JULY, 1903



Volume XVIII No. 7

Contents

The Baby—Teething (Illustrated) Care of Children's Eyes Alcoholism Evils of Tea Drinking Tuberculosis A Sphere for Women Problems in the Prevention of Disease

FIFTY CENTS PER YEAR

lile

FIVE CENTS PER COPY

PACIFIC PRESS PUBLISHING CO., Oakland, California Entered February 2, 1902, as Second-class Matter; Post-Office at Oakland, Cal.; Act of Congress, March 3, 1879

A SENSIBLE PLACE TO EAT

The Vegetarian Restaurant

315-319 WEST THIRD STREET

Between Broadway and Hill Street

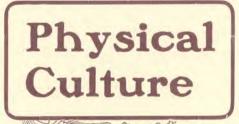
LOS ANGELES, CAL.



We serve no flesh food. Flesh-making foods, however, fill our menu. Prepared and served in the most appetizing styles.

OUR CULINARY DEPARTMENT will hereafter be open to public inspection, and we will spare no effort in fulfilling our object, which is to advance the health of our patrons.

We Serve Our Own Dairy and Bakery Products



Pacific Press Publishing Co.

Oakland, California

REAL ARCHINE AND AND A REAL AND A

ments of the new book entitled "EDUCATION" is the one known as"Physical Culture." Under this heading the study of Physiology, Temperance and Dietetics, Recreation, and Manual Training are all given careful consideration.

One of the strong depart-

The volume as a whole is one that will appeal to those interested in mental and physical development.

It contains 322 pages.

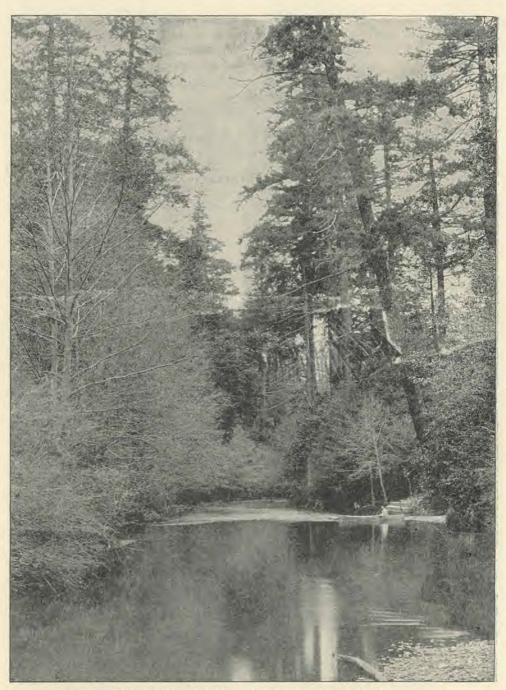
Price is \$1.25.

Descriptive circular sent on application.

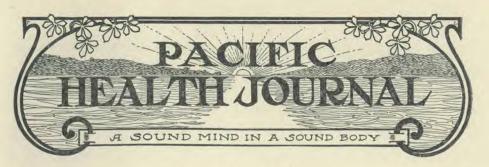


What Is a Nebulizer?





"BREATHE THE COUNTRY AIR."-See Article Next Page.



VOL. XVIII.

Oakland, California, July, 1903.

No. 7-

Problems in the Prevention of Disease

By Frederick M. Rossiter, M. D.



HE movement inaugurated by the Board of Health of Chicago, in July and August, 1901, to district the poorer

and more densely populated portions of the city among voluntary physicians, and to undertake a house-tohouse hygienic campaign, giving personal instruction in reference to cleanliness, bathing, boiling the water, keeping nursing bottles clean and sterile, improving ventilation, cleaning private premises, getting the children out into the parks, resulted in greatly reducing the mortality of infants and the number of cases of intestinal complaints. The carrying on of such a campaign in every large city would deprive death of a host. If so much good can be accomplished by systematic effort during a few weeks, what would be the results if this effort were continued throughout the twelve months of the year? The prevalence of diphtheria, scarlet fever, measles, smallpox, tonsillitis, bronchitis, and pneumonia would undoubtedly be reduced.

Another recent movement which has for its main object the securing to sick and worn-out city mothers and their sick children a change of environment, a rest, and a chance to breathe the country air for a week or more in the summer, is also in the line of preventive medicine, and should be encouraged by the physician. But the good work of the various charity organizations in this direction is only a drop in the vast bucket of the city's. need. Thousands of the poor in the great cities, because of the accidents of birth, environment, and destitution, rarely have an opportunity to see the green grass, or to fill their lungs with fresh, pure air. To those who are so fortunate as to get it, the summer outing is a powerful educational influence, tending to inspire a desire for something better, and greatly lessening the susceptibility to disease. If the millionaires of our country who are spending \$3,000,000 on a residence, \$300,000 on polo grounds and other personal luxuries, could be induced to contribute a tithe of these amounts toward the improvement of the tenement districts of the large cities, toward providing public parks and playgrounds within the reach of tenement children, and toward giving the needy, sick poor prolonged country life during the summer, the mortality statistics would be greatly lowered.

Large donations to colleges and libraries are undoubtedly needed, but if a like generosity could be enlisted toward the improvement of the sanitary surroundings of the poor and ignorant, and providing special means for their instruction and education in hygiene and cooking, teaching the women to make nourishing dishes from inexpensive foods, an inestimable benefit would be conferred upon both present and future generations. Here is the opportunity for our wealthy men to immortalize their names as true humanitarians. From a purely business standpoint the returns would be greater than the investment. Measures promoting cleanliness and health react wonderfully in thrift and morality. Cleanliness keeps disease at bay, increases self-respect and a love for the right.

The recent brilliant researches showing that yellow fever is due to the mosquito bite, that malaria may be caused in the same manner, and that the plague is communicated principally by rats and fleas, also that flies may communicate typhoid fever and tuberculosis, are etiological facts that assist preventive medicine in taking the proper precautions to hold most of these diseases in abevance. A vigorous warfare against the mosquito, its bite and its breeding-places, and the use of mosquito-bars, will make malaria an uncommon disease. The day is past when physicians can tell patients who are suffering from ptomain poisoning that they are having a "touch of malaria." The cause being removed, the disease disappears, unless the cause has existed too long, as, for instance, in organic disease. But even in this case the removal of the cause ameliorates the disease.

Because of the importunity of patients and friends, physicians are often inclined to shorten the period of convalescence in acute attacks, thus lessening the patient's chance for complete recovery, and rendering him much more susceptible to relapse and to other diseases. Patients are more at fault in this matter than physicians, but there should be more cooperation on the part of each.

In this age of travel, the equivalent of many times the entire population of the United States is carried by the railroads annually. There are 200,000 consumptives in this country, and thousands of these journey from east to west and from north to south and back again. Hence the dust in sleeping and palace cars is infected with tubercular bacillus, as has been proven by Koch. The blankets, pillows, and cushions may likewise become infected by these patients. It is a known fact that blankets in a sleeping car are seldom washed, even though the sheets are changed every day. Porters going through the cars with feather-dusters keep the dust, which is made up largely of sputa, flying through the air. When travelers reach their destination, the porter lines them, and starts a cloud of dust through the car, that increases in volume as it reaches the last victim, and receives a fee for this dangerous attention.

The proper disinfection of railroad coaches is a matter of so serious a nature that every state board of health should give it consideration. Not only is tubercular infection thus scattered, but other diseases are propagated. Under existing conditions it does not give one the most pleasant sensation to think that possibly a consumptive occupied his berth the night before. Drug medication has led to the pernicious, disease-producing habit of . merely treating symptoms. Symptoms, instead of being interpreted in the true language of disease, are treated as isolated factors, thereby obscuring important diagnostic signs. A drug may cause a symptom to disappear speedily, but the morbific condition still remains. This method of superficially regarding disease has given rise to a vast number of drugs to fit each symptom.

