse than useless to think of nerve gardening there. Nevertheless, his spirit revolted at the thought of his per-

petual indoor livmg, devoid of exercise and sunlight. In the course of time he determined to adopt an expedient to compensate for his lacking opportunities for gardening. He got the kodak habit, and learned to make use of the open air and sunlight, which he had never before enjoyed. He made collections of original park views, and obtained pictures of pleasing bits of scenery here and there about the city and in other people's gardens.

In an incredibly short time his new-found enthusiasm totally replaced his old-time irritability. He was enabled to look at

life from an entirely new viewpoint, and was better equipped for his business and social obligations. His nerve garden was only a kodak, but it took him into the air and sunlight, and gave him new interests. So the results were the same as if he had purchased a rake and hoe instead of a camera.

These are two examples of the nerve garden,—the place where brain fag was dropped and the tension of weary nerves eased. Any one can determine the particular sort of garden that will suffice for his own individual case.

The instances are rare and isolated where one has such complete self-mastery that any daily routine will not, in due course of time, grow monotonous

and wearving. This is true, even following the line of favorite occupation and performing congenial tasks. In such cases there will come times when the hands on the dial move slowly and the necessary details of employment grow irksome. After this point is reached, it is soon evident that nerves are beginning to manifest themselves. The wise person at this juncture will ease up a trifle and shift the weight somewhat while the bearings are oiled and due repairs made.

This is the exact time when the nerve garden should be planned. The gardening is eas-



She abandoned herself to the pursuit of her newfound happiness.

ier and more pleasant and is more effective than when one waits until there is a diseased body to throw into the scheme and a lagging spirit begins the diversion. Actual gardening is the best, no doubt, if only a scarlet geranium is planted in a green flower pot. There is something in the feel of the earth that gives one renewed grit. However, it would be best to place the flower pot outdoors, if possible. Both the geranium and its owner will be better off in the open air. But if actual gardening on even a humble scale is utterly impossible. something else must be made to substitute for the nerve garden.

Fortunate indeed is the person who has a hobby when the nerves begin to vibrate discordantly. The unfortunate office employee who feels the first sting of an overwrought nerve may cultivate a hobby—become a baseball fan, perhaps, and find in the baseball park a nerve garden shaped like a diamond.

The housewife can make a real live garden, or raise mushrooms, or grow chickens, or walk in the park, or dress dolls for her babies - anything in the line of pleasing diversion will answer the purpose. Something different from the regular routine and ordinary, wearying, everyday duties is all that is necessary. A new line of activity for recreation will rout even obstinate nervous difficulties. Some one has said: "Rest is not idleness, and to lie sometimes on the grass under the trees on a summer day, listening to the murmur of water, or watching the clouds float across the sky, is by no means a waste of time."

The idea of a nerve garden would cure many a case of nerve trouble that now baffles the skill of conscientious physicians. Nervousness may be transformed from a curse into a blessing; for nervousness is like an electric current; under proper control, it will prompt purposeful action; without control, havoc results.

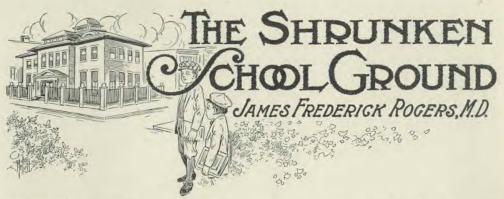
If there are wrong connections in your social, domestic, or personal activities, if. now and then, you find a live wire down. or discover that your lines are getting crossed, try to get out into the open, into a nerve garden, and devise some way of readjusting your entire system of wiring. if necessary. Some have made nerve gardens in spite of incredible odds. They have successfully planted their nerves in art, science, philanthropy, or athletics. When life begins to pall on you, when trifles annoy you, and humanity, individually or collectively, irritates you, get into a nerve garden of some sort just as quickly as possible.

"Friend, all the world's a little queer, except thee and me; and sometimes I think thee a trifle peculiar." When you reach this stage, you would better shut down the dynamos entirely and stop all the engines. It will take your utmost of time and attention in a nerve garden to get back to normal again. Become so full of health and strength and hope and courage that life will seem good to you once more and the earth a worth-while planet.

"Diving and finding no pearl in the sea.

Blame not the ocean; the fault is in thee!"





HE most anomalous and pathetic sight for gods or man that has exhibited itself on this supposedly progressive sphere,

which we like to call ours, is the movement to encourage, promote, or even force bodily play among children.

The young of all animals take to play almost from birth, and the word play is synonymous with that which gets itself done not only without urging, but spontaneously and with pleasure. To its antithesis, work, both young and old need driving, at any rate until that work metamorphoses itself into play. In our present age there may seem to be a confusion

of terms, and, since it takes planning, teaching, and urging to secure play, according to old definitions play has apparently become work.

There are sundry theories of play, for it has become of moment to theorize over what formerly was taken for granted as a living fact. Of these theories perhaps the most widely accepted would read something like this — that play is due to the bubbling over of superabundant nervous and muscular energy along lines of ancient ancestral activities. After a good meal and a sound sleep the nerve cells of a healthy animal become so filled with energy that this overflows into the mus-



Country school, "all outdoors" for playground, and husky children who attend.



Photo by Brooks

This village school in Malta, Ohio, has abundant space for play. All the vacant ground belongs to the school.

cles with which they communicate, and these, being also primed with explosives, go off with the least cause. This discharge of force naturally follows those nerve channels which from long practice have been worn most smooth and deep, and it results in those most important movements used in securing food or in combating and escaping foes. To the playing dog an old shoe becomes a rat, to be seized and tossed about with as much vim as if it were the real prey.

In children or adults who play there is the same bubbling over of energy and the exercise of senses and limbs with the same subconscious purpose. The play of tossing a ball is only the practice of hurling an idealized weapon, and the stick with which the ball is batted is nothing more nor less than a glorified war club of our primitive fathers. The playing child is as like his ancestors of the stone age as two peas. The discharge and seeming waste of energy serve, in the well-fed child of nature, to give opportunity for still further filling of nerve and muscle in the next period of rest. Use is followed by growth in size and strength.

We call play instinctive, whether in the child or animal. We are told nowadays that many man cubs do not know how to play - must be taught how to play. Has instinct in these been outgrown? - Surely not. The machinery for play must be born in each child, for we have not outgrown the old methods of nerve wiring of the body - it was too long used to be so easily dispensed with. The machinery being intact, there must be wanting the energy to run it, and if the energy is lacking (and this is most apparent), there must be either insufficient food; an inherited inability to adapt the food to its nervous and muscular purposes; an insufficient time for rest; its energies must be drawn into some unusual channels, allowing none for the old



Space for play, equal to floor space of two schoolrooms, in rear inclosed between walls of building on three sides, and paved with cobblestones,

instinctive movements; or, finally, there is no place, no room for play. Doubtless all of these conditions may severally or in combination produce the phenomenon of the playless child.

The child may not be sufficiently fed; but this, save in the first two years of life, is, in our country, of comparatively rare occurrence. From crowding into city tenements, from working in factories, or other causes, the increasing inability of mothers to nurse their children handicaps many a child for life, through poor nutrition in its earliest months. Give a child proper food in its first year or two, and it will usually get ample food afterwards for all purposes.

It is among children of the better to do, of the "successful," whatever that word may mean, that the second cause is most apt to operate. The parents, so exhausted by the intensity and prolongation of effort they have made in securing place and prestige (an effort too often involving a suppression in themselves of any desire for recreation, or even for sufficient rest), have transmitted to their pale and puny offspring a weakened machinery which cannot derive more than

a minimum of energy from its food; and if it stores sufficient energy for play, that play is brief and ineffectual for bodily or mental development. With small nerve cells and muscles, the results in spontaneous outburst are more likely to be the spasmodic and indefinite responses of nervous irritability, of pushing and pulling, of scratching and biting, rather than the prolonged and complicated expression of the normal instinct for play.

Some children who would play have their energies too constantly drained into other channels—studying school lessons at home, even at night when they should be in bed, the practice of music, or in the work of a factory. There may be moving pictures or other distractions which add to the disquiet and unrest of many modern homes.

The most apparent and therefore first to be noted causes of playlessness is the lack of opportunity. Even the child bubbling with energy must have some place larger than a chimney corner for bodily play, and will be stunted in his bodily and mental development if the opportunity is not to be found. The country still affords ample room both at home and at



City school with lawn next to streets. Narrow space for play, between school and house on right, paved with asphalt.

school for the ebullition of effervescent spirits. There has never been any complaint that the child of the rural district could not or did not play. What is more, it is these playing children from the country who later in life take charge of the political, business, and professional activities of the city.

It is in our cities and our citified towns that the play instinct has limited space to assert itself, and where, once discouraged, it becomes aborted. The half of the street in front of the tenement must still serve for most city children, though lacking in freedom of space, in turf, pure air, abundant sunlight, and in running brooks. The surroundings are not very suggestive accompaniments to such play instinct as we have inherited.

It may be worse in that congested educational tenement—the public school. The public school building has been planned by adults whose chief aim goes by the sweet-sounding name of economy. Lacking sympathy with the child, forgetful of their own childhood, they have made a mess of it. They have mistaken the head of the child for its whole; have considered its brain as independent of its belly. They have too often considered

play a waste of precious time and energy, and the playground as a waste of valuable land and money. Bethinking themselves, however, on seeing the child pale and drooping, that something was amiss, it was conceived that while there was little play there was not sufficient work, and a system of made-to-order exercises was devised — a thrusting of dumb-bells (if they could only speak!) and a swinging of Indian clubs (would an Indian deign to touch one?) within the chill walls of the basement of the schoolhouse, was devised to correct the evil. Better than nothing to give ailing muscles a chance to do something, but quite failing to hit the nail on the head. Finally, it was discovered that the trouble lay in the need for play, but as only adults are supposed to know anything, it was considered necessary that the child be taught how to play. Now things taught are too often nauseating to the child, and we are in danger of making play nauseating by too much supervision.

But, "personally conducted" or otherwise, the child at play must have room, and our modern adult play advocates find that the room has disappeared. Whereas the village school was inconspicuous in

comparison with its yard for play, in the city it is hard to find the playground for the building. The resultant effect of this change of relations upon the pupil is shown by the accompanying cubist sketch. The body of the child has shrunk with the shrinking of the yard.

SCHOOL-

PLAYGROUND FOR

RURAL SCHOOL

PRODUCT OF RURAL SCHOOL

ROOM

The artist has perhaps erred in making the child of the shrunken school yard so very erect. The head in either example is large enough, but the size of the brain

has little to do with the working power of the person to whom it belongs. The largest and most complicated engine is powerless without the boiler which develops steam for it. It is not to be wondered at that the severe and persistent mental work of the city is done by brains imported from the. country, really the product of ample

school grounds and play time, for the district school boasts no such splendid machinery "with all the modern improvements" for broadening the mind as does the city school. The educational processes of the latter are superb, save that they largely miss this main point.

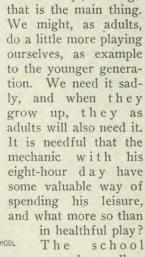
The movement for playgrounds has arrived late,—like the doctor who arrives after the disease is contracted,—but from its very lateness it cannot be urged forward too vigorously, especially in smaller cities, which may, before they

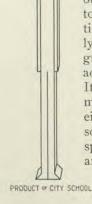
realize it, outgrow opportunities for reservation of space for recreation. But playgrounds, and good big ones, in connection with school buildings, must be of even more importance than playgrounds elsewhere, and it has as yet entered too little into the imagination of school



boards that there is lack of economy in cramped room or no room for play.

We might do more than furnish opportunity, though





ground as well as the building should be a social and recreation center.

We are late in discovering that play is a good thing, and that opportunity for play has been too much crowded out of our cities through stupidity and the hugging of the almighty dollar. The malady resulting from this stifling of instinct—the lowering of vitality—can only be cured by removing the conditions which have brought it about. The sooner the conditions are corrected, the earlier the cure will be effected.

MOUNTAIN LIMBING 88 an EXERCISE G.H. HEALD, M.D.

HE Germans are a church people; that is, they have the buildings and the ecclesiastical organizations; but

more often than not, at the time of service, the edifices of worship are practically

empty. The Germans believe thoroughly Sunday, but they also believe in fresh air and exercise, and their best opportunity to get these is on Sunday; and, somehow, to these people the inside of a large building, replete though it may be with hallowed associations. does not make a good substitute for oxygenation.

Dresden is beautifully situated on the Elbe, a clean, healthful city. That the people believe in health is evidenced by the fact that in Dres-

den was planned, established, and successfully administered the most enormous, the most complete hygienic exposition this world has ever seen; and they still maintain the essential part of the great exhibit as a permanent museum.

The people of Dresden believe in health, and the administration of the city shows it.