Prior to the Reformation the theological treatment of the clergy was so carefully worked out that they had a special form of penance for each sin. This became an intolerable galling yoke, and finally led to the Reformation.

Luther's service to the race consisted in promulgating the doctrine that, however varied the sins, the causes are very few and simple, and invariably originate in the violation of one or more fixed principles, that the remedial principles also are equally few and well defined. Such a reformation is needed in treating the causes of disease. A few well-applied therapeutic principles will reach every disease known to man that responds at all to remedial agencies. The routine treatment of symptoms leads the practitioner to neglect and ignore the actual factors of disease, and to make many errors in diagnosis. This superficial treatment not only tends to perpetuate disease, but calls for a mere surface form of professional knowledge. Symptoms are magnified into diseases. When such a course is pursued, pathology, physiological chemistry, and physiology are soon lost sight of. It is the patient and not the symptom that needs the treatment.

Action of Grape Juice on the Organism

THE grape is composed of various constituents which give it its value in the so-called grape cure. Water, grapesugar, cream of tartar, tartaric and malic acids, albuminoids, various minerals, as potassium salts, lime, magnesia, the oxides of iron and manganese, a little silicum and alumina, also certain acids, phosphoric, sulphuric, and nitric. There are traces of chlorides and a small quantity of soda and phosphates. The seeds contain tannin. Grape juice from its constituents is a veritable mineral water. In taking the grape-juice cure, the quantity at first taken is small, and is gradually increased, the length of the time of treatment being from three to six weeks. Walking and exercise in the open air assist very much in bringing about good results during the time of this cure. The general health is improved, the appetite is increased, and the digestive functions are greatly improved. The patient usually puts on flesh. This cure is especially indicated in affections of the digestive organs, visceral congestions, ascites, jaundice, in cases of hepatic calculi, diarrhea, habitual constipation, in certain skin troubles, and in neurasthenia ; pulmonary tuberculosis is benefited by this treatment, but the intestines must be in good condition. It seems contraindicated only in persons who are too fat or who have a tendency to become so, and during the period of menstruation.-Gazette Heb. de Med. et de Chirurg.

THE

BRISTLE brooms are better for wood floors and those with smooth carpets.

The Prevention of Communicable Diseases

By T. J. Evans, M. D.,

[Supt. of St. Helena Sanitarium.]

I. TUBERCULOSIS.



HE study of communicable disease is useful only as it enables us to make use of it in the elimination of disease

from the human family. To eliminate disease it is necessary to understand the nature and character of it, so it can be intelligently combated. In all ages communicable diseases have made their ravages upon the human race, destroying millions who might have been saved had they a knowledge of the disease that was preying upon them. Unrecognized as it was, there was nothing to limit its spread among the inhabitants of the earth. Had they recognized the approach of this great, unseen army, some fortification could have been built that would have limited its ingress, and the few intruders might have been successfully combated, but as it was many have fallen captive to the unrecognized foe.

The spread of infectious diseases would be just as great now as then were it not for the efforts put forth by men of ability to prevent infection. A great effort is being made at the present time to limit the spread of tuberculosis, that disease which is playing such terrible havoc with beast and man. It is believed that about one out of seven of the human race die from this disease alone. So prevalent is it in all parts of the world that it has been called the great "white plague."

Until the last few years tuberculosis has been on the increase all over the civilized world, but medical men everywhere have been studying the disease with the idea of eliminating it from mankind, and now they believe that tuberculosis is on the decrease.

Tubercular germs may attack almost every organ and tissue of the body. When they attack the lungs, they seem to be very tenacious. In the year 1901, Prof. Robert Koch announced his conviction that bovine tuberculosis was a distinct disease from human tuberculosis, and that it could not be communicated from cattle to man. Within forty-eight hours after this was done, milk producers and butchers of Great Britain petitioned Parliament to relieve the trade of the restriction to the sale of tuberculous milk and meat. At this same time, Dr. Ravenel, of the University of Pennsylvania, had recorded three instances of the transfer of tuberculosis from the cow to man. This testimony was presented at the same congress where Professor Koch made his announcement. Since then there has been so much evidence in support of the communicability of tuberculosis from cattle to man that the statement on page 70 of Gould's Year Book on Medicine for 1903 is justified: "The identity of the two diseases is still firmly established, and the danger of infection from cow to man is more likely to occur than the reciprocal infection, and must be taken into account. Contrary to Koch's pronouncement, the generally admitted higher virulence of bovine bacilli justifies the strict supervision of our milk and meat supply."

When the tubercular germ once gains access to the system, it is a very difficult matter to dispose of it, for it is a very hardy organism and multiplies rapidly at the temperature of the body. If the germs get all through the system, there is debility, loss of flesh and strength, fever 102° to 104°, cough, hurried respiration, rapid pulse, enlarged spleen, and it usually takes only from two to four weeks for the patient to succumb to the disease, When the germ gains access to the lungs only, they are a little slower in their progress, as it is an ulcerating process that takes place in the lung tissue. This disease may then last for years, and is sometimes cured. The symptoms are usually those of a cold, hacking cough, rise of temperature in the evening, loss of flesh, and dyspepsia. There is a rapid pulse, flushed face in the evening, and night sweats; and, unless the disease is stopped, there is a gradual wasting away of the patient.

Nageli, at the Pathologic Institute at Zurich, after making 500 autopsies. found that the disease seldom occurs in infants. It is very rare in children from two to five years of age. From five to fourteen, one-third of the bodies show tuberculosis. From fourteen to eighteen, half the cases had tuberculosis, and from eighteen to thirty nearly every one showed marks of the disease, but in one-half healing had occurred. Of the bodies over thirty years of age, all showed alterations due to tuberculosis, but in the majority of these the healing process was completed, the proportion of cures increasing with the age. As only one out of seven of these died with this disease, it would appear that a large proportion who were affected with

tuberculosis had recovered. From this it would seem that tuberculosis is a curable disease.

The disease is spread from person to person and from animal to man in a great variety of ways. It may be breathed into the lungs with the dust that floats about in the air. It may be taken into the alimentary canal with food or drink, or it may be inoculated into the system through Kissing may spread the wounds. bacilli from mouth to mouth, or dishes may be the means of conveying the infection unless boiled or disinfected. Meat, if suspected, can be rendered safe only by thorough cooking. Milk may be disinfected by boiling or pasteurizing, although this is denied by some. The milk may be sterilized in a corked bottle which is put into a strong salt solution, the salt solution being brought to the boiling-point; but this alters the composition of the milk, and, according to some, lessens its digestibility and nutritive power. Perhaps the best milk is uncooked milk from a tested cow. The bacilli are not killed by freezing. Bright sunshine will destroy them in a few hours.

HE who knows not, and knows not that he knows not, is a fool. Avoid him.

He who knows not, and knows that he knows not, is simple. Teach him.

He who knows, and knows not that he knows, is asleep. Awake him.

But he who knows, and knows that he knows, is a wise man. Follow him.—*From the Arabian Proverbs*.

[[]The next issue will give careful directions for the destruction of tubercle bacilli in sputum, clothing, and rooms,]



Teething



EETHING is a natural process, and in a normal baby ought to take place without disturbance. From the baby's birth, yes, even before, the teeth are forming and growing toward the edge of the gums. It is a gradual, con-

tinuous process. There seems to be no reason why there should be more trouble when the tooth is pushing through the gum than there is during the time it is working its way up to that point.

The experience of cutting the wisdom teeth may serve as an illustration. One tooth may come through without any disturbance, the discovery of the presence of the new tooth being the only intimation of what was taking place, while with another tooth there may be much discomfort, perhaps also a badly swollen face to accompany the process. Why the difference?—We often lay it to taking cold.