Not only do the people of Dresden believe in health measures, including the outdoor life, but the city is especially favored with means for the exercise of the outdoor instinct. Along both banks of the river for a considerable distance is a series of baths, which would make some of our attempts in that direction appear laughable. And convenient to the city and reached by nu-



FELSENTOR, BOHEMIAN SWITZERLAND

merous small steamers and by rail is Saxon Switzerland, a region second only to the great Alpine region in interest, and affording far more convenient recreation to hundreds of city dwellers.

In Saxon Switzerland - or Bohemian

never lose his way, though he may be traveling amidst the most rugged scenery. By means of a Baedeker, the writer, though he knew scarcely a word of German, had no difficulty in finding his way.



"COME ON, THE VIEW IS FINE!"

Switzerland, for the region lies both in Germany and in Austria—nature has sculptured out hundreds of perpendicular crags and gorges; and it is here that many of the people of Dresden and vicinity take their six- or eight- or ten-mile or longer walks, according to their ambition and strength. The country is so well mapped out, and so well laid out with paths and guide signs that one need



REQUIRES BOTH NERVE AND MUSCLE

But there are those who are not content with the moderate exercise of walking. Armed with rope and staff, these scale the various rocky steeps, some of which, being comparatively easy of ascent, are attempted by the novice; others require the limit of nerve, skill, and strength for their ascent, and only the most experienced mountain climbers attempt it.

Any one who thinks he might like mountain climbing may try it by throwing a rope up over the roof of his house until it catches over the chimney or other projection, and hauling himself up hand over hand. When he has ascended in this way for about twenty feet, and probably less, he will have all he wants.

On one point the hygiene of this people fails; but, as one has said, "If one is hygienic even in spots, it will help to lengthen life." The hygienic spots of this people consist chiefly in their outdoor life and vigorous exercise. It must be admitted that they use a large quantity of beer and tobacco; and some of



IT'S WORTH THE EFFORT



A RATHER STEEP STAIRWAY

There is perhaps no exercise calling for more strenuous use of the muscles than mountain climbing, and none that, properly done, is more invigorating. Not the least factor in this invigoration is the satisfaction of having accomplished something difficult.

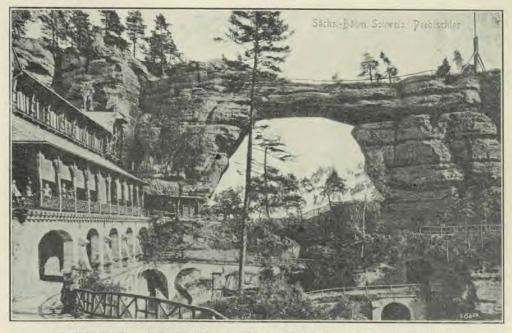
The illustrations accompanying this article are not faked, as some might think who have not been in the region where they indulge in such exercise, but they represent the work being done as a regular thing in Saxon and Bohemian Switzerland.

the most picturesque of their mountain resorts, as that of Prebischtor, have their beauty marred by great beer halls and open-air tables. One would have preferred to see this great natural bridge unmarred by the hand of man. The custom of the walkers, or of many of them, is to make convenient walks from one beer hall resort to another,— and every one of the most charming spots has its beer hall,— and water is not thought of as a quencher of thirst.

But even in Germany there is a reaction against the heavy consumption of beer, and the emperor himself has realized that if he is to have an efficient fighting army and maintain his place among the strong powers of Europe, he must discourage the habit of beer drinking. He is sensible.

In America there is opportunity at least for walking, if we but had the fashion of it. The city of Washington has its Rock Creek Park, with miles of beautiful walks, surrounded by nature in all its wildness; Philadelphia has its Fairmount Park; New York, its Central

Park, where one will find spots in which he might imagine himself in the wilds a hundred miles from a city; San Francisco, its Golden Gate Park, its ocean beach, and many other walks. If we do not have the opportunity for mountain climbing, can we not at least revive that most ancient, most respectable, and most beneficial mode of exercise — walking? Or has the motor car taken out all taste for anything so slow as walking? Or do we lack the incentive of the German walks — a beer hall every two miles?



PREBISCHTOR, A WONDERFUL NATURAL BRIDGE IN SAXON SWITZERLAND

The bridge is in a spur at right angles to the main ridge, which is to the left. From the flagstaff in the upper right-hand corner there is a sheer drop into a deep valley. Note below the path and the tunnel through the spur. To the left is the ubiquitous beer hall, which has been made an integral part of all nature's attractions in this region.



OW often does the grown-up, forgetting his own early years, bewail the degeneracy of the children of the present genera-

tions, because, forsooth, they tire so easily when they have a task assigned, but are frisky as kittens the moment they get out to play. Of course "things were different when we were boys"— accord-

ing to our treacherous memories. The fact is, the normal child is more interested in play than in work. This desire for play is instinctive. Play is one of the most potent of educative factors, and we are just beginning to appreciate it, to that extent that we are now learning that a well - conducted playground is a far better means of education physical, mental, and moral - than an indifferently conducted school. In fact, I am not sure but it ranks right alongside of



CROQUET

What the child is intensely interested in, what he concentrates his attention on, that is what is affecting the gradual change in his brain cells, nerves, and muscles, that we call education. Johnny goes through the arithmetic lesson as a task, as something foreign, in which his main interest is, perhaps, to avoid punishment; but on the playground he finds something to enlist his interest and en-

ergies, something into which he can throw his whole life. If that something can be so directed as to develop his manhood, his sense of fairness, his generosity, his sense of perception, his capacity to overcome difficulties, his ability to give and take and be a normal fellow among his fellows, he is learning what that arithmetic lesson and that spelling lesson can never give him.

When I was a boy, it was drilled into me that education makes the difference between the successful man and the unsuccessful man. Only get education, and your success is assured. I learned later that success is a matter of education, not in the sense of book learning, but of character building, the forming of what we call personality. Many a man with far less than a grammar-grade schooling has made a splendid success, and many a college graduate has made a dismal failure. Book learning of itself

is not education. But what one gets on the playground may be education of the highest sort.

As is known, the young of nearly all animals play instinctively. It is this play the kitten with the ball of twine, the puppy with the old shoe that develops muscles and nerves, strength and skill, and prepares the young animal for the more serious work of its after life.

An accompanying illustration

shows a statue of cubs playing. These little fellows go through the motions which are to stand them in good stead later, when life will depend on how well Mr. Bear can handle himself in an emergency.

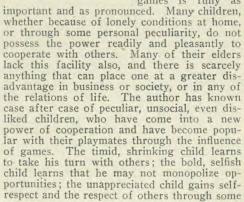
In the same way, with youth of the human species, the desire for play is instinctive, and it is as important that this instinct be met as with the young of other species.

I cannot better finish this article than by quoting the language of Jessie H. Bancroft, assistant director of physical training in the public schools of New York City, in "Games for the Playground, Home, School, and Gymnasium:"1—

"Games have a positive educational influence that no one can appreciate who has not observed their effects. Children who are slow, dull, and lethargic; who observe but little of what goes on around them; who react slowly to external stimuli; who are, in short, slow to see, to hear, to observe, to think, and to do, may be completely transformed in these ways by the playing of games. The sense perceptions are quickened: a player comes to see

more quickly that the ball is coming toward him; that he is in danger of being tagged; that it is his turn; he hears the footsteps behind him, or his name or number called; he feels the touch on the shoulder; or in innumerable other ways is aroused to quick and direct recognition of, and response to, things that go on around him. The clumsy, awkward body becomes agile and expert: the child who tumbles down today will not tumble down next week; he runs more fleetly, dodges with more agility, plays more expertly in every way, showing thereby a neuromuscular develop-

"The social development through games is fully as





Victor Peter, sculptor, Museum, Luxembourg, Paris
CUBS PLAYING

¹ The Macmillan Company, New York.

particular skill that makes him a desired partner or a respected opponent. He learns to take defeat without discouragement, and to win without undue elation. In these and in many other ways are the dormant powers for social cooperation developed, reaching the

highest point at last in the team games where self is subordinated to the interests of the team, and cooperation is the very life of the

game.

"Most important of all, however, in the training that comes through games, is the development of will. The volitional aspect of the will and its power of endurance are plainly seen to grow in power of initiative; in cour-age to give 'dares' and to take risks; in determination to capture an opponent, to make a goal, or to win the game. But prob-ably the most valuable training of all is that of inhibition -that power for restraint and self-control which is the highest aspect of the will and the latest to develop. The little child entering the primary school has very little of this power of inhibition. To see a thing

he would like is to try to get it; to want to do a thing is to do it; he acts impulsively; he does not possess the power to restrain movement and to deliberate. A large part-of the difficulty of the training of children at home and at school lies in the fact that this power of the will for restraint and self-control is undeveloped. So-called 'willfulness' is a will in which the volitional power has not yet been

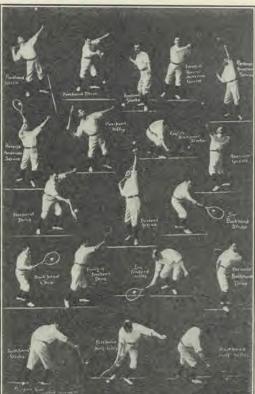
balanced with this inhibitive power. One realizes in this way the Force of Matthew Arnold's definition of character as 'a completely fashioned will.'

"There is no agency that can so effectively and naturally develop power of inhibition as

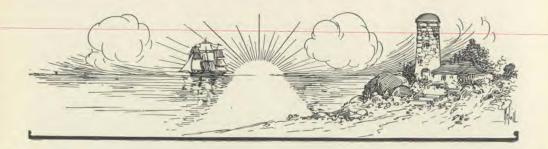
games. In those of very little children there are very few, if any, restrictions; but as players grow older, more and more rules and regulations appear, requiring greater and greater self-control - such as not playing out of one's turn; not starting over the line in a race until the proper signal; aiming deliberately with the ball instead of throwing wildly or at haphazard; until, again, at the adolescent age, the highly organized team games and contests are reached, with their prescribed modes of play and elaborate restrictions and fouls. There could not be in the experience of either boy or girl a more live opportunity than in these advanced games for acquiring the power of inhibitory control, or a more real experience in which

not be in the experience of either boy or girl a more live opportunity than in these a d vanced games for acquiring the power of inhibitory control, or a more real experience in which to exercise it. To be able, in the emotional excitement of an intense game or a close contest, to observe rules and regulations, to choose under such circumstances between fair and unfair means, and to act on the choice, is to have more than a mere knowledge of right and wrong. It is to have the trained power and habit of acting on such knowledge,—a power and habit that

mean immeasurably for character."



TENNIS





Mrs. Henry Parsons in her work of love.

SCHOOL GARDENS

Bienisto Resanigita



O capable observer will be disposed to deny that play is the normal activity and the congenial atmosphere of the nor-

mal child. Whatever else in life may interest the little one, nothing seems to take the place of play; and the adults who make a success in life are those who continue to play, who enter their work with the same enthusiasm with which the boy enters the game, and who "play the game" for all it is worth.

After all, it is not the muscular exertion which constitutes work a drudgery; a prisoner much prefers work, even strenuous work, to confinement in a cell. The more we are interested in an occupation, no matter how vigorous it may be, the more it partakes of the nature of play. And there are activities which involve a fair portion of vigorous exercise, into which children may enter with all

the zest and enthusiasm of play. A school garden, rightly conducted, is such an activity.

It would seem that the school-garden idea originated in France, for in 1880 that government started a system of school gardens, "not to teach the business of farming, but to inspire a love for the country and to develop the natural tendencies of children to become interested in flowers, birds, etc." But, notwithstanding this beautiful and practical ideal, as stated in the law, the French school gardens were principally for the use of teachers until 1902, since which time gardens for the children have been attached to the rural schools. In 1903 school gardens were started in England, largely by private philanthropy, but the work was taken up later by the department of education, and 8,300 pupils were having garden instruction in 600 day



The children also love the work. It is play for them.



The youthful gardeners are straightening their plats,



The boys are intently criticizing one another's work.

schools in 1908, and the work is on the increase in that country, and the school-garden idea is spreading to other countries.

But doubtless the real founder of school gardens for children was Mrs. Henry Parsons, who began in about 1900 her effort, in the belief that children are willing and anxious to work. The illustrations for this article, all of which were furnished to the writer by Mrs. Parsons, show that the child may be as enthusiastic with the hoe and watering pot as he is with marbles, volley ball, or skates.

Mrs. Parsons also believed, and demonstrated, that such virtues as private care of public property, economy, honesty, application, concentration, self-government, civic pride, justice, the dignity of labor, and the love of nature may be taught in the school garden. She also demonstrated that the school garden is one of the best preventives of tuberculosis, and that it may even cure tuberculosis that has not made too serious inroads on the body. She says:—

"The excitement of games or mechanical apparatus will often lead children and adults far beyond their physical endurance. Manual labor, when not compulsory, never does. . . .

Few persons realize that a child's backache, flushed face, and unnaturally bright eyes are to be considered seriously. The healthy child is never lazy. It may have its likes and dislikes regarding certain kinds of occupation, but it is generally prone to perpetual motion, and oftentimes its occupations must be planned in order to keep it from too intense a strain.

"A properly conducted children's garden, by its very method of spading, planting, marking the plots, hoeing, raking, weeding, watering, develops every part of the body, straightens the back, broadens the chest, and encourages deep breathing, without any verbal suggestion that it is wise and best for the child's health that it should do these things."

She says of the De Witt Clinton Park school garden, a plot of ground 135 x 250 feet in size, pictures of which are shown in connection with this article, that "there is more happiness to the square inch in this piece of ground than anywhere else in the world." This may seem to be rather an enthusiastic statement, but the pictures appear to bear her out. Of the thousands of children and adults who have had the benefits of these gardens, quite a large number have been crippled children.

The movement inaugurated by Mrs. Parsons — for the real children's gardens in Europe came after hers — has

grown until now there are such school gardens all over the United States and our island possessions.

The school garden is not necessarily a ten-acre lot, or even a one-acre lot; it may be a window box when no other opportunity offers, though the window box does not give the advantage of the outdoors. In the ideal school garden, each child has a plot which he can feel is all his own, and where nature may teach him by rewarding his care and intelligence, and by admonishing him by loss when he is careless. Here he works; here he takes pride in making his precious seedlings develop, if possible, more sturdily than those of his fellows.

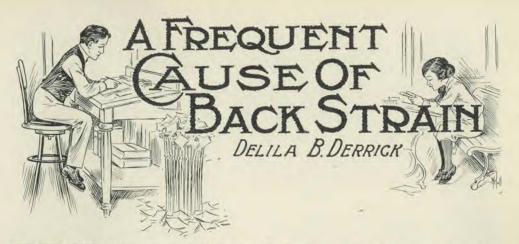
In some places the school gardens have developed into real social centers, and in this way they have increased their usefulness. There can be no question that the school garden properly conducted makes for better health, higher efficiency, greater intelligence, a more industrious spirit, a love for the beautiful, and a strong civic pride. The school garden is, without doubt, a most important educational factor.

An authoritative book on the subject is "Among School Gardens," by M. Louise Greene, M. Pd., Ph. D. (Yale), issued for the Russell Sage Foundation by the Charities Publication Committee, New York. It contains references to numerous other books.

Among free booklets on the subject are Farmers' Bulletins, No. 218, "The School Garden;" No. 134, "Planting in Rural School Grounds." These may be obtained by sending a postal card request to the Secretary of Agriculture, Washington, D. C.



Mental as well as physical development.





FEW years ago a crusade was raised in some of our public schools against the "cruel" practice of letting little children

sit for hours in schoolrooms with the feet hanging midway from the floor.

Physicians who had been consulted said the habit of letting the lower limbs hang unsupported was a frequent cause of weak and painful back, since practically the same muscles which pass through the lower limbs extend up through the back, and when these muscles become stretched or strained there is a corresponding strain on the back.

The weight of the lower limbs is a strain on the lower portion of the back, which tends in time to weaken the delicate vital organs in sympathy. Such marked stress was laid upon this point that the writer remembers that in some schools little children were not permitted to sit during recitation with the feet hanging, but were provided with a low bench, which was pushed back when older pupils sat on the high bench to recite.

A local paper commenting on the subject stated that the habit of doubling up and hanging the heels over the rung of a high stool did not entirely relieve the strain, since the position is an unnatural one, and some employers in factories were acting in harmony with the light given and were providing foot supporters for their employees. It said that a number of the breakdowns among bookkeepers and office clerks could be traced to the

back strain and attendant nerve strain due to improper positions in sitting,

"If you do not believe that sitting with feet unsupported will cause a backache," said the writer, "just try sitting on a high stool with feet dangling until the back is aching painfully, then change to a position with feet firmly planted on terra firma, and see if it does not relieve the backache within a few hours. It is more important to have a support for the feet than a rest for the back. An employee with the backache is ilk."

To secure the best results from the working of the hands, the feet should be thrown out comfortably in front. If it is necessary to sit on a high stool, there should be a foot rest at the proper height.

In some factories there is a narrow board placed under the high tables on which to rest the feet. The writer has observed that where factory employees have this provision for their comfort, there is comparatively little complaint from the above-mentioned affliction; while in factories where no such provision is made, the complaints are frequent and even distressing. A cramped position not only interferes with the working of the hands, but retards the circulation, and lessens the brain activity.

To relieve the strain entirely while leaning back in a chair, the foot rest should be of such a height that the lap may be level. If the above simple precautions were observed, there would be less complaint from this painful affliction than at present.



MENUS FOR A WEEK IN MAY

George E. Cornforth

ARD breads, such as zwieback, and one or more kinds of unfermented bread, like rolls, sticks, and beaten biscuit, should always be kept on hand so as to be ready for any meal, when needed, without the necessity of making them especially for that meal, and something of this kind should be on the table, whether mentioned on the menu or not.

Recipes are given for those dishes on the daily menu which are marked by a superior 1.

To simplify the menus, omit either the article in () or the one in []. For the sixth dinner, the asparagus soup may be omitted and an asparagus sauce made for the walnut loaf.

Lentil Toast

Rub one cup of stewed lentils through a colander. Cook one teaspoon chopped onion and one teaspoon flour in two teaspoons oil till the flour turns brown, then mix it with the

lentil pulp and add sufficient hot water or part tomato juice to thin to the consistency of gravy. Salt to taste and heat in a double gravy. boiler. Serve over slices of zwieback which have been dipped in hot cream,

Grapefruit With Maple Sirup

Prepare grapefruit for the table as usual by cutting into halves and removing the heart and the membranes which divide the fruit into sections, leaving the sections of pulp in place in the skin. Fill the center with maple sirup and serve, or set in the refrigerator for a few minutes before serving.

Nut Cheese and Potato Pie

21 cups sliced potato

d cup sliced onion

I cup diced nut cheese (a recipe for making nut cheese has been given in LIFE AND HEALTH)

I teaspoon browned flour

2 teaspoons oil

to I teaspoon salt

teaspoon sage, if desired

Early in the forenoon put the potato and onion to cook in sufficient water to cook them. Simmer very slowly for about two hours, then add the nut cheese, the browned flour and oil, which have first been mixed together, the salt and sage.

First Day

DINNER

Cream Corn Soup Nut Cheese and Potato Pie ¹ Spinach with Egg and Lemon Gral Bavarian Cream with Jelly ¹ Graham Bread

BREAKFAST

(Wheat Meal Mush) Cream or Milk Lentil Toast 1

Baked Potatoes [Rye Puffs] Grapefruit with Maple Sirup 1

SUPPER

Spinach Cream Broth 1 Cottage Cheese Graham Bread Washington Cream Pie 1

Second Day

BREAKFAST

Rice Griddlecakes with Maple Sirup (Blueberry Toast) Hashed Brown Potatoes Graham Beaten Biscuit [Grape Juice]

SUPPER

Nut and Date Sandwiches Buttermilk Zwieback Canned Plums

Pea Chowder
(Browned Macaroni with Cream Sauce)
[Brazil Nuts]
Graham Bread Lettuce Mayonnaise

While the potatoes and onion are cooking, the following crust should be in preparation: -

Crust for Nut Cheese and Potato Pie

Early in the forenoon set a sponge of

I cup warm milk

decake yeast, dissolved in the milk

2% cups sifted pastry flour

When this sponge is light, which will bein about two hours, add the following to make a dough

3 tablespoons oil

1 teaspoon salt

I teaspoon sugar

I to 11 cups sifted pastry flour

Mix thoroughly. Let rise. This should be light by the time the filling for the pie is prepared. Put the filling into the pan in which the pie is to be baked. Roll out the dough one-half inch thick. Cut into biscuit and place the biscuit close together on top of the pie filling. Set the pie in a warm place for the crust to rise. When the crust is light, bake in an oven which bakes well from the bottom. If there is more dough than is needed to cover the pie, the rest may be baked as biscuit.

Bavarian Cream

Put one-fourth ounce gelatin to soak in about four quarts hot (not boiling) water. After one hour's soaking, turn through a colander to drain off the water. Put to soak again in about four quarts hot water. In onehalf hour drain and put to soak again in the same quantity of fresh hot water. After fif-teen minutes, turn into a colander again and drain thoroughly. Put this soaked and drained gelatin into a double boiler and, without the addition of any water, cook in the double boiler till it dissolves. After it becomes partly dissolved, it may be necessary to cook it for a moment directly over the fire to completely dissolve it. While the gelatin is soaking, the following should be prepared:-

Heat together in a double boiler

4 cup milk

cup sugar

Beat 2 egg yolks with

d cup sugar and

teaspoon salt

Mix some of the hot milk with the volks, then stir the yolks into the hot milk and cook till the mixture coats a silver spoon dipped into it. Remove from the stove and strain the dissolved gelatin into it. Set aside to cool.

When warm fold into it

I cup cream, whipped

I teaspoon vanilla

Turn at once into individual molds wet with cold water. When cold, turn out of the molds and serve a teaspoon of jelly with each mold.

The spinach cream broth for the first supper is made with the water in which the spinach for dinner was cooked, by simply adding salt and cream to season, and heating. If the broth is too strong, it may be necessary to dilute it with water.

Washington Cream Pie

Bake sponge cake in layers and use the following filling between and on top of the layers: -

Filling

1½ tablespoons cooking oil

d cup sifted flour

å cup sugar

I teaspoon vanilla

A few grains salt

I pint milk

2 eggs

Third Day

DINNER

Cream Peanut Soup

Stewed Kidney Beans Asparagus on Toast Baked Potatoes White Bread

Cornstarch Blancmange with Banana Dressing 1

BREAKFAST (Puffed Wheat) Cream or Milk Poached Egg on Toast Potatoes [White Puffs] Stewed Potatoes Bananas Apple Sauce

SUPPER

Johnnycake and Milk ¹ Date Rolls

Cereal Coffee Jelly with Whipped Cream 1

SUPPER

Barley Gruel 1 Cream Sticks (Lettuce with Lemon) Plain Buns [Prune Whip 1]

Fourth Day

BREAKFAST

(Farina) Cream or Milk Egg Gravy Toast otatoes [Johnnycake 1] Browned Potatoes Prune Marmalade

DINNER (Kidney Bean Soup 1) [Corn Pudding]

Mashed Potatoes Asparagus Salad Oatmeal Bread Rhubarb Pie 1

Heat the oil and flour together. Stir into them the milk, which has been heated with the sugar. Cook in a double boiler till thickened. Stir some of the hot mixture into the beaten eggs, then stir the eggs into the hot mixture. Cook two or three minutes. Then add the salt and vanilla.

Coconut Cream Pie

Bake the crust for this pie on the bottom of an inverted pie tin, then remove the crust from the bottom and put it on the inside of the plate. The crust should be pricked before baking, to prevent it from blistering.

Cream Pie Filling

2 cups rich milk
½ cup shredded coconut
½ cup sugar
½ cup sifted flour
2 eggs
A few grains salt

Save out one-fourth cup of the milk with which to stir the flour smooth. Steep the coconut in the remainder of the milk for one-half hour. Strain out the coconut, pressing it well to get out all the goodness. Measure the milk, and if it is less than the original quantity (one and three-fourths cups) add milk to make that amount and return it to the double boiler. Add the sugar to it and reheat. When boiling hot, stir into it the flour, which has been stirred smooth with the one-fourth cup cold milk. Allow the mixture to cook ten minutes. Separate the whites from the yolks of the eggs. Beat the yolks. Stir into them a little of the hot milk mixture, then stir the yolks into the hot mixture. Cook two minutes. Add the salt. Pour into the baked crust. Put a meringue on the pie, made of the whites of the eggs and one and one-half tablespoons sugar.

Cornstarch Blancmange

ī qt. milk ½ cup sugar ½ cup cornstarch 1-6 teaspoon salt

Put three and one-half cups of the milk and the sugar and salt into a double boiler to heat. When boiling hot, stir the cornstarch smooth with the one-half cup of cold milk, and stir it into the hot milk in a fine stream, whipping the hot milk well as the cornstarch is poured in. Allow it to cook one hour. Pour into one large mold wet with cold water or into individual molds.

A batter whip is most convenient to whip the cornstarch into the milk with. The long cooking of this dessert takes away the cornstarch taste which it will have if cooked only till it is thickened.

When cold, the blancmange is ready to serve and should be removed from the mold and served with cream or —

Banana Dressing

2 tablespoons cooking oil
1 round tablespoon flour
Heat together in a double boiler. Add
1 cup hot milk. Cook till thickened. Add
2 teaspoon salt
3 cup sugar
Yolks of 2 eggs
Cook two minutes. Cool. Add
2 bananas rubbed through a colander
1 cup cream, whipped

Barley Gruel

degree control of the control of the

Add one-half teaspoon salt and cook the barley in the water in a double boiler for four or five hours. Rub the barley through a colander. Add hot milk to make of proper consistency for gruel. Add more salt if necessary.