In the same way baby may suffer with some teeth and not with others, without apparent cause for the difference. Some babies suffer with every tooth, while other babies cut their teeth without any discomfort or disturbance.

Teething is only one manifestation of a transitional stage through which baby is passing and which is not complete till the end of the second year. During this time the whole digestive apparatus is gradually passing through more or less change, preparatory to handling a mixed diet. These changes, while natural, are more or less of a tax on the nervous system.



Still, the teething of a normal baby ought to be without much disturbance. An increased nervous irritability and some feverishness are often present. Baby is more easily upset by indiscretions, changes, or unfavorable conditions. While previously it has withstood the effects of faulty diet, of poorly adapted clothing, and disturbances of regularity and rest, this power of resistance is lowered during teething. This accounts for much of the illness that accompanies teething. The teething is not the real cause. The real cause is wrong diet, wrong habits,



wrong clothing,—causes which may be there all the time, but which can produce sickness only when baby's nervous system can no longer properly command the forces of resistance.

This is the reason teething is a serious matter in summer. Baby is depressed by the heat. In addition, the nervous disturbance of teething completely destroys the power of resistance; baby becomes very susceptible to colds and to disturbances of digestion from slight causes. So slight a thing as the changes from the warmth of midday to the coolness of evening may make it ill, though when in normal condition it is not affected so easily. During winter more care is generally exercised in regard to the clothing anyway, so that it is more often in the summer than in the winter that the baby takes cold from this cause.

When teething is attended by manifest irritation, shown by fretfulness, feverishness, and loss of appetite, guard the baby in every possible way against sickness by carefulness in diet, in the care of its milk, bottles, nipples, etc., remembering always how easily milk becomes contaminated in hot weather unless extreme care be taken in every detail. Give the baby abundance of water and lessen the amount of food. Also give attention to its clothing, dressing it according to the temperature. During the heat of the hot days it should have on very little, but be clothed appropriately when the day cools off. Its proper periods of rest must be carefully adhered to. Frequent bathing is especially needful.

When it shows signs of illness, look for the cause in something beside the teething. Vomiting or diarrhea in a child of this age is always a serious matter. Never pass it by as "only teething." Find the cause of the illness. It may be some indiscretion in diet. Sometimes a very, very little, less than a teaspoonful of some article, —may cause dangerous and even fatal illness. Articles of diet which the baby has previously eaten without dis-



During the heat of hot days.

turbance may, under the irritation of teething, be the cause of severe illness. The cause may be cold resulting from failure to protect the child against changes of temperature.

The mortality among infants during the teething period is great, especially

in summer, and it is distressing to think that this high mortality is entirely unnecessary,—that by proper care nearly all these precious lives might be saved. Truly we in sacrificing a large proportion of our infants to ignorance and carelessness are little better than the Hindoo women who sacrifice their babies to the god of the Ganges.

Therefore too much can never be said on the care with which the baby should be treated. In order to cooperate with nature, there should be a gradual, systematic, careful transition from the milk diet to a varied diet. But it is not wise to make any change during the heat of summer. And when teeth are coming through, risk no experiments with doubtful things, because, as we have seen, much sickness that is laid to an innocent tooth has its cause wholly in improper attention to the hygiene of the baby.



Alcoholism

By W. H. Irvine, M. D.



HE next disease in order from a mortality point of view, and the one which is hardest of all, I fear, to control, is

alcoholism. Volumes have been written upon the subject, and able men have spent the best part of their lives trying to regulate or control it. Still it remains the greatest predisposing factor of crime, disease, ruin, distress, and death which we have to contend with.

The question which confronts us is, How shall we deal with alcohol?

It is the unanimous opinion of those who have the handling of criminals that 70 per cent of all crimes committed are directly or indirectly attributable to alcoholism. This unusually large percentage applies principally to such offenses as interference with the rights of others, contempt for law and order, and such crimes as rape, disturbance of domestic peace, manslaughter, and murder. To all of these the habitual drinker of alcoholic stimulants seems to be particularly prone, such misdemeanors being frequently committed in a moment of passion-hence entirely unpremeditated, and followed by intense remorse when the perpetrator regains his normal mental equilibrium.

It does not require much provocation at times to induce an inebriate to commit a grave breach of the peace, such as assault or manslaughter, and sh culd a invent competitivity pr sent itself, he may commit moral delinquencies, such as rape, theft, etc.,-crimes entirely unpremeditated while sober. Perjury or incendiarism are rarely committed except by the alcoholic, whose brain and nervous system is weakened in vigor and activity, and whose moral senses are correspondingly blunted. Chronic alcoholism is characterized by evidences of degenerative changes in the entire system, more particularly of the cerebrospinal nervous system, the gastro-intestinal and circulatory systems, and by evidences by perversion of the will, impaired powers of intellectual activity, a lowered standard of morality, and lessened respect for the good, true, pure, and beautiful, together with a diminished or complete lack of public-spiritedness. It is only reasonable to conclude that a brain which is nourished by blood, the composition of which is modified by alcohol actually circulating in its vessels (this seems to be an established fact, for competent observers claim to have actually found modified alcohol in the ventricles of the brain at the postmortem examination of drunkards), would account for delusions and hallucinations on a par with the mental aberrations incident to the morphin or cocain habitue.

The drunkard's inability to resist temptation and his obscure mental activity render him an easy prey to evil associates and all kinds of misfortune, social, physical, and financial. His digestive system generally shows evidences of chronic gastro-intestinal perversion of function, caused by chronic gastritis, together with liver and renal derangements, which, if not already organic, are very apt to become so. The circulatory system is very prone to atheromatous degeneration, with its numerous pathological sequelæ.

To summarize: The system is so reduced in vitality that the alcoholic habitue offers a very susceptible soil for nearly all—and I think I am safe in saying all—kinds and conditions of sickness,—notably pneumonia, grippe, syphilis, gonorrhea, and any disease where exposure, carelessness, neglect, and a lowered vitality act as promoting influences.

The armies of all nations to which alcoholic beverages are liberally provided furnish in the reports of their medical officers numerous evidences of the deplorable results through drunkenness and disease, particularly venereal diseases, contracted while in an intoxicated state. The sufferings and deprivations of the women and children of the chronic alcoholics are only too well known by all, and further reference to them would be superfluous.* —*Medical Examiner and Practitioner*.

THE

THE religious doubter is sometimes simply a dyspeptic, who thinks he is visited with wholesome divine discipline to which he should meekly submit, when, in fact, nature is lashing him for sins against his own stomach, and he ought to rid himself of the scourge by plain living and good habits.—*Selected*.

^{[*} The above article on alcoholism is part of a paper which recently appeared in a journal devoted largely to the interests of life insurance medical examiners. Insurance men are especially interested in diseases in their relation to the probable length of life of applicants for insurance. For years these men have made a scientific study of disease in order to know what disorders are favorable and what are unfavorable for insurance. Dr. Irvine, in discussing the diseases most to be dreaded by insurance men, and consequently the most fatal, considered first tuberculosis, and then alcoholism.—ED.]

Evils of Tea Drinking

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

ECENTLY a lady came to us for relief from her condition, described something like the following:—

For about two score of years patient had been addicted to the common habit of drinking strong tea at almost every meal; following close upon this attacks of "heart-burn" were experienced, with frequent sour eructations, relief from which was only had by taking increasing doses of baking-soda after each meal. This condition had continued to grow worse, so distressing that in order to obtain relief, even to a small degree, over a pound of soda was taken each week,—over a flour sack full per year.

The history of this case is a repetition of that of many who frequent the physician's office, seeking only relief from distressing symptoms, and thinking little of the relation of cause and effect,—that "the way is prepared and disease is invited."