Fifth Day

DINNER P

Split Pea Soup Creamy Rice Whole Wheat Bread Pulled Bread ¹ Stuffed Cherry Salad ¹ Baked Indian Pudding ¹

BREAKFAST

(Toasted Corn Flakes) Cream or Milk Creamed Nut Cheese on Toast Baked Potatoes Canned Pears

SUPPER

Blueberry Toast

Cottage Cheese Whole Wheat Bread

Coffee Cake

Sixth Day

BREAKFAST

(Malt Breakfast Food) Cream or Milk Steamed Eggs Cream Baked Potatoes [Whole Wheat Unfermented Rolls] Canned Hawaiian Pineapple

SUPPER

Egg Sandwiches Bran Tea ¹ (Shred Lettuce with French Dressing) Beaten Biscuit [Rhubarb Sauce¹]

DINNER

Cream Asparagus Soup
Walnut Loaf with Gravy
Steamed Potatoes in Jackets String Beans
Whole Wheat Bread
Orange Jelly with Coconut Sauce 1

Prune Whip

Remove the stones from stewed prunes and rub a sufficient quantity through a colander to make one pint of prune pulp. Add one-eighth teaspoon salt, one-fourth cup sugar, and one-half teaspoon vanilla. Beat two egg whites stiff (use the egg whites left from the banana dressing). Beat the prune pulp into the beaten egg whites, and continue to beat till the mixture is light and stiff.

Tohnnycake

A recipe for johnnycake was given in LIFE AND HEALTH some time ago, but we offer this as a decided improvement over the former recipe:-

In the evening set a sponge of

2 cups lukewarm milk

r cake compressed yeast dissolved in the milk

3 cups sifted bread flour lightly measured

In the morning add the following ingredients to make a dough

i egg, beaten d cup lukewarm milk

3 cup sugar

2 teaspoons salt

3 cup half cooking oil and half crisco

23 cups corn meal

Mix well. Pour into a pan in which it will be about three-fourths inch deep. Let rise not more than one-fourth inch. Bake.

The kidney bean soup for the fourth dinner is made from the stewed kidney beans left the day before.

Rhubarh Pie

If the rhubarb is young and tender, having a tender skin, it will not be necessary to peel it.

Wash the stalks well and cut them into one-half inch pieces. Mix together

7 cup sugar 2 tablespoons flour Mix these with

(Cream of Wheat)

Raised Doughnuts

Cottage Cheese

2 cups of the prepared rhubarb.

Line a pie tin with crust. Put the rhubarb mixture into the crust. Sprinkle a few grains salt over the pie. Cover with the top crust, in which a few perforations have been made. Press the edges firmly together. Bake in a moderate oven. If the oven is too hot, it will cause the juice to run out of the pie.

The johnnycake which is left from breakfast the fourth day is used for supper.

Cereal Coffee Telly

I pt. water

a cup dry cereal coffee

d cup sugar

doz. vegetable gelatin

A few grains salt

Prepare the vegetable gelatin as was described in the recipe for Bavarian cream. Simmer the coffee in the water twenty min-utes. Strain. Add water to make one pint. When the gelatin is drained the third time, put it into the pint of coffee and cook it till it dissolves. Strain. Add the sugar and salt. Pour into individual cups wet in cold water. If desired, a stoned date and an English walnut meat may be dropped into each cup. When cold remove from the cups and serve with whipped cream or plain cream.

Baked Indian Pudding

In a double boiler heat

1 qt. rich milk, Stir into it

3 round tablespoons corn meal 3 round tablespoons flour which have been mixed together.

Cook, stirring, till the milk is thickened, then add

d cup sugar

d cup cold milk

‡ cup molasses

1 cup raisins

I egg, beaten

1-6 teaspoon salt

teaspoon ground caraway seed, if desired

Mix well. Turn into a pudding dish. Set the dish into a pan of water in the oven, cover, and bake three hours. At the last the pudding may be removed from the water and baked with the cover off to brown the top of the pudding slightly. Serve plain or with cream or whipped cream or with apple juice hoiled down with sugar to a thick sirup, using two cups sugar to one quart of apple juice.

(Concluded on page 228)

Sabbath

DINNER.

Cream Pea Soup Saged Macaroni 1 Egg Mayonnaise Stewed Figs with Whipped Cream Fruit Bread

BREAKFAST

Cream or Milk Dry Toast Canned Raspberries SUPPER

Molded Cream of Wheat with Bananas and Cream Tea Rolls Honey

ED TOR AL

NATIONAL FIGHT FOR HEALTH

HAVE been asked to give my idea of the national fight for health. It is rather a large subject, and yet the principles may be somewhat briefly stated. The national fight for health is a gigantic, cooperative effort in which units, varying in size from the individual to the nation, are interested, and for which they are all to a degree responsible.

Let us begin with the individual and the family. There is a hygiene that pertains to the individual and a hygiene that pertains to the family, and unless both are observed, the best results cannot be obtained. One individual in the family may be careful regarding his health, but if the head of the family and the family as a whole are careless regarding sanitary requirements, the careful individual will suffer with the others as a consequence. On the other hand, in a well-regulated family where the practice of hygiene and sanitation, ventilation, plumbing, good housekeeping, etc., have their proper consideration, if some one individual exposes himself to infectious disease, or is otherwise careless, the welfare of the entire family may be compromised. For the best interest of the family and each individual, there should be some one at the head who can instruct in hygiene, and who has the authority to enforce as well as to instruct.

The same relation exists between the family and the town. No matter how careful a family may be, if the authorities allow stables and flies everywhere; if they do not have a proper water and milk supply, and an adequate sewer system, the family will not do so well. On the other hand, if the town has efficient health officers and they are upheld in what they do by the community in general, so that the sanitary code is properly administered, and there is one family which is opposed to all attempts to live hygienically, that one family might endanger the whole town.

Here, again, there should be some authority which can properly instruct citizens regarding public health measures, and which, if necessary, can by force protect the town against vicious persons or careless families who would expose it to disease.

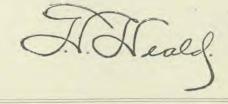
We have this same relation between the town and the State. A town may be properly administered healthwise, but if the State is lax in its health-laws, the town will suffer. On the other hand, if the State has efficient health laws properly administered, and there is one town which is a back number and allows smallpox and diphtheria and other diseases to run rampant, that town will endanger the State.

So, again, there should be an agency in the State which can organize and instruct the health agencies of the local communities, and which, if necessary, can take measures to protect the rest of the State in case some town or district is so backward that it will not look after its own health conditions.

Taking one more step, we have the same relation between the State and the

nation. There is a certain amount of health work that is between States and which cannot be under the control of individual States, such as the regulation of interstate railways, international quarantine, and the like; such work must be under the general government. If the general government is not efficient in its work, a State, no matter how careful it may be, will not be able to protect itself entirely against the carelessness of other States or of foreign countries. On the other hand, no matter how excellent the national health organization is, if there is some State that permits yellow fever or smallpox or malaria to run rampant, it would be very difficult to keep such epidemics inside State lines; notwithstanding all the national government might do, the near-by States and perhaps distant States would be endangered. So the national government has a duty in instructing in hygiene, and it also must exercise authority as between States and between this country and foreign countries.

Thus the health question is one that concerns the individual, the family, the town, the State, and the nation. And every one of these units should cooperate in its sphere for the preservation of health; and to the extent that any one of these does not cooperate, to that extent we do not have an ideal condition of disease prevention.





Disease A FEW years ago a Transmission well-known tuberculosis specialist, having a temporary cough, and partly to educate the people to cleanly habits, carried a small sputum cup, such as are advised for the use of tuberculosis patients, and expectorated into it in the street car. Immediately the passengers on each side of him edged away as if he were a leper. Had it been a man with actual tuberculosis, and had he spit on the floor, they would probably have thought nothing of it.

This incident, showing how irrational people are apt to act in their attitude toward disease, is related to preface the account of an incident that occurred in a town in a civilized country, not a thousand miles from the United States.

A child just returned from a visit to another place, had died of diphtheria. A number of people had been exposed before the nature of the disease was known. All contacts, so far as they were known, had been inoculated with immunizing doses of antidiphtheritic serum. The question arose as to whether the local school should be closed. All the physicians who were consulted, and the local health officer, gave it as their opinion that nothing would be gained by closing, the opinion being expressed that un-

less particular care were exercised in the oversight of the pupils during their play there would be more danger than in the school, where it is customary to exercise care regarding common towels, concerning drinking cups, etc. Nevertheless, the school was closed for a week. There were no secondary cases, which probably some may attribute to the fact that the school was closed.

Doubtless these same persons who were insistent on closing the school are sometimes careless about allowing their children to drink out of public cups, notwithstanding the fact that live virulent diphtheria bacilli have been found on such cups. It is not impossible that the little girl who met her death from diphtheria mysteriously contracted, got it from a public cup.

This instance is given to illustrate the fact that people do not, in attempting to prevent disease, act in accordance with wisdom.

Regarding diphtheria transmission, the following from Dr. Chas. V. Chapin, superintendent of health of Providence, R. I., a man who has spent almost a lifetime in the study of this subject, is worthy of consideration:—

"As regards diphtheria there is also most convincing evidence that it is not air-borne, even indoors."

He then goes on to relate how in various hospitals diphtheria cases are kept in the same ward with patients having other diseases, with only a card on the bed cautioning the nurse to be especially careful. Only very rarely is there in such cases a transmission of the disease to others, and then it may be through the nurse. In one case there were 126 diphtheria cases and 130 carriers and no transmission to 541 other patients. In Liverpool from 42 diphtheria patients there were no transmissions to 600 others in the open ward. In 1,200 other cases there were only two infections. The very rare cases of infection may in such a case be better explained by the nurse carrying it than by the theory that the disease is air-borne; for an air-borne

disease would doubtless cause more infections.

Again, it should be realized that the heavy incidence and fatality of diphtheria is rather under the school age, and the presumption is that schools, especially those properly conducted, do not favor the transmission of diphtheria and similar diseases.

If swapping gum, exchanging pencils, using common drinking cups, common towels, and common basins, and other measures by which persons exchange saliva, could be abolished from the schools, these would become, like the Canal Zone, a mighty safe place to be.

The great difficulty is to get the people to drop their old prejudices. It was not so long ago that typhoid, malaria, yellow fever, and practically all diseases were supposed to be carried in some mysterious way by the air. So far as we have learned anything definite regarding diseases, it is that they are not borne by means of air but in some other way. And the presumption is that gradually we will learn that the air is not an important means of transmission of any disease, with the possible exception of tuberculosis and anthrax.

佐 佐 佐

The Spread of Among the laity Infectious Diseases there is a notion that infectious disease is spread in some mysterious manner, like a fatal miasma; that coming into the presence of an infected person may cause the disease. At the same time they wonder why it is that physicians who daily come in contact with such diseases, usually escape. The reason for this seeming immunity is that physicians have learned to avoid the disease by being clean in their habits. Practically all disease transmission is the result of uncleanly habits; and, when we come to think of it rightly, of disgusting The following from Chapin, quoted in Rosenau's "Preventive Medicine and Hygiene," shows how these all too common uncleanly habits facilitate the spread of diphtheria, scarlet fever,

measles, and other diseases whose germs incubate in the mouth, throat, and nose: -

"Not only is the saliva made use of for a great variety of purposes, and numberless articles are for one reason or another placed in the mouth, but, for no reason whatever, and all unconsciously, the fingers are with great frequency raised to the lips or the nose. Who can doubt that if the salivary glands secreted indigo, the fingers would not continually be stained a deep blue; and who can doubt that if the nasal and oral secretions contain the germs of disease, these germs will not be almost as constantly found upon the fingers? All successful commerce is reciprocal, and in this universal trade in human saliva the fingers not only bring foreign secretions to the mouth of their owner, but there, exchanging it for his own, distributes the latter to everything that the hand touches. This happens not once, but scores and hundreds of times, during the day's round of the individual. The cook spreads his saliva on the muffins and rolls, the waitress infects the glasses and spoons, the moistened fingers of the peddler arrange his fruit, the thumb of the milkman is in his measure, the reader moistens the pages of his book, the conductor his transfer tickets, the 'lady' the fingers of her glove. Every one is busily engaged in this distribution of saliva, so that the end of each day finds this secretion freely distributed on the doors, window sills, furniture, and playthings in the home, the straps of trolley cars, the in the home, the straps of trolley cars, the rails and counters and desks of shops and public buildings, and, indeed, upon everything that the hands of man touch. What avails it if the pathogenes do die quickly? A fresh supply is furnished each day. Besides the moistening of the fingers with saliva and the use of the common drinking cup, the mouth is put to numberless improper uses which may result in the spread of infection. It is used to hold pins, string, pencils, paper, and money. The lips are used to moisten the pencil, to point the thread for the needle, to wet postage lips are used to moisten the pencil, to point the thread for the needle, to wet postage stamps and envelopes. Children 'swap' ap-ples, cake, and lollipops, while men exchange their pipes and women their hat pins. Some-times the mother is seen 'cleansing' the face of her child with her saliva-moistened hand-kerchief, and perhaps the visitor is shortly after invited to kiss the little one.

after invited to kiss the little one.

"Children have no instinct of cleanliness, and their faces, hands, toys, clothing, and everything that they touch must of necessity be continually daubed with the secretions of the nose and mouth. It is well known that children between the ages of two and eight years are more susceptible to scarlet fever, diphtheria, measles, and whooping cough than at other ages, and it may be that one reason for this is the great opportunity that is afforded by their habits at these ages for the transfer of the secretions. Infants do not, of course, mingle freely with one another, and older children do not come in close contact in their play, and they also begin to have a little idea of cleanliness."

In addition, the worker in the dairy, if he is a diphtheria "carrier," may contaminate the milk and spread diphtheria over the milk route. There are so many ways that, through our uncleanly habits, the germs may be transmitted from mouth to mouth, that it is fortunate indeed for us that most of the disease germs live for only a short time outside of the body. A little drying, a little exposure to sunlight, kills many of them.

堤 堤 堤

Tuberculosis UNDER this caption No Longer the April LIFE AND a Bugaboo HEALTH had an article giving briefly the protest of Dr. Edward R. Baldwin, of Saranac Lake, against the general fear of tuberculosis, and ending in the statement, "The writer is inclined to think that Baldwin's statement contains only a part truth, and it would not be wise to take his propaganda too literally." The following is the essential part of Baldwin's conclusion: -

"Qualify these statements as we may, it is time for a reaction against the extreme ideas of infection now prevailing. There has been too much read into the popular literature by health boards and lecturers that has no sound basis in facts, and it needs to be dropped out or revised. More protection for children and better hygiene for adults are logically demanded, but beyond this the preachments about the danger of infection to adults in the present state of society are without justification from an *experimental* standpoint."

Baldwin's purpose was right. There is always a danger that the people (and physicians also) will fall into one of two errors,- either they will not take proper precautions regarding tuberculosis and will unnecessarily expose well people to the danger of infection, or they will have an attack of phthisiophobia, shun the consumptive as if he were a leper, and increase a hundredfold his already heavy burden of trouble. Baldwin desired to warn against this phthisiophobia, and in doing so may have led some to fly to the other extreme.

A recent issue of Public Health Reports discusses Baldwin's article, which it says the public largely misconstrued, and quotes a statement from Baldwin showing that Baldwin himself believes that exposure of adults to consumptives is not absolutely without danger, but only relatively so as compared with the exposure of children.

Public Health Reports then gives the result of some investigations by Herbert G. Lampson, in Minneapolis, from which

Lampson concluded that -

"the spread of tuberculosis infection in families where open cases of tuberculosis exist is greater than it is generally supposed to be. In no case where there has been definite proved exposure of a family to an open case of tuberculosis, no matter what precautions have been taken, have I failed to find a spread of infection."

This is certainly a gloomy view, especially the expression, "no matter what precautions have been taken," and would indicate that tuberculosis is certainly and surely infectious at close quarters irrespective of what precautions are taken. But, so far as the writer has seen, Lampson does not indicate that this secondary infection in families is among the adults; and, moreover, there is nothing to indicate that there is not something in the heredity and the general method of living of the families studied which makes them peculiarly susceptible to the disease. While we do not want under any case to take unnecessary risks, such as to have a well person sleep with a victim of open tuberculosis, we want to realize that tuberculosis is not so surely contagious as is indicated by Lampson, else we would expect that after a case of open tuberculosis had developed in a family, practically all the rest of the family would be doomed to die of tuberculosis. I feel certain, for one, that this would be an extreme view.

提 提 提

The Cow and Mr. ROBERT MOND has made a series of investigations at his experimental farm and also at the infants' hospital (London, England) from which he concludes that tuberculosis is not conveyed by cow's

milk to man, and that sterilized and condensed milk is a danger to infants fed on it. At the infants' hospital, according to him, children fed on milk from cows which afterward were shown to be tuberculous did not develop tuberculosis, and, on the other hand, infants fed on condensed milk, guaranteed to be free from tubercle bacilli, developed bovine tuberculosis. Kittens fed on sterilized milk died in a week. Mr. Mond drank milk from tuberculous cows in large quantities and thrived on it. He calls attention to the fact that those who advocate sterilizing milk overlook butter, which is just as likely to be contaminated with tubercle bacilli as milk. He believes that it is the unsterilized cream or the butter added to the dietary of those fed on sterilized milk that saved their lives.

Possibly, Mr. Mond takes a somewhat extreme view; but perhaps it is necessary as against the view that has held in the past of the great danger of tuberculous milk.

Sir Almoth Wright, discussing the views of Mond, stated that he had demonstrated that when milk is boiled the calcium and magnesium salts are thrown down to the bottom of the vessel, and that if a drop of acid be added, the lime salts are again dissolved.

Wright thinks we are making too much of exclusion of infection. It is impossible to exclude all chance of infection. The well-fed, well-nourished child has powers of resistance which constitute its best protection, according to Wright.

烂 烂 烂

Treatment Public Health Reof Malaria ports, Jan. 23, 1914,
gives an abstract of a report in the Journal of the Royal Army Medical Corps
(London) in which the writer, Major
F. W. Lambelle, gives his experience in
China showing that quinine is not a specific in malaria, the relapses being frequent after quinine treatment, patients
returning to the hospital deaf from the

quinine, ill with fever, and showing parasites in the peripheral blood.

He tried the method suggested by Beard, of using the pancreatic ferments, trypsin and amylopsin, injected in careful dosage into the muscles of the buttock. The ferments diffuse slowly from the tissue, and there is some local edema for twelve to twenty-four hours, but very little local pain. In cerebreal cases, the headache vanishes, the restlessness ceases, the skin becomes moist, the temperature falls, the patient's aspect is totally changed in a few hours, and he feels fresh and looks bright. As a rule, a single injection is sufficient to clear the peripheral blood of parasites. In severe infections, three injections, given at intervals of about four days, are believed by the author to be necessary to effect a cure. He repeats the injections until the enzyme itself causes a rise in the patient's temperature. This usually occurs with the third injection. No relapses were recorded in cases in which the treatment was given in this way.

災 災 災

Treatment DR. GEO. M.-NILES, of Pellagra of Atlanta, Ga., in the Journal A. M. A., January 24, gives a somewhat hopeful view of the prognosis in pellagra, and, as a result of his experience, gives some suggestions for treatment.

He finds, in an experience covering six hundred cases, four classes in which "the prognosis should be extremely guarded," that is, they are apt to end unfavorably. They are: Persons over fifty years of age; alcoholics; patients with marked mental symptoms; and those who capriciously veer from one plan of treatment to another.

"On the other hand, if the patient is under fifty, and has sufficient intelligence and perseverance to adhere to a fixed line of treatment, and will faithfully cooperate with the physician, a permanent cure may be expected in the majority of cases."

He finds that alcoholic beverages in any amount seem to be highly detrimental, and that sunlight should be

avoided during the spring and summer months. The sufferers do better in a cold environment.

In prescribing a diet, he prohibits corn products unless he knows that the corn is fresh and has undergone no heating. This, as a concession to those who believe in the corn theory. Aside from this he does not believe in a too-limited regimen. When there is diarrhea, he does not advise the use of woody or coarse vegetables. He finds that flesh proteins are especially well borne. Sweet milk is valuable if it does not cause flatulence and distress. He does not believe in the routine prescription of large amounts of milk and eggs. Fresh or artificially soured buttermilk is always suitable. When constipation is present, he advises oatmeal, tender vegetable purees, thoroughly baked Irish potatoes, and cereals with little sugar. He believes that it is wise in pellagra to nourish the body to the limit.

He goes carefully into his method of medication, which I shall not reproduce; suffice it to say that it is arsenic (iron arsenite and Fowler's solution) for the general condition, with special remedies for diarrhea, constipation, sore mouth, rash, etc.

况 况 况

The Effect of Coppered Foods referee board have been making careful experiments to determine the effect on animals and man of foods colored with copper. Their findings are given in the U. S. Department of Agriculture Report No. 97. The studies were made in various laboratories, some on animals, some on healthy young men ("poison squads").

It would seem that in none of the experiments was it determined that the quantity of copper ordinarily taken with food could be definitely shown to be unmistakably injurious in the time covered by the experiments, which in some cases extended over a period of three or four months. But it was shown that a certain portion of the copper was retained in

the body; and on this fact Taylor, one of the observers, remarks: -

"I do not believe such a retention of a heavy metal can be a negligible matter even in the complete absence of present symptoms referable thereto; the whole tenor of the pharmacology of the heavy metals is contrary to such an interpretation. . . Under these circumstances the ingestion of vegetables colored with copper constitutes a menace to health."

Long, another of the observers, believes, as a result of his work —

"that it may be difficult to feed enough peas—and this may be even more truly the case with certain other vegetables—to ingest copper in amount sufficient to produce a harmful action, as shown by clinical and metabolism observations."

"On the other hand," he continues, "it is certainly true that copper sulphate as ingested with milk or beer through periods of some weeks is far from being harmless or free

from easily observed effects."

Chittenden concludes from his work that —

"when coppered vegetables are eaten with the food, a certain proportion of the copper is absorbed and may be temporarily deposited in the liver. Even when taken in small amounts, copper ingested in this way is prone to be absorbed in some degree, and thus constitutes a menace to good health. The conclusion seems obvious that vegetables which have been greened with copper salts are adulterated, because they contain an added or deleterious ingredient which may render such articles of food injurious to health, whether taken in large quantities or in small quantities."

It was also brought out that by the use of copper salts, inferior vegetables can be made to appear as of better quality.

This careful work which has consumed months has not given anything very definite regarding the effect of the copper salts on the system when taken in the small quantities used in coppering vegetables, but so far as it goes, it confirms our fears that coppering vegetables is a process which should not be permitted.

MENUS FOR A WEEK IN MAY

(Concluded from page 221)

Pulled Bread

Take a loaf of bread from the oven when it is about half done, and lightly pull it into pieces about the size of an egg. Put these ragged pieces onto a baking pan and bake them slowly till thoroughly dry and lightly browned throughout.

Stuffed Cherry Salad

Remove the stones from canned or fresh cherries and fill the cavities with pieces of any kind of nut, perhaps pecans are nicest. Place the stuffed cherries on a bed of lettuce leaves and put over them mayonnaise with which a little whipped cream or plain cream has been mixed.

Orange Jelly

4-5 cup orange juice 4-5 cup cold water

3 tablespoons lemon juice

doz. vegetable gelatin, cooked in 1 cup water, after it has been prepared as usual by soaking and draining

1 teaspoon salt 2 cup sugar

Mix together the orange juice, cold water, lemon juice, salt, and sugar, and strain into it the dissolved gelatin. Turn into molds wet with cold water. When cold, turn from the molds and serve with coconut sauce.

Bran Tea

Sift bran to remove the flour and fine particles. Steep one cup of the sifted bran in one quart water for thirty minutes, Strain. Serve with cream. Bran tea contains some of the valuable mineral elements of which we are deprived by the use of white bread.

Rhubarb Sauce

Prepare the rhubarb in the same way as it was prepared for the rhubarb pie. Put it to cook in hot water, using only enough water to cover about one third of the rhubarb. Heat slowly so as not to scorch, and cook till tender, which will require only a few minutes after it begins to boil. When tender, remove from the stove and add sugar to taste.

In cooking rhubarb, as in cooking any kind of acid fruit, it will be found that less sugar is required to sweeten it if the sugar is not cooked with it.

The saged macaroni for Sabbath may be prepared the day before and warmed up. It is simply boiled macaroni put into peanut gravy which has been seasoned with sage.



Questions accompanied by return postage will receive prompt reply by mail. It should be remembered, however, that it is impossible to diagnose or to treat disease at a distance or by mail. All serious conditions require the care of a physician who can examine the case in person.

Such questions as are considered of general interest will be answered in this column; but as, in any case, reply in this column will be delayed, and as the query may not be considered appropriate for this column, correspondents should always inclose postage for reply.

Cataract.—"Is it advisable to operate for cataract on a man aged seventy-two? The sight of one eye is about out, and the other nearly out."

It is entirely proper to operate for cataract at this age, unless there is some other condition that is against an operation. If properly performed, an operation will give some sight, and without an operation the individual would soon be sightless. Everything depends upon having a skilled operator.