As is probably well known, tea contains a large percentage of tanninabout twenty-six per cent. A wellrecognized authority on materia medica says that "tannin precipitates pepsin and coagulates albumen, impairs digestion, stops peristalsis, and causes constipation." To precipitate the pepsin is to separate it from the gastric juice and render it inert,-inactive. Then to further aggravate conditions the tannin coagulates-forms into a hard, indigestible mass-the albuminoids,-milk, meat, eggs, etc. Thus the peptic action of the stomach juice s neutralized, while the foods upon which it is designed to act are rendered more indigestible.

Lehman, the great German chemist, investigated the properties of tea and coffee fifty years ago, and was the first to point out the harmful properties of these drugs. He found that 71/2 grains of caffein, which is the active constituent of tea and coffee, was enough to make a person sick, while 20 grains was enough to make him dangerously sick. This experiment has been tried many times on cats, and it has been found that 71/2 grains will kill a cat, which is said to have nine lives, and is very hard to kill. Now here is good Oolong tea, which contains about 5 per cent thein. According to the old rule, it takes a teaspoonful of tea to each cup and a spoonful for the potabout a dram. That is the recipe for making tea. A dram weighs 60 grains, and $\frac{1}{g_0}$ of 60 is three; so there would be 3 grains of thein in each cup of tea. Now suppose a person' takes 3 cups of tea, he would take more than poison enough to kill a cat, and if he should go on drinking he would soon get enough to make him drunk.

It takes 1 part of alcohol in 200 to produce insensibility, and 1 part in 100 to kill a person, but it does not require nearly so much thein to produce the same effect; thein is a much more powerful drug than alcohol, for 20 grains, or $\frac{1}{3}$ of a dram, is almost a fatal dose, and it takes much more than a dram of alcohol to kill a person. A strong man, accustomed to its use, could take at least an ounce of pure alcohol without killing him, but $_{10}^{1}$ of that amount of thein would be a fatal dose; so it is 10 times more powerful than alcohol. The decoction as swallowed is about on a par with lager beer.

A few years ago there was a club of newspaper reporters in England who met and had a spree on tea every Saturday night; and they used to get drunk on tea and get under the table before morning. Regular old topers, after having drank tea a few hours, would become so intoxicated that they would become insensible.

THE

ALL physicians know what a placebo is, but many druggists do not. It is a harmless or inert remedy which we are sometimes obliged to give to nervous patients, whom we feel need no medicine, but who think they must take something; bread pills, colored water, etc., are placebos; the word "placebo" means in Latin "I will please." The following placebo is reported to have cured a large number of neurotic and cranky women of their imaginary ills; it was prescribed for one court lady by Napoleon III's physician and was greatly in vogue by the grandes dames de la cour. The ingenious prescription is as follows:-

Sig.—One drop in a teaspoonful of water thrice daily.

As a few of my readers (very, very few, of course!) may not be strong in Latin, I will translate the ingredients into English: ¹) Spring water, ⁹) the same repeated, ³) the same distilled, ⁴) hydrogen protoxide (H₂O) [water],

⁵) nothing else. Had the demon of curiosity not taken possession of the grande dame, she might have gone on to her last day praising and presenting to her friends the great prescription of the famous Dr. N. But she could not resist the temptation. She wanted to know what the wonderful ingredients were. She presented the prescription to numerous physicians and pharmacists, but they evaded a direct answer, or said that those were rare medicaments, the nature of which she would not understand. At last she found a druggist, who, for a considerable sum of money, revealed the fatal secret. The wrath of the grand lady against the physician can be better imagined than described .- Critic and Guide.

THE

It frequently happens that ice can not be obtained for the sick room. In such an event, it is only necessary to procure a pitcher of cold water, and place about it a towel soaked in :—

Within half an hour very cold water will be on hand, ready for use.

THE

INSTEAD of pushing a man up a ladder, teach him how to climb. Instead of helping a man with charity, it is a much nobler thing to teach him to help himself. As Andrew Carnegie says, there is no use boosting a man up a ladder, for as soon as you stop pushing he may drop down.

THE

BRASS ornaments may be cleaned by washing with rock alum, dissolved in hot water.



A Woman

By Charles Hanson Towne

You say that you are but a woman—you Who are so very wonderful to me.

You tell me there is little you can do, Little indeed that all the world can see.

There are no battles on the open plain

That you can fight, as I, a man, can fight; But who shall say your life is lived in vain

If all my darkened days you have kept light?

Oh, little woman-heart, be glad, be glad That you are what God made you. Well I know

How you have nerved me when the day was sad,

WE take pleasure in announcing to our readers that an illustrated, interesting series of articles are being prepared for our department on Physical Culture in the Home, by Mrs. A. C. Bainbridge. We feel sure that they will be both sensible and practical, and by putting our soul into these exercises we may acquire that ease and grace of movement that is so much coveted by those of esthetic taste.

THE

Out of Place

IN our last month's issue crept this line of filling:---

"One smoker contracts diptheria to three non-smokers."

Now why did the printer put that

And made me better—yea, and kept me so! Be very glad that you, in your white place, Your little home, with folded hands, can be

A silent influence to whose source I trace The little good there ever was in me.

To be a woman! Is there any more

That you have need to be from day to day? How wonderful to have your heart, your store Of purity and goodness, and to say,

"One that I love is nobler since I came; One that loves me is better for my sake"!

A woman! Oh, there is no greater name That ever on the mortal tongue shall wake!

THE

in? Why did he not think? First, it is not true. It meant to say just the opposite, that three smokers contract diphtheria to one non-smoker; that is, among men of smoking age. And they deserve to if they desire to narcotize the resistance power of the tissue by the deadly poison.

Secondly, the item does not belong in our Woman's Realm. They do say that women smoke, and that the number in certain classes of society are continually increasing; but we will not believe this of our circle of sister readers.

Thirdly, the out of place of such an item is a lesson on the moral fitness of things both to printers and the people who suffer from them or are blessed by them.

A Sphere for Women

By Mrs. Mina Mann

So many women long for a mission, to do some great thing in life; and they mourn over their narrow, restricted spheres and are continually beating their wings against the bars, be they ever so gilded. Many of these same women are mothers, too. To such may I send a word of cheer, and perhaps help them to see what a vast field they have for their energy, wisdom, ambition, - a sphere limitless as to boundary. My work brings me into contact with many youth and young people. You would hardly believe that so much ignorance exists among them in regard to the things that only a mother can teach just right. Girls are allowed to reach womanhood with absolutely no conception of why they are placed here in this world, or what mission they are expected to perform while here. They have little knowledge of their own bodies or the functions of the various organs. The grand, glorious possibilities of womanhood, her place in the home and society, are scarcely dreamed of. They look upon marriage through a halo of romance and sentiment, and to be entered into not so very seriously. I would that mothers would arouse to the work that lies so near them, and they would teach their girls something regarding the temple of their bodies, that they would teach them that the body is a setting for the most precious of jewels -the mind.

If mothers would give their girls the right conception of marriage, show them what God designed it should be, would help them to fit themselves for the position they will one day occupy, how many unhappy alliances and ruined homes might be avoided! As I have talked with scores of young girls, I have been made heartsick as I have found how little they are prepared to deal with life's problems.