Comparison of Animal and Vegetable Fats. -"How do the animal and vegetable fats compare? Does not the cottonseed oil stand at the head of the list as to digestibility and economy? and is it not less liable to become rancid?"

I know of no comparative figures showing that cottonseed oil is more digestible than other oils. As to economy, that depends en-tirely on the relative price of the different oils. If one sells for twenty-eight cents and another for thirty-two cents, of course the twenty-eight-cent oil is more economical. Whether cottonseed oil is less likely to become rancid than other oils I am not in a position to reply; possibly individuals who are interested in the manufacture of cottonseed oil have very decided opinions and may have published some statements.

Remedy for Alcohol or Tobacco Addiction. 'Can you give me a remedy that can be used openly or secretly for smoking or drinking?

The most important essential in the cure for tobacco or alcohol is the desire on the part of the victim to be free from it. If there is no such desire, any effort on your part will be absolutely futile. In case the victim de-*sires freedom, the best course is to put him in an institution which is conducted for this purpose, and by that I mean a Christian institution, where the physicians realize the advantage of prayer in connection with their remedies.

A new cure for the tobacco habit is to paint the inside of the mouth with a solution of nitrate of silver.

Cartilage Treatment.-" 1. Will the cartilage treatment or apparatus make one grow taller when one is past the age of twenty-three years? 2. How long does it take to produce results? and is it bad for the heart? 3. Is there anything which will make the bones of a small, undersized person larger? I and 2. I have no reason to think that this

treatment will make any one grow taller, no matter how long it is used.

3. There is nothing except disease that will make the bones of a small, undersized person larger.

Food Regulation for a Child.—" Can a boy five or seven years of age be considered his own best judge in regard to the quantity of food he should consume at one meal? if not, how is the parent to know when to draw the line, for often when it would appear that children have eaten all that is good for them, they are still hungry? I wish to train my boys in such a way that in their early years no foundation will be laid for intemperance in later life."

As a general rule a child can dispose of much more food and do it more advantageously than will seem appropriate to an older person. I think more often the mistake is made of underfeeding children than of overfeeding them. In our cities, and sometimes in the country, children are said to be "delicate," when, as a matter of fact, the trouble with them is their parents are not feeding them enough. Children should have sufficient protein food to furnish the tissues for growth. It is this, I sincerely believe, that makes the difference between a man who is capable of doing things in this world and one who takes a second part. Do not underfeed your boys. I think ordinarily the child can be trusted pretty well to know how much he needs to eat.

Of course, if you have knickknacks, candies, and a great variety, a child may be tempted to overeat. But with plain, substantial food (and by substantial food I do not mean foods that are entirely carbohydrate, such as bread and potatoes, but including a sufficiency of protein and fat) I do not think that a child will go far astray.

It is possible that the food you are giving them may be lacking in some element that is requisite to their proper nourishment. If this one element is lacking, no matter how much you may be feeding of other things, they may be overeating in order to try to get a proper quantity of that one element. Not knowing anything about your method of feeding, I cannot judge. I notice, however, that very often the tendency is to underfeed children in the matter of protein.

Indigestion.—"I have never used meat, tea, or coffee, but for several years my stomach has given me trouble. I have been troubled with gas in my bowels. For several months my diet has been grains and fruit. As I crave sweet milk, I have drunk freely of it, but lately I have been having rheumatism, so I have stopped the use of milk. Eggs, nuts, etc., do not agree with me."

I am inclined to think that your trouble is too much carbohydrate, that is, too much starch and sugar, and that it would be better for you to go lighter on mushes, grains, etc., and to use vegetables more freely, and to do almost entirely without fruit. Sometimes fruit causes very annoying conditions in the intestines, and in some cases the patient must leave it alone entirely. Your difficulty may be in your mouth—loose teeth, decayed teeth, insufficient mastication. Until mouth conditions are remedied one cannot hope for good digestion.

Indigestion in a Child.—" My little boy two years old has bad breath, poor appetite, is constipated, and within a week pimples have come on his legs from his hips to his knees. I never-let him eat anything but grains and milk, and fruit between meals. He is thin and irritable."

Your little boy is evidently getting the wrong food. I notice that you give him nothing but grains and milk. Suppose you give him more vegetables and not so much grains, and a liftle egg if he can eat it. In

this you will have to experiment carefully and slowly, as, at this distance, I can do no more than guess. It is possible that soured milk or buttermilk may agree with him better than fresh milk.

Remedy for Hemorrhoids.—"I have been troubled for more than thirty years with piles. I had an operation once, but the trouble is getting worse again. I think constipation is the cause, and am required to use enemas of two or three quarts of water. I use whole wheat, bran, prunes, apples, etc., but the bowels will never move without assistance."

So far as I know, the best and most thorough treatment for hemorrhoids is a radical operation. I notice that, although you use a laxative diet, you still have great trouble with constipation. I would suggest that you use one of the mineral oils, such as liquid paraffin, taken in sufficient quantity to accomplish the purpose. Begin with a teaspoonful three times a day and increase the dose until you are using sufficient to accomplish the purpose. Try adding a little soapsuds to the enemas you use.

Headache.—" My head has been hurting for six months or more, especially when I lift, or bend down, or lie down. The pain is darting or throbbing, and hurts badly when I cough or sneeze. Can my kidneys have anything to do with it?"

I can only express an opinion regarding the condition in your head. I think it has nothing to do with your kidneys, and perhaps nothing to do with your diet. I would suspect a congested condition of the membranes of the brain, which brings on the feeling you describe whenever there is an increased pressure within the brain cavity, such as would be caused in bending over or in coughing. It is, in fact, a pressure pain, for all the things you speak of increase the pressure in the head. You would do well to have a test made of your blood pressure.





Geriatrics; the Diseases of Old Age and Their Treatment, by I. L. Nascher, M. D., with an Introduction by A. Jacobi, M. D. 50 plates, 81 illustrations. \$5.00 net. P. Blakiston's Son & Co., publishers, Philadelphia.

Is it another example of our "dollar diplomacy" that we have an abundance of textbooks on the diseases of children and none till the present one on the diseases of the aged? The baby is a prospective producer, and the aged person can be only a consumer. The helplessness of the child excites our passion - and admiration; the helplessness of the aged excites our pity - and disgust. We enjoy the ignorance and the oddities of the baby; we have difficulty in tolerating the ignorance and the oddities of the elderly person. The child is coming; the aged are going, and, hav-ing outlived their usefulness, having neglected to keep abreast of advancing ideas, having become intensely self-centered, the quieter and quicker they go, the more we that are left feel relieved. A heartless way to put it, but is it far from the truth - especially if the elderly person is the signer of a will in which we are interested, or if he is poor and dependent upon us?

But this general tendency to neglect the old is not shared by the medical profession; physicians believe in saving life, and in prolonging it to the utmost, irrespective of the usefulness of the patient, and they do not give up their efforts even when incurable disease is present. But, notwithstanding this tendency of the profession, this is the first American book dealing comprehensively with the diseases of the aged, and doubtless it will be

welcomed by the profession.

Before entering into the consideration of the diseases of old age, the book considers such topics as childhood and old age; normal changes, physiological and anatomical, in old old age; and causes of old age. In this latter subject, the author gives the various theories that have been propounded, and finally his own. The consideration of the diseases of the aged is the completest we have in this country. The last part of the book is devoted to Home Care of the Aged; Institutional Care of the Aged; and Medico-Legal Relations — subjects which should be of great interest to many who are not physicians.

School Janitors, Mothers, and Health, by Helen C. Putnam, B. A., M. D. American Academy of Medicine Press, Easton, Pa.

Dr. Putnam firmly believes that health habits are better than health precepts, that no amount of teaching—say that a toothbrush is a good thing to use—is equal to the actual establishment of toothbrush habit.

One great trouble with the physiology as it has often been taught in our schools is that the pupils (and perhaps the teachers) know and do not

This book is first an appeal to mothers. Dr. Putnam believes that mothers ought to know that if they are determined to do so, they can bring about the same careful housekeeping in the school that they have in their own homes.

The book is divided into three parts: First, "The Prevention of School Fatigue," which is really practical and sensible instruction in child hygiene in school and out; second, "Mothers' Clubs and Clean Schoolhouses," which shows how mothers can improve school conditions; and, third, "School Janitors and Health," a most important topic, which deserves much more attention than it now receives.

Intelligent communities must and will work for the improvement of their schools along the lines suggested by Dr. Putnam.

The Secret of Success for Boys and Young Men, by B. J. Kendall, M. D. Paper, 25 cents; cloth, 50 cents. B. J. Kendall, M. D., publisher, Geneva, Ill.

This, on the whole, is an excellent book, considering the sexual and other pitfalls which are a menace to the young, and should have a good effect upon young men who read it. The author is a physician with high ideals, and possibly his religious viewpoint has led him to make a few statements regarding the physical effects of sexual error which are not entirely borne out by modern students of the subject.

The truth regarding the physical effects of sexual vice is bad enough; but extravagant statements regarding the effects of sexual vice have frightened many a young man into a condition of almost incurable hypochondria. The poor fellows, through their reading, actually come into the condition that has been pictured before them. My most serious task with some young men has been to relieve them of this mental handicap, produced often by quack literature, but sometimes by well-meaning and conscientious authors.

A plain heart-to-heart talk with the boy telling him the exact truth without exaggeration, and emphasizing the positive side, the bearing of sexual cleanliness on a splendid manhood, would, I think, do more good. In my experience the frightening process does little good, and adds a mental evil to the physical vice. There has been no overstatement of the effect of venereal disease. It

would be difficult to do that.

The business maxims at the end of the book are most excellent. The book is clean and wholesome, and the young man who follows its advice will be incomparably better off than the one who does not.

A Preface to Politics, by Walter Lippman. Mitchell Kennerley, publisher, New York and London.

Caustic, epigrammatic, with unbounded faith in his own logic and contempt for the logic of the other fellow, and especially for the average politician and college professor, Lippman writes a book that will compel one to think, for one is not likely to agree with him as he reads, and yet the challenge is there to dis-prove it. Whether one agrees or disagrees, he will have to think as he reads. But there is a suspicion that Lippman has been just a little too much influenced by such revolution-

The key to the book is in the chapter "The Changing Focus," the change which we see coming over us from a government founded on precedent to a government founded on efficiency, in which the one great object is the good of the people. I have selected almost at random the following paragraph as a sample of his style. The book is full of them.

"If a nation's destiny were really bound up with the politics reported in newspapers, the impasse would be discouraging. If the important sovereignty of a country were in what is called its parliamentary life, then the day of Plato's philosopher kings would be far off indeed. Certainly nobody expects our poli-ticians to become philosophers. When they do, they hide the fact. And when philosophers try to be politicians, they generally cease to be philosophers. But the truth is that we overestimate enormously the importance of nominations, campaigns, and office holding. If we are discouraged, it is because we tend to identify statecraft with that official government which is merely one of its instruments. Vastly overadvertised, we have mistaken an inflated fragment for the real political life of the country.

The Home Nurse, by Dr. E. B. Lowry. Forbes & Company, Chicago. \$1.00.

For the successful treatment of illness so much depends upon nursing that any family would do well to have this practical volume on the bookshelf for ready reference; it would prove as useful and indispensable as the staple remedies kept in every family medicine chest.

It gives helpful directions for the care of the sick in the home and tells how to cooperate with the physician in providing for the comfort and cure of invalids. Full directions for first aid to the injured are also given. Technical terms are avoided, and a complete index makes it possible to refer quickly to the desired information.

The author lectures on nursing in one of the leading medical colleges. The instructions may therefore be depended upon as conforming with the best medical knowledge and

practice.

Success With Hens, by Robert Joos. Forbes & Company, Chicago, 1914. \$1.00.

This complete guide to poultry raising, by an expert, is clear, practical, and up-to-date. The fifty-five chapters give full directions

for the hatching and brooding of chickens, incubation, feeding, and housing, increasing the egg supply, cure of diseases, the marketing of eggs and fowls, and everything pertaining to the care of hens.

Nothing is given but the best methods and only those which have been proved by the experience of successful poultry keepers. The small and large poultry man, the beginner and the experienced, will find this book valuable.

The Back Yard Farmer, by J. Willard Bolte. Forbes & Company, Chicago, 1914. \$1.00.

The seventy-five chapters of this useful book give complete and reliable directions for the best cultivation of vegetables, fruit, and flowers; the management of poultry and pets; the proper care of the lawn, vines, and shade trees; and discuss everything pertaining to the outdoors of the suburban, village, or country

Some of the chapters are: "Making the Back Yard a Garden Spot," "Back Yard Dividends," "Making a Garden Productive," "Preparing the Garden," "Why Gardens Fail," "Making the City Block Pay," "Laying Out Flower Reds."

Out Flower Beds.