Few are even taught how to conduct themselves toward those of the opposite sex, and the many blunders made. however innocently, have wrecked many a girl's life. Mothers, if you have a daughter, you have a vocation life, and there is none higher. Study her and with her. Teach her and lead her step by step. Let her feel you are her best friend on earth, and that everything that touches her touches you. Teach her in regard to the relation she really bears to you, that is a part of your being. Teach her the charm of modesty and purity. Teach her that by and by she is to be a help meet for some one, and teach her how to be one. Teach her that the "crown of womanhood is motherhood," and counteract, as far as possible, the idea that is becoming alarmingly extant, that this holiest of all offices is undesirable, and to be avoided by any means procurable. As you strive to instil all these things into the young life that is part of your own, your life will expand and broaden, and cares will lighten, and life be fuller, and you will never again spend valuable time in vain regrets for a sphere outside your home circle until you have completely filled that.

Darning Stockings

By Mrs. A. C. Bainbridge

DARNING stockings was never considered a hard task at our house. Mother managed it so that we all learned to darn well, and, as naturally followed, we all liked it.

Thursday evening was mendingtime, and the stockings came first. Brother Jim, Sister Emma, and I sat around three sides of the table with our darning-cotton, scissors, and needle-books, while mother, with her book, sat at the other side, for darning night was our story night. Mother read well,—she was from Boston,—and we loved to work and listen.

Each mended his or her own hose first, then helped with what was left. If we came to a hole that was too hard, we laid our work down. Mother recognized the signal, and, as soon as she found a good resting-place, she stopped reading, and gave us the required assistance.

Badly-darned hose are very painful to tender feet, while neatly mended ones are saving in cents, and temper, too.

Mother's way was this: Look over your hose carefully, particularly the seams, and sew over and over the first break you find. Never, *never* make a knot in your thread. It will surely find a sore spot, or make one. Use silk for very fine hose, cotton of the same color for ordinary, and zephyr for woolen ones, hiding the ends under the stitches as you sew. If a thread of the stockinet has broken or raveled, catch it with your needle and sew several stitches each side of the break. It will look something like this:—

Next look for thin places; do not wait for a hole, but if at the top or heel or ball it has begun to wear, put in a few stitches with darning-cotton a little coarser than the weave, darning in and out, up and down; skip three stitches and take up two, following carefully the woven mesh. Begin well out at one side of the worn place and work well beyond it, leaving a little loop at each turn of the thread to allow for shrinking. Do all your work on the right side. It will look like this when done:—



This will not hurt the feet, and will save many a hole. If a hole has appeared, pull the ragged edges into place and sew over and over with sewing cotton, as if it were a ripped seam, hiding your thread ends under the stitches, like this:—



Pull it apart, and see if you have caught every stitch, and go over it again backwards.



Now pinch it flat between the ball of your thumb and fingers, so there will be no rough places; then put in your stitches as you did in the thin place, going beyond the hole on all sides.



A hole mended like this will not give way nor feel uncomfortable. The work being done on the right side, leaves the inside perfectly smooth. By watching carefully for the thin places and little holes, you will never have any hard darning to do.

Lack of Earnestness in Young Girls

312

I WANT to impress upon young girls the necessity of earnestness of purpose, in the home, in their work, and in life in general. You must cultivate that quality if you wish to be a success in life. Learn to watch your life, your temper, your disposition, your conduct, your acts, and your words.

Are you wasting your time in small talk and still smaller reading, or are you giving time to serious reflection and preparation for the responsible duties of life that come to all of us sooner or later? Remember that when a girl lacks definiteness of purpose she becomes frivolous, shallow of thought, and, as a consequence, insipid of speech.

The tendency of so many girls today leans toward self altogether too much. In the matter of dress, for instance, it seems to be the desire to excel her companions, instead of merely the idea of being neat and trim

and stylish. They are so absorbed in the daiminess of life, only trying to please themselves, sweet, charming girls enough, but when you come to look for depth you only find emptiness, frivolity, and idleness.

Every woman admires a man who has strength of character and fine mental ability, yet would that type of man choose for a wife a girl of shallow thought? Could she understand and sympathize and enter into his thoughts, activities, and interests?

Wake up, then, from your dreams of pleasing self, and know that life is not play, and that you must fit yourself in every way for the duties and responsibilities that are in store for you.

Suppose you resolve that to-day not a minute of your time should be wasted. Just stop and think what energy and strength would enter into your life and what grand results you could bring out.

You are a law unto yourself in making for yourself a well-proportioned character. Every thought which enters your mind, every word you utter, every act of yours, makes its impression upon the inmost fiber of your being, and the result is your character.

Every pure and uplifting thought, every noble aspiration for the good and the true, every longing of the heart for a higher and better life, every lofty purpose and unselfish endeavor, reacts upon the body, makes it stronger, more harmonious, and more beautiful.—*Margaret Stowe*.

THE

IT is announced that two foreign universities for women will be open next year, one at Tokyo and one at Moscow.



Cautions Regarding the Use of Sugar

WHILE sugar is more digestible than starch, and is more rapidly utilized by the muscles when overworked, it can not be used by the ordinary healthy person in such unlimited quantities as starch. One investigator reports that foods containing one and one-third pounds of starch (equivalent to two and one-half pounds of bread or six pounds of potatoes) can be digested without difficulty during considerable periods of time.

Another investigator observed that the use of two-thirds that amount of sugar daily for some time disturbed his digestion very much. Of course, no generalization made from single cases is of great importance.

A former paper called attention to the fact that sugar, being so readily absorbed, if it is eaten in large quantity, is taken into the blood faster than the liver can store it up, and it has to be disposed of at the expense of the secretory organs, which are in this way prepared for premature breakdown. The tendency of large quanties of sugar or sweets to ferment in the stomach was also referred to,

The action of concentrated solutions as an irritant was also mentioned. In proof of this may be given the work of a German scientist, who found that a 5.7 per cent solution "reddened the mucous membrane; a 10 per cent solution made it dark red, indicating irritation; a 20 per cent solution caused the dog such distress that the experi-

ment was carried no farther." Undoubtedly the use of sugar in concentrated form, as in candy, has a similar effect on the human stomach. There seems to be no proof that sugar to the amount of three ounces a day is injurious to the healthy, active adult, and the belief that it is injurious to the teeth seems to be without foundation. except as it is eaten in such quantities as to impair the digestive forces and lower the vitality. Starchy foods, which sometimes form lactic acid through the action of germs, are far more a menace to the teeth, as the sugar, being soluble, is necessarily washed out of the mouth by the saliva, while particles of starchy food may remain for some time in a decaying condition between the teeth. The negroes of the West Indies, who consume great quantities of sugar, are said to have the finest teeth in the The finest set of teeth the world. writer ever saw was in the mouth of a Jamaica negro.

From what has been said regarding the use of sweets in concentrated form, parents will recognize the folly of permitting children to use candy in anything but minute quantities, especially as many candies have coloring matter and other ingredients which are more harmful than the sugar.

But children, being very active, require large amounts of carbohydrates. In what form shall it be given them? While on a milk diet the child receives a considerable amount of milk-sugar, which is equivalent to cane-sugar in nutritive value, but is inferior in sweetening power. It seems, however, to be better adapted to the infant stomach than cane-sugar. On account of its slight sweetening power, children accustomed to use sweets sometimes refuse milk, and thus get an excess of carbohydrates with a deficiency of tissue-building material, which, if uncorrected, finally results disastrously to the child.

Another thing to consider about the free use of sweets is the danger of establishing a capricious appetite, not satisfied with foods of mild flavor. Such an appetite is always a snare to its possessor, and is apt to be the precursor of a lifelong dyspepsia. For older people the tendency is also to use too much in the line of sweets, pastries, and puddings, in place of simple articles of food.

169

The soldier on a hard march and light rations can use large amounts of sugar with impunity, and the Canadian lumberman, exposed to severe work and rigorous weather, can dispose of amazing quantities of molasses and fat pork without difficulty, while the same persons taking a rest during the summer months will contract severe indigestion on such a diet.