The author, who is a practical gardener and an authority on the subject, was for several years a member of the faculty of two State agricultural colleges, and possesses the ability to write in a clear and entertaining style. book will be treasured by every person fortunate enough to possess a garden spot.

BOOKS RECEIVED

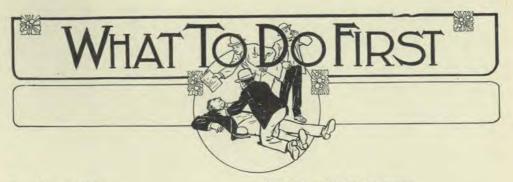
Physical Training, Junior Course. Price, 75 cents

Physical Training, Senior Course. Price, 75 cents.

Swedish exercises, games, swimming, diving,

life saving. By E. John Solano. The Bobbs-Merrill Company, publishers, Indianapolis,

Adopted by the British war office. A review of these books will appear later.



To Abort a Felon

Cover the end of the finger with a cloth or with absorbent cotton saturated with alcohol. and exclude the air by drawing over it a rubber finger cup.

Erysipelas

APPLY a saturated solution of Epsom salts by means of a compress of fifteen to twenty layers, large enough to extend beyond the limits of the area, and cover with oil silk or paraffin paper.

For Tapeworm

Dr. Allen, in the Journal A. M. A., favors the use of thymol for the elimination of tapeworm. Without the use of preliminary starvation or purgation, he has been very successful in removing tapeworms by this method. He gives thymol in the usual manner, either with or without salts. This is a remedy, however. that should be given only with the advice and under the care of a physician, as its use is not without danger.

An Antidote to Alcohol

GIVE ammonium chloride, 30 to 60 grains, "with copious drafts of water to prevent gastrointestinal irritation." This treatment prevents the effects of alcohol, sobers the patient quickly, and is a valuable preventive of delirium tremens. The New York Medical Times, which gives the suggestion, adds. "Should the [delirium tremens] patient not become quiet after taking the remedy, a bromide or chloral hydrate may be administered."

Care of the Mouth During Illness

WHATEVER else you may do for the very sick patient, do not neglect his mouth. In addition to gentle but careful brushing of the teeth, which can be done for the comfort and welfare of the patient, one should spray the mouth and throat with an efficient mouth One physician, in order to overcome the objection of sick children to the cleansing of their teeth, offered them a bribe of chewing gum. By this act of diplomacy the objection of the child was overcome, the use of the brush permitted, and not only this, the gum itself must have had a certain cleansing action. The gum was destroyed each time, and a new piece given

Measles and Scarlet Fever

THE following treatment of measles (and also of scarlet fever) has been used with excellent success in institutional work in England, and is certainly well worth trying: The patient is first given a hot bath, then follows a thorough application of eucalyptus oil to the entire surface of the body, except the hands and the part of the face around the eyes, nose. and mouth (this on account of the irritating effect of the oil on the eyes), and the mouth is irrigated twice daily with a weak alum solution, and glycerin and borax are applied to the interior of the mouth and the gums. The throat and tonsils are treated with carbolic oil (1 to 10), morning and evening, a tongue depressor being used. Every day for the following four days the child is blanketbathed morning and evening, and again rubbed with the eucalyptus oil and the mouth and throat receive the same treatment as on admission to the hospital. By attacking the mouth and throat, one reaches the point of concentration of the virus of the disease. The main purpose of the eucalyptus rub seems to be to get the oil inhaled into the air passages, though it may also act favorably in some other way

To Remove Warts, etc.

Drp into undiluted forty-per-cent formaldehyde a wooden toothpick, and apply to the surface of the wart, corn, callous, or mole, every three to six hours, for two or three days; or if it is desired to hasten the process, the applications may be more frequent. The normal skin should not be touched by the formaldehyde, and only as much of the escharotic should be used as will completely cover the surface of the affected tissue without overflowing on to normal tissue.

The growth ordinarily should devitalize and dry up in a few days; and when it comes off, the under surface should be free from blemish; if it is not, another application or two will secure this result.

In extensive callouses, the application can be made by means of a small brush for several days, or until the parts become sensitive, when the treatment should be discontinued, and t' parts allowed to dry. Then by means of a soaking in warm water, a layer of the scarf skin can be rolled off, and the process of the formaldehyde can be repeated, until the horny growth is entirely removed.— R. L. Ham-mond, American Medicine.



Farm Sanitation.—The U. S. Department of Agriculture has issued a bulletin (No. 57) entitled "Water Supply, Plumbing, and Sewage Disposal for Country Homes." The drawings and descriptions in this bulletin will prove invaluable to those who are interested in improving the sanitary conditions of the farm.

Massage in Nervous Disorders.— A physician (in Practitioner) states that to be successful massage should be vigorous in hysteria, the severer the better; but in neurasthenia, all vigorous or stimulating treatments are injurious. Only the gentlest movements should be used, and tender points should be treated last. He believes that the actual nature of the movement is immaterial so long as it is rhythmical. (Doubtless the "personality" of the masseur—his "suggestive" influence—is also an important factor.)

Insurance Sanatorium Opened.— The sanatorium erected by the Metropolitan Life Insurance Company for the care of the tuberculous among its employees, located at Mt. McGregor, N. Y., is open and receiving patients. Previous to the erection of this sanatorium, the company had some fifty of its employees in other sanatoriums. When the company proposed to erect a sanatorium for its employees, the objection was made that the company could not legally use its funds in this way, and the question has been before the courts for some time; but the Appellate Division of the New York State Supreme Court has finally rendered a decision that the company has the right to use its funds for this purpose.

Nurses From Fifteen Nations to Panama-Pacific Exposition.— More than six thousand trained nurses, the pick of the great hospitals of Europe, Asia, and the isles of the sea, will meet in four congresses at the San Francisco exposition, beginning in June, 1915. The associations to hold these congresses are: The International Association of Nurses, representing fifteen foreign nations, including England, Ireland, Germany, France, Belgium, Italy, and others, with Australia, China, and Cuba; The American Nurses' Association. with 22,000 members, of which Miss Genevieve Cook, of San Francisco, is president; the National League of Nurse Education, numbering 12,000 members, chiefly educators and superintendents of training institutes; the Organization of Public Health Nurses, with an equal number of members, whose labors have to do particularly with public health, tuberculosis. settlement work, social service, and the like; and, finally, the California State Nurses' Association, which will act the part of hostesses to the foreign contingent.

Texas Counties Required to Build Hospitals.—The Texas law requires each county having a city of ten thousand population or over to erect a hospital for the care of consumptives. In all such counties separate provision must be made for cases of communicable disease, tuberculosis, maternity cases, and for the temporary care of the insane until they can be sent to a State institution.

Children or Cotton? - According to a superintendent of one of the Texas schools, cotton is a curse to Texas children. Lewis W. Hine explains why it is a curse, in the Survey of February 7. "Come out with me at sunup," says Mr. Hine, "and watch the children trooping into the fields, some of them kiddies four or five years old, to begin the pick, pick, pick, drop into the bag, step forward; pick, pick, drop into the bag, step forward, six days in the week, five months in the year, under a relentless sun. The mere sight of their monotonous repetition will tire you out long before they stop. Their working day follows the sun, and not until sundown will they leave the fields. Ruby, aged seven, stopped working long enough to say, as I stood by her, 'I works from sunup to sundown, an' picks thirty-five pounds a day.' Imagine the number of feathery bolls that must go into the bag hanging about her neck to tip the scale at thirty-five pounds!" What can be the result of such a grind but physical degeneration and moral atrophy? It is to make animals out of human beings - and all that for sordid gain.

Prevention of Malaria. - Public Health Reports, February 27, gives a very excellent article which explains carefully how to keep mosquitoes out of the house, from which a few extracts are given herewith. Mosquitoes enter the house in search of blood. usually find entrance through defective screens, such as those of 12- or 14-mesh wire, or corroded or torn wire screens, or the sides of poorly fitted screens. They also enter through chimneys, drain holes, and, in fact, any opening which is of sufficient size. Malaria-bearing mosquitoes, in particular, have the faculty of finding such defects. These mosquitoes usually fly at night or between sunset and sunrise. They are attracted to the house by the light. They are not content on finding that the entrance is closed, but seek to find any opening by which they can enter. If there is an opening large enough for them to pass through, they will probably find it. For those who live in a malarious country, or a mosquito-infested country, this paper is worth while. It may be obtained by sending five cents in coin (stamps not received) to the Superintendent of Documents, Washington,

Radium Caution.—The London Lancet, stating that no important facts have been recently developed regarding the curability of cancer by radium, finds it "regrettable that medicinal men should encourage the publication of a contrary view in the lay press in the absence of any advances that have stood an adequate test of time. . . . In many cases grievous disappointment and serious financial embarrassment may have needlessly added to the sufferings of the victims of malignant disease by the publication of ill-understood medical evidence."

Food Inspectors Adopt Uniform Rules.—At the Spokane conference of the food, drug, and dairy inspectors of Idaho, Washington, and Oregon, uniform rules were adopted for the government of the inspectors, among which are the following: Eating houses serving chicory in coffee must display a conspicuous sign saying so. Soda fountains using benzoate of soda must inform the public of the fact by means of large cards. Cider vinegar must not be diluted, and all vinegars must be branded with their true name. Flavoring extracts must be labeled "imitation," unless made of the true product. Catsup or sauce bottles must not be refilled. A pound of butter must weigh 16 ounces net. These regulations are intended rather as a preventive of fraud than as a health measure, for few of these substitutes or adulterations are detrimental to health.

Tango a Beautifier (?).— A Washington woman warns tangoists that in a few years they will suffer from flatfoot if they persist in these new dances.

To Fight Trachoma.— A number of physicians have united to work in connection with the United States Public Health Service, to attempt the eradication of the epidemic of trachoma in Kentucky.

St. Louis Quacks Taking to the Woods. Following the lead of the Chicago Tribune. the New St. Louis Star has been conducting an investigation into the workings of St. Louis quacks, and has been giving its readers the results of these investigations. quacks are seeking shelter, and the papers that have prostituted themselves to the extent of selling advertising space to the quacks have closed their pages to them—for a reason. Both laymen and physicians of the better class have been supporting the Star in its campaign of publicity. Some of the prominent business men stated their intention to take their advertising out of the papers which continued to carry advertisements of fraudulent medical concerns. A little influence of this kind goes a long way farther than any amount of preachment regarding the ethics of carrying dirty and lying advertising. It may be a hard thing to say, but it is a fact that the shortest way to the conscience of some publishers is through the pocketbook.

The best antiseptic for purposes of personal hygiene

LISTERINE

There is a tendency upon the part of the public to consider the dental toilet completed with the use of the tooth-brush and a dentifrice in paste or powder form.

It is not possible with the brush and either paste or powder to cleanse the interstitial surfaces of the teeth; here the use of dental floss is imperative, and after meals, or in any event before retiring at night, it should be employed to dislodge the remaining shreds of food substance wedged between the teeth. The tooth-brush and a paste or powder may then be employed for their frictionary effect, moving the brush from the gum margin toward the cutting edge or grinding surface of the teeth, and not toward the gum margin, lest these tissues be loosened from their attachment about the teeth and the sensitive dentin exposed. Rotate the brush upon the grinding surfaces of the molars to remove any food which may be lodged in the fissures of these teeth. The mouth should then be rinsed with an antiseptic solution of suitable strength, for which there is nothing comparable to Listerine, one part, tepid water ten to fifteen parts, forcing the Listerine to and fro between the teeth that all of their exposed surfaces may be brought under its antiseptic influence.

This procedure faithfully pursued will insure the conservation of the teeth.

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

Trichinosis Reportable.— The board of health of New York City has adopted a resolution requiring physicians to report cases of human trichinosis.

Tango Strenuous.— A number of persons while dancing the tango have, it is said, broken a leg or an arm. Possibly, also, fractured some laws of propriety.

The Wisconsin Marriage Law Unconstitutional.— In the Milwaukee County Circuit Court, the law requiring a certificate as a condition for marriage license has been declared unconstitutional and void.

Decomposition and Preservation of Eggs.—A. Kossowicz (quoted in Experiment Station Record) gives some results of experiments on eggs. Fresh eggs kept for two or three days at a temperature of from 68° to 86° were, with few exceptions, found to be free from bacteria. Eggs exposed to various bacteria under conditions corresponding to those in the handling of eggs from the producer to the consumer, demonstrated that microorganisms and molds can penetrate the unbroken shell and cause decay. The shells of old eggs are more easily penetrated with molds than fresh eggs. Some yeasts also penetrate the shell. When the shells are soiled with egg substance, either fresh or decayed, they are penetrated more readily by microorganisms. In order to preserve eggs, the author recommends cold storage, or packing the eggs in milk of lime or water glass.