Sugar, then, is a proper food, if used in moderate quantity, in proper combination, and at the right time; and the nature of the climate and occupation will indicate what is a moderate quantity.

THE THE

The Care of Children's Eyes

DEFECTIVE vision in children is the result of abuse of the eyes, through ignorance of parents and teachers, during the early years of school life. The proper place for very young people is out-of-doors the greater part of the day, where the vision rests largely on objects at such a distance as not to tire the eyes. Modern ambition, or ignorance, or whatever you may please to call it, crowds these children at an early age into schoolroomsoften poorly lighted-and compels them for several hours each day to gaze on close objects. This overwork of the muscles of accommodation, unnatural at any age, but especially so in small children, results in many evils which are not always recognized as due to eye strain. Again, children who are near-sighted, by holding the

book very near the face, cause the eyes to be converged or drawn together with considerable force. The muscles which perform this office, overacting for a long time, gradually change the shape of the eyeball, and increase the short-sightedness, until the eye becomes hopelessly diseased.

If a pupil complains of not being able to see distant objects distinctly, holds its book close to the face, looks at objects between partly-closed lids, complains of headache or pain in the eyes while looking at near objects, that pupil is in urgent need of the services of a competent oculist.

Glasses properly fitted at the proper time may prevent disastrous results to the eyes and enable the child to accomplish a work it could not with poor eyes. The normal child should not enter school until the age of eight, or, better, ten; and the child with serious eye defects should not begin school work until two or three years later, in order to allow the tissues of the eye to become more resistant.

The movement on foot to shorten school hours and to lessen the amount of home work to be accomplished by pupils is in the right direction. The children's heads may not be crammed with so much useless matter as heretofore, and their eyesight will be far better. Children should not be encouraged to supplement their school work with reading of story-books. If they do any book work it should be with good light, so placed as to shine on the book and not on the eyes. One authority says: "With the advance of civilization there is a constant increase of visual defects and of general physical degeneration among school children. The causes are many. The most prominent are: Imperfect construction of schoolhouses, imperfect lighting, foul air, crowding, poor ventilation, long hours of continuous application at close work in school and necessary extra preparation after school hours, frequent and trying examinations, and poor print and paper in school-books."

Every school should be under the supervision of a medical inspector, who should examine the eyes, air passages, and general health of the pupils from time to time; for in the schoolroom is frequently laid the foundation of lifelong disease.

THE THE

Does School Life Develop Defective Vision?

NORMALLY the eyes of a babe are farsighted and not adapted for near work. The eye is soft and its shape easily changed. If a large amount of near work is attempted, the muscles which draw the eyes inward are brought into strong action, gradually changing the shape of the eyeball, and causing astigmatism, or blurring of the images. As this process continues, the eye becomes short-sighted, as well as astigmatic, gradually advancing to incurable disease.

Statistics made by careful observers show that the proportion of shortsighted scholars increases from the primary grades until in some of the European universities over half of the students are near-sighted. As nearsightedness is incurable, and tends, especially under unfavorable conditions, to grow progressively worse, it is important that measures be taken in the first school years to prevent the development of this most unfortunate condition.

The ideal place, as stated before, for the child under eight or even ten years of age is out in the open air for the greater part of the day. In order that schools may do the least possible damage to the eyes of school children, it is necessary that they be properly and adequately lighted.

The light should come preferably from *one* side,—the left side is best, as the right hand throws a shadow over the work when lighted from the right, and the body casts a shadow over the work when the lighting is from be-

170

hind. Light from the front is worst of all, as it dazzles the eyes without properly lighting the books.

Ceilings should be so high that the light comes in entirely over the heads of the pupils. One authority gives the following dimensions for a room to accommodate 45 pupils: Height of ceiling, 15 feet; lower sill of window, 3 feet from floor; top of window, 14 feet from the floor; height of window, II feet. Schools should not be located on narrow streets, but should be surrounded by yards, to permit the direct entrance of the light. The lighting should be such that a normal pupil can read the words on a test card at the proper distance in any part of the room.

When the light enters the schoolroom from the north, the lighting is most uniform; but there is also an advantage in having direct sunlight at some part of the day, as is secured when the windows open to other points of the compass. Shades or awnings may be needed for such exposure. Ceilings should be of some light color which will not absorb the light rays. There should be as few blackboards as is consistent with good work, and these preferably should be located opposite the light.

Blackboard or chart work is valuable in that it gives the eyes a rest from close work; but copying from the blackboard to books is especially trying to the eyes, because it involves constant and rapid change of accommodation. Blackboard work should be large and distinct enough to be easily read from all parts of the schoolroom, and the boards should be sponged occasionally, to remove the gloss and grayish tinge which results from the use of the eraser. The dead

black of the washed board gives a much better contrast to the chalk than the glossy, grayish black left by the eraser.

THE

THE Review of Reviews for June has four articles of especial value to tubercular patients and their friends. The first article, on the "Outdoor Treatment of Tuberculosis," shows the remarkable results which follow this line of treatment when properly conducted, not in a climate especially adapted to the cure of tuberculosis, but in the less favored climates of some of the Eastern states.

To the victim of the fatal disease, without the means with which to travel and undergo an expensive course of treatment, who has, perhaps, given up hope and abandoned himself to his fate, the perusal of this article ought to bring courage and a fresh determination to live and regain health.

Tuberculosis, the most fatal of diseases, is being robbed of some of its terrors, and patients who, like King Hezekiah, have had the death sentence passed upon them, find that, as a result of coming close to nature, a term of years is added to their lives. And it is not drug medication that is doing it; but as a prominent Pennsylvania physician expressed it, "Eight hours a day in the open air, unless the weather is so inclement as to make this a practical impossibility; a clean, healthy diet, consisting largely of milk and eggs, and the exercise of proper precaution against infection from the germs of disease."

The second article, "How to Live Out-of-Doors," was written by a former tubercular patient, who was stimulated by one of the best physicians of Philadelphia to make an effort to save her life. This physician snapped his fingers, telling her that her life would go like that. Stirred with indignation at the unfeeling remark, and filled with a desire to prove that he was mistaken, she worked out her own physical salvation, and gives the readers of this article the benefit of her experience, going quite minutely into the details of her daily life while under treatment.

In the third article, "The Consumptive's Chances in Colorado," it is stated that "when the sanatoria now being established in a number of the states are properly conducted, even though they are located with no special climatic advantages, the results obtained will be as satisfactory in the end as in institutions situated in typical climatic resorts."

The fourth paper, entitled "New York's Fight against Tuberculosis," gives an account of the very commendable and successful work that is being accomplished by the health officers of New York City in controlling the spread of tuberculosis in that city.

THE

LAST March Dr. J. H. Kellogg, superintendent of the Battle Creek Sanitarium, appeared before the Michigan State Legislature as representative of the Michigan State Medical Society, to deliver an address on the diseases of animals that are likely to be communicated to man. The lecture was given by request, with a view to securing legislation providing for the proper inspection of animals used for food. Incidentally it may suggest to the thoughtful the wisdom of discarding meat altogether; for it will be a long time before adequate inspection can be secured, even by means of the most stringent laws.

The lecture was illustrated by means of a stereoptican and charts. The doctor dwelt on the following wellknown facts. Among others:—

Human beings may contract tuberculosis by eating the flesh of animals suffering from that disease.

Enormous quantities of such flesh are eaten, as shown by statistics.

Ordinary cooking, as broiling a steak, does not destroy the tubercle bacillus.

Cancer is rapidly increasing, having doubled in New York and tripled in Boston in the last ten years.

More than one hundred thousand persons in the United States are dying of cancer, a disease almost unknown among people who do not use domestic animals for food.

Tapeworm, which is derived usually from the beef and pork, is increasing.

Trichinosis, another disease resulting from eating swine's flesh, is also rapidly increasing.

One hog in every forty slaughtered in Chicago is infected with trichina.

According to one authority, one out of every seventeen persons who die has trichinosis.

There are more men who eat hogs than there are hogs that eat men, which may explain why the disease is more frequent in men than in hogs.

747

THE Philadelphia Medical Journal calls attention to the dangerous character of wood alcohol, or "Columbian spirit," as it is sometimes called. It is sometimes used ignorantly in place of alcohol, as a "stimulant," on account of its comparative cheapness; and it has been substituted for true grain alcohol in prescriptions by unscrupulous druggists. While the use of ordinary alcohol is bad enough, the use of wood alcohol is followed by most disastrous results, a very small quantity sometimes being sufficient to cause total and incurable blindness, and even death.

THE

ANOTHER abuse quite common in some localities is the distribution of free samples of poisonous drugs, such as headache remedies. Very rarely are these remedies harmless. In fact, if they are at all effective in relieving headache, or other pain, the chances are they are far from harmless. The practise of leaving sample packages of tablets on the doorstep for the baby to get hold of may end in loss of life and is certainly pernicious.

As an exchange well says, "It is bad enough to have to read in the street-cars the advertisements of headache powders that can cure a toper's morning pangs in ten minutes for ten cents, and to know that these nostrums are poisons, and therefore capable of great abuse; but to have the injurious drugs hawked about the streets, and thrown gratis into people's front yards and vestibules, is a defiance of the public welfare that amounts to a challenge of the law."

Until people learn the principle that nature has provided no safe means by which the results of transgression of her laws may be obviated, these delusive anti-pains and anti-headaches will prove a temptation; but with the children especially, accustomed as they are to taking confections in tablet form, there is the risk that the contents of one of these sample packages will prove an overdose and even terminate fatally.

If the people would quit buying the stuff, it would not be long till these fakers would be out of business.

TIT

As warm weather comes on we may expect the usual mad dog scare in Eastern cities. Doubtless the bite of a rabid animal is often fatal; but perhaps the fear that an animal is rabid causes as many deaths,-people being literally "scared to death" by the bite of an animal supposed to be suffering from rabies. Whether the people die as the result of a virus implanted by the dog's teeth or because of fright, the fact is the same that deaths are caused by snapping dogs, and means should be taken in cities where such causalities are likely to occur to keep the streets free from roving dogs. At the same time the sensational papers which work upon the fears of the people, and thus indirectly contribute to the fatalities, should be "muzzled."

THE

NEW YORK is the first city in this country to erect a tent hospital for poor consumptives. In April a number of tents were put up on the grounds of the Metropolitan Hospital, and many of the consumptive patients were transferred from the woods to the tents. If the plan works as well in New York as it has in a number of European cities, we may expect to see a much larger proportion of the consumptives restored to health, and, as a result, other American cities will doubtless adopt similar measures.

THE

A COMPARATIVELY new method of investigating fluids by determining the freezing-point (cryoscopy) is being applied to milk to ascertain its purity. It will not distinguish between skim milk, whole milk, and cream, but will detect immediately the addition of water, and also will reveal the presence of disease in the cow. As the method is comparatively simple, it will probably come into general favor, unless it be found to be unreliable.

THE

A PARISIAN medical journal comments on the effect which the introduction of many newspapers teeming with advertisements of secret nostrums is having on the people of remote districts hitherto unreached by the dailies. By means of the rural deliveries people on the farms are brought, as it were, in contact with loud-mouthed charlatans, the result being a rapid increase in the consumption of nostrums.

Baümler reports in a Berlin medical journal a series of 187 patients treated medically for appendicitis. The recoveries were over 90 per cent, though some cases were so severe as to necessitate staying in the hospital from two to more than six months.

He believes that recovery is possible

THE

without surgical treatment in the overwhelming majority of cases, even where large quantities of pus have collected. But this does not mean by "home treatment." A sufferer from appendicitis should by all means be in skilful hands. If, after the attack is completely over, local symptoms still continue, he advises removal of the appendix.

A WRITER in one of the leading medical journals of Germany, after reviewing some of the literature relating to the effects of borax and boracic acid on the system, concludes that these substances are harmful, having a tendency to injure the kidneys and to produce skin eruptions; that they prevent, to some extent, the absorption of food, and may cause diarrhea and vomiting.

THE

It is well to remember this, for these substances are usually considered comparatively harmless. Their use as food preservatives, or as a corrective for fermentation or putrefaction in the stomach, is attended with danger.

THE

RECENT bacteriological examinations in bathing establishments show that a bather in an ordinary bath throws off from the surface of his body in ten minutes some 4,000,000 germs. This argues much in favor of the daily private tub bath, or, better still, the daily spray, and against the public bath, especially baths where bathers congregate who perhaps have not had a full bath for a number of days.

alexan

174

THE open-air treatment of pulmonary consumption is one of the grandest triumphs of the medicine of the nineteenth century. The profession is now thoroughly convinced that tuberculous pulmonary disease is eminently curable in its early stage by such simple measures as rest, with constant exposure to the open air of a salubrious region and a generous diet of highly nutritious food ; also that it is curable even in the absence of one or more of these favorable conditionsnay, that it often ends in spontaneous recovery without the assistance of any of them, which fact, however, in nowise excuses failure to press them all into service. The general public is slowly beginning to recognize that the consumptive is not necessarily doomed. Facilities for treating the consumptive poor on a large scale are now at hand, or shortly will be, and we may look forward to seeing "the great white plague" conquered within a very few years .- N. Y. Medical Journal.

THE

Antidote for Formaldehyde

In view of the fact that this chemical is coming more and more into general use 'as a disinfectant and antiseptic, cases of poisoning from it will become more frequent. We have (*Merck's Archives*) an easily accessible and reliable antidote in ammonia. It may be given in the form of ammonia water, a few drops well diluted, or the aromatic spirit, or a solution of ammonium acetate.—*Medical Times*.

34

IF through any word or act of mine gladness, peace, or relief may come to any person, I am fully satisfied and seek no other reward.

A FRENCH chemist, of a particularly inquiring turn, has determined by experiment that the body of an average man, of about 80 kilos, has all the chemical elements represented in the yolk and white of 1,200 ordinary-sized eggs of the common hen. Properly reduced, such a body would furnish 96 cubic meters of gas and sufficient hydrogen to fill a balloon with an ascensional force of 70 kilos. Normally, the human body contains iron sufficient to make 7 large nails, fat for 13 candles, carbon for 65 gross of pencils, phosphorus to tip 820,000 matches, together with the constituents of 20 teaspoonfuls of salt, 59 lumps of sugar, and 42 liters of water. -Selected.

A SPLENDID house without a foundation or with a rotten foundation is a bad thing. It may tumble over any time, even without warning. But a foundation without a house is still worse. The first is useful as long as it lasts; the second is of no use at all. When I see a highly-developed intellect on a puny, weakly body, I think of the splendid house with the rotten foundation. And when I see a splendidly developed specimen of humanity with the brain and intellect of a cat, I think of the foundation without a house.—Selected.

THAT

EVERY man needs what every plant has,—an innate law of upward growth, an affinity for light, a tendency toward the sun. All this is found in a noble aim, and where that strikes deep root, it will struggle toward its object with marvelous strength and constancy.— *Life-Power*.



G. H. HEALD, M. D., Editor

H. H. HALL, Business Manager

Address all business communications to PACIFIC HEALTH JOURNAL, Pacific Press, Oakland, California All contributions, exchanges, and matters for review should be sent to the Editor, Sanitarium, Cal.

VOL. XVIII.

Oakland, California, July, 1903.

No. 7.