Treatment of Disease in the Aged.—Orenstein, in the New York Medical Journal, recommends as of paramount importance regulation and restriction of diet. "The senile can subsist on a modified fluid diet, consisting chiefly of milk, soups, eggs, toast, butter, and stewed fruits. He regards it as futile to replace the teeth, inasmuch as it is impossible to restore the integrity of the rest of the digestive tract. An adult ration overtaxes the digestive powers and floods the blood with products which the kidneys and other emunctories cannot handle. He advises fresh air, exercise, light clothing, and well-protected feet. Nightcaps he considers desirable.

Poison Oak.—According to a recent observer of the action of various poisonous plants (poison oak, poison ivy. sumac, etc.), the poison is not volatile, and cannot be conveyed through the air. It is not a pollen, and it cannot be carried by insects. It appears to be a resin, found in all parts of the plant except the pollen and the flowers. In order to cause inflammation, the gum must come into direct contact with the skin. The dried resin is soluble in alcohol. The treatment advised is to wash the skin with hot water and soap, and carefully apply a saturated solution of lead acetate in dilute alcohol. This, however, is not a new remedy. The New York Medical Journal suggests the addition of alum. It is important to avoid the use of salves and ointments.

A Book Every Retailer Should Have — Free



Find the leaks and stop them, buy for profit, sell at the right price, turn your stock often—learn how in "A Better Day's Profits."

This book is filled with ideas that will save money and increase profits for you.

After you have read this book, we believe that you will see how you can be even a more successful manager if you get the information this book outlines for you, and that you will naturally be interested in getting the facts without increasing your Pay Roll, which is the Burroughs way.

In many a business the Burroughs makes the difference between making a big success and merely making both ends meet. Ask for the book, or for a free demonstration of a Burroughs machine.

Burroughs Adding Machine Company

47 Burroughs Block, Detroit, Michigan

ST. HELENA SANITARIUM



Nestled among scenic foothills, on the sunny slopes of Howell Mountain, like some great, white jewel, in a setting of wonderful landscape, is one of the most beautiful, and at the same time one of the most scientifically conducted, institutions in all California.

THE ST. HELENA SANITARIUM is a refuge, a haven, a veritable Paradise for the sick, the invalid, and those who need rest and recuperation. Its hospitable doors are open to all who are sick, and everywhere is the environment of kindness and good cheer. The sanitarium is the retreat of the cultured and refined, affording the advantages of a thoroughly scientific institution, where Nature, the physicians, and the surgeons work hand in hand for the alleviation of human ills.

Located sixty-five miles north of San Francisco, in a little hamlet all its own, it is so peaceful, so placid, so serene, that it seems as though it were in a world apart. The main building and cottages wholly lack the depressing atmosphere of a hospital.

Apply for beautifully illustrated booklet "E."

Address

THE ST. HELENA SANITARIUM

Napa County

Sanitarium

California

Special Books on Sex Hygiene

It is a well-known fact that the conditions of many people today might have been greatly improved had they been properly instructed when young. For young people to be permitted to grow up to manhood and womanhood without a knowledge of the vital forces of life, is a great injustice to them. There are many parents who know this to be true, and greatly desire to be able to impart the instruction in a wise way, but who from lack of education are unable to do so. To all such we recommend the following books:—

For Boys

Truths: Talks With a Boy Concerning Himself, by E. B. Lowry, M. D. 55 cents.

Almost a Man, by Dr. Mary Wood-Allen. 50 cents.

What a Young Boy Ought to Know, by Sylvanus Stall, D. D. \$1.00.

For Young Men

What a Young Man Ought to Know, by Sylvanus Stall, D. D. \$1.00.

What a Young Husband Ought to Know, by Sylvanus Stall, D. D. \$1.00.

For Men of Mature Years

What a Man of Forty-Five Ought to Know, by Sylvanus Stall, D. D. \$1.00.

For Girls

Confidences: Talks With a Young Girl Concerning Herself, by E. B. Lowry, M. D. 55 cents.

Almost a Woman, by Dr. Mary Wood-Allen. 50 cents.

What a Young Girl Ought to Know, by Dr. Mary Wood-Allen. \$1.00.

For Young Women

What a Young Woman Ought to Know, by Dr. Mary Wood-Allen. \$1.00.

What a Young Wife Ought to Know, by Dr. Mary Wood-Allen. \$1.00.

For Women of Mature Years

What a Woman of Forty-Five Ought to Know, by Dr. Mary Wood-Allen. \$1.00.

The foregoing books are highly recommended by physicians throughout the country. One of the most important periods in a person's life is when a boy or girl is blossoming from boyhood or girlhood into manhood or womanhood. Their future usefulness and happiness depends to a large degree upon proper instruction at such a time. The books here mentioned have been a great boon to many.

Review and Herald Publishing Association

Takoma Park - - - Washington, D. C.



ROME BURNS BIBLES

See Photographic Reproduction of Manila, P. I., Newspaper Telling of Bible Burning, Also Striking Cartoons in "Picture Section."

Friday, March 26, we ordered printed the sixth edition of the great February, or "Protestant Mass Meeting," number, containing Dr. McKim's two speeches, and the third edition of the March number, containing the Prescott-Wilson-Tumulty features. containing the Prescott-Wilson-Tunulty features. The same day we filled one order from Massachusetts for 6,000 of the February number. And still the demand continues! continues!

SOME OTHER MAY FEATURES

Protestants and Catholics Unite in Demanding More

Chaplains.
Rome's Interpretation of Religious Liberty, Idolatry of the Church of Rome.

ONE YEAR, \$1.00 - SINGLE COPY, 10 CENTS

Distribute 20 copies (\$1.00) or 50 copies (\$2.00) of this May number in your neighborhood.

INVEST \$1.50 IN FIVE FRIENDS

For this small amount we will send the Magazine For this small amount we will send the Magazine to five of your friends for SIX MONTHS — regular price, \$2.50. Or, this amount will pay for SIX "TRIAL" SUBSCRIPTIONS for FOUR MONTHS each.

PROTESTANT MAGAZINE

Washington, D. C.

The Watchman

YOU NEED ITS ENCOURAGING GOSPEL MESSAGES ITS CONTENTS WILL INTEREST YOU

Who Should Subscribe

Every earnest seeker after truth Every one desiring to know Bible prophecy Every one wishing a presentation of the Bible in its purity

Ten cents a copy Sample free One dollar a year

A monthly magazine considering present-day problems in the light of the prophetic Word.

Gives the Trumpet a Certain Sound

Send two dollars with the names of two friends and we will place your name upon our subscription list free for one year.

Order through your tract society or

Southern Publishing Association,

2123 24th Avenue N.,

Nashville, Tennessee



Send \$1.00 for 20 or \$2.00 for 50 copies

Pilgrim Fathers, Church Monopoly, and True Patriotism Number

Read James Madison, Daniel Webster, and Other Patriots on Religious Liberty, Government Chaptains, etc. See Also Church and State Cartoons

The fight for our Constitutional rights of free speech, free press, and free assembly is not won! Witness, for example, the canceling of two hall contracts recently in Columbus, Ohio, through pressure on the part of Roman Catholics, when our editor, Prof. Chas. S. Longacre, had been advertised to lecture upon the subject "Shall America Adopt a National Religion?" in the Chamber of Commerce and the A. I. U. halls, respectively. HELP TO EDUCATE THE PUBLIC BY CIRCULATING THIS MAGAZINE!

NOTE THESE OTHER FEATURES

Important Judicial Decisions — Daniel Webster's Oration on Religious Liberty — James Madison on Government Chaplains — Religion in the Public Schools — Church and Politics — Limits of Rightful Authority — Governor Patterson on "Why I Changed Front on the Liquor Question" — America Traveling in the Wrong Direction — Are Sunday Laws Constitutional? — Conservation of Natural Rights, etc.

35 CENTS A YEAR - 10 CENTS A COPY

10 yearly subscriptions, for yourself and nine friends, only \$2.00 — regular price, \$3.50.

Post-office Stamp Books Accepted.

LIBERTY MAGAZINE :: Washington, D. C.

Boulder - Colorado Sanitarium, Boulder, Colorado



Non-Tubercular

One mile above sea-level, in one of the most beautiful spots in all Colorado, situated at the foot of the Rocky Mountains in the beautiful city of Boulder, thirty miles from Denver, the Boulder-Colorado Sanitarium offersits patrons an ideal place for rest, recuperation, and health training. This sanitarium is a pleasant, homelike place, splendidly equipped with the most modern and uptodate appliances known to medical science for the successful treatment of disease. In addition to these advantages we keep constantly in our employ a number of splendidly qualified physicians of both sexes and corps of well-trained nurses. Our institution is a member of a sisterhood of about eightly under the same methods of treatment, consisting of all curative agencies which are recognized as a part of rational medicine, including Baths of Every Description, Massage and Manual Town, Classified Dietary, Laboratory of Hygiene for Bacteriological, Chemical, and Microscopical Investigations. Each succeeding year these methods of training the sick back to health by the application of nature's remedies are being more and more recognized, not only by the individual, but by the medical fraternity, as being scientific and effective in

fraternity, as being scientific and effective in the treatment of all curable diseases. Our institution has this advantage over the ordinary hospital, in that the hospital features are entirely eliminated by a system of segregation, our hospital and surgical ward being conducted in a separate building from our main sanitarium building.

Our sanitarium location is an ideal one, and we enjoy the advantages of a delightful summer and winter climate. Write for large catalogue.

Southern California's

SANITARIA

Medical and Surgical

ETHICAL

SCIENTIFIC

PROGRESSIVE



OMPRISING the LOMA LINDA, GLENDALE, and PARADISE VALLEY SANI-TARIUMS, covering the entire field of rational medicine and scientific surgery. These up-to-date, homelike Institutions of Health have helped to make Southern California the great Mecca for the tourist and health seeker.



These Sanitariums have qualified regular Physicians, skilful Surgeons, trained Attendants, graduate Nurses, and thoroughly equipped Laboratories. Their institutional apartments are models of convenience for the scientific administration of every modern Physiological Therapeutic treatment. The basic principle of their system of treating disease has been in constant successful employment for more than thirty-five years, and includes every modern curative measure known to medical and surgical research.

The professional staff of each of these Institutions gives special attention to classified dietetics, and the bills of fare are based on a complete return to nature's first principles, and to her food products, which are largely produced on the institutional estates and by their own food factories.

Besides the complete acquired facilities of scientific medical and surgical research, these modern "Homes of Health" offer to the traveler seeking rest, recreation, and health, under new scenes, the attractions of a matchless climate, both summer and winter. It is never too hot nor too cold for outdoor exercise and enjoyment. The very words "Southern California" bring to mind a smiling summer-land rich with tropical vegetation and heavy with the perfume of flowers. The mountain air mingled with the salt-sea breezes forms a live, invigorating atmosphere for those seeking health restoration.

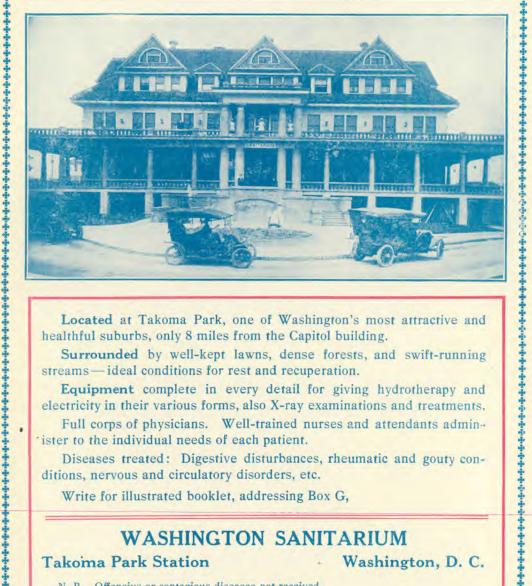
Each institution has its own peculiar points of excellence to offer its patients and guests. Address for "Illustrated Prospectus"

THE LOMA LINDA SANITARIUM - - - Loma Linda, California
THE GLENDALE SANITARIUM - - - Glendale, California
THE PARADISE VALLEY SANITARIUM - - National City, California

Or the City office of these Institutions, 417 W. Fifth Street, Los Angeles, California

Washington Sanitarium

Medical and Surgical



Located at Takoma Park, one of Washington's most attractive and healthful suburbs, only 8 miles from the Capitol building.

Surrounded by well-kept lawns, dense forests, and swift-running streams - ideal conditions for rest and recuperation.

Equipment complete in every detail for giving hydrotherapy and electricity in their various forms, also X-ray examinations and treatments.

Full corps of physicians. Well-trained nurses and attendants administer to the individual needs of each patient.

Diseases treated: Digestive disturbances, rheumatic and gouty conditions, nervous and circulatory disorders, etc.

Write for illustrated booklet, addressing Box G,

WASHINGTON SANITARIUM

Takoma Park Station

Washington, D. C.

N. B. Offensive or contagious diseases not received.