OUR readers will be glad to know that the PACIFIC HEALTH JOURNAL is enjoying quite a large circulation. Although we have printed extra copies of the last few issues, the demand has been greater than our supply. We are continually receiving new subscriptions and orders for clubs as high as 1,000 copies. We are making every effort possible to improve the JOUR-NAL, and trust our readers will cooperate with us in extending the sphere of this periodical, and thus bring to their friends the valuable instruction which each issue contains.

THE

A New Vegetarian Restaurant

IN answer to the many calls made by its patrons in Oakland, Cal., the Sanitarium Food Company of St. Helena has opened a vegetarian restaurant in connection with its food store at 44-46 San Pablo Avenue, that city.

The cafe and store occupy adjoining rooms, that have been fitted up in such a way as to make them both attractive and neat in appearance. Each department is separated by a partition, although the windows in the front of the building have been so arranged as to show that both lines of work are under the same management and ownership. A large opening has been cut through the partition, so that customers may pass from one room to the other,

The food store has been in operation about two years, and has made many friends for medical missionary work.

Although the restaurant has only been open a few days up to time of our going to press, it is enjoying a good patronage, and the managers have received many expressions of appreciation from those who have attended.

At this restaurant there is being developed a new line of work, that of selling hot cooked foods over the counter in convenient dishes for carrying home. This bids fair to become an important adjunct to the restaurant.

Plans are being laid to carry on a school in hygienic cookery. The lessons will be conducted by competent instructors, who have had the advantage of being connected with the kitchens of the Battle Creek and St. Helena Sanitariums. Lectures in dietetics and hygiene will be given from time to time.

THE

WE have received a program of a "Good Health Meeting" of the Saint Louis Vegetarian Society, to be held in Aschenbreedel Hall, Eighteenth and Olive streets, St. Louis, Mo., July 1, 1903. Quite a number of prominent speakers will be present, and we are sure the occasion will be an interesting and profitable one.

Pacific Health Journal IN CLUBS

Those desiring to use the PACIFIC HEALTH JOURNAL in clubs may secure them at the following rates:-

No. Copies One Year						Six Months					Three Months			
5.			\$1	50				\$0	75				\$0	38
10 -		*	3	00				1	50					75
20 .		4	6	00			ς.	3	00		4		I	50
30 .			9	00				4	50				2	25
40 .			12	00				6	00			3	3	00
50 .			15	00	x			7	50				3	75
75 .			22	50				II	25				5	63
100 .		G.	30	00	4			15	00				7	50

Payments should be made quarterly in advance, if possible, although if it is not convenient to pay in this way, we will try to arrange it so that no church nor society need go without JOURNALS.

Address, Pacific Health Journal, Oakland, Cal.

PURITY BOOKS

The way to purity is through knowledge

The Self and Sex Series

Has the unqualified endorsement of Dr. Joseph Cook, Rev. Chas. M. Sheldon, Rev. F. B. Meyer, Dr. Theo. L. Cuyler, Dr. F. E. Clark, Bishop Vincent, Anthony Comstock, "Pansy," Francis E. Willard, Lady H. Somerset, Eminent Physicians, and hundreds of others

BOOKS TO MEN

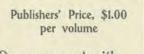
By Sylvanus Stall, D. D.

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

BOOKS TO WOMEN

By Mrs. Mary Wood-Allen, M. D.

What a Young Girl Ought to Know What a Young Women Ought to Know \$1,000 Prize Book, by Mrs. Emma F. A. Drake, M. D. What a Young Wife Ought to Know



One copy sent with one year's subscription to PACIFIC HEALTH JOURNAL, \$1.00

Address PACIFIC HEALTH JOURNAL Oakland, Cal.

THE FASCINATION OF THE MYSTERIOUS

One of the most remarkable series of articles ever written will soon appear in the





HEY are prepared by Prof. J. A. L. Derby of Healdsburg College, and treat the much-talked-of subjects of Hypnotism, Spiritualism, Telepathy, Theosophy, Clairvoyance, The New Thought, Pantheism, Christian Science, etc.

He first admits that the human mind is fascinated by the mysterious, and that this instinct, which we call curiosity, is right because it leads to knowl-

edge. He then asks and clearly answers the question, "What is a proper exercise of this natural propensity?" His answers are so reasonable, so free from cant, and display such a knowledge of the principles involved, that they will be gladly read and re-read by those desiring light on these important queries.

In his third article he admits "that somewhere in man's make-up—call it his sub-conscious self, his subliminal consciousness, or what you will—there is the capacity for receiving, seemingly by supernormal faculties of sight, hearing, feeling, etc., communications from the spirit world." This may seem to our readers an unwarranted admission, but a careful study of the question will be sufficient, we believe, to convince the candid student that this conclusion is emphatically true.

Then follows his conclusion: "Since man has that capacity, is it to be wondered at that any one who places these faculties at the disposal of Satan, should receive messages and experience visions from him, just as certainly as a true prophet may receive supernormally-imparted knowledge from God?"

Again, he says, "There is much that is superhuman from spiritist sources, but superhuman knowledge is not necessarily divine."

- **HYPNOTISM**—The manner in which the author passes by all the phenomena connected with the manifestation of this ism, and strikes directly at the root of the matter, is startling.
- **CLAIRVOYANCE**—In this article the real truth is told about clairvoyance, in connection with which are introduced absolute tests by which the true prophets of God may be distinguished from those receiving messages from the opposite source.
- **TELEPATHY OR MIND READING**—Prof. Derby again admits in this article that there are manifestations not accounted for by any manner of trickery and yet the reader is led to conclude with the author that the practice is ''immoral.''
- **THEOSOPHY**—The term is here defined as "Aristocratic Spiritualism.". The reasons for thus defining it are direct and ample.
- THE NEW THOUGHT—"A scheme of self-salvation through the power of the will," says the author.
- **PANTHEISM**—He here declares that the theory of the natural immortality of the soul, which is the life-blood of Spiritualism, Theosophy, The New Thought, and Saint Worship, ''is neither an intuition of the mind, a Biblical teaching, nor a scientifically-demonstrated fact.'' Rather a strong statement, but we hope you will suspend judgment until you have read the argument. This theory, he says, leads direct to Pantheism, which he then compares with the philosophy of Brahamism.
- The above articles merit world-wide circulation, for they treat topics which are forcing themselves to the front everywhere.

THE "SIGNS OF THE TIMES" IS AN ILLUSTRATED 16-PAGE WEEKLY SUBSCRIPTION PRICE, \$1.50 PER YEAR

ADDRESS

SIGNS OF THE TIMES

OAKLAND, CALIFORNIA

BATTLE CREEK

SANITARIUM



CKNOWLEDGED to be the oldest and most extensive sanitarium conducted on rational principles in the United States. It has the special advantage of an elevated and picturesque site and remarkably salubrious surroundings.

Artificial climate for those needing special conditions

A lakeside resort slcamers, sail boats row boats bathing, etc.

A fine gymnasium with trained directors

Thoroughly aseptic surgical wards and operating rooms

All the conveniences of a first-class hotel



Everything an invalid needs

Special dietaries prepared as directed Electricity in every form Massage and Swedish movements by trained manipulators Pneumatic and vacuum treatment Mechanical appliances of all sorts Classified dietaries Unequaled ventilation Perfect sewerage

Baths of every description

The institution affords facilities for Turkish, Russian, electric vapor, and water baths of all kinds the electric light bath, and a large swimming bath

Incurable and offensive patients not received

Trained nurses of either sex furnished at reasonable rates

For Circulars, Address

BATTLE CREEK SANITARIUM, Battle Creck, Michigan

JAMES S. WATSON, President NATE R. SALSBURY, Vice-President STEPHEN G. PALMER, Secretary Minneapolis, Minn.

JOHN R. ADAMS, Treasurer Chicago, III.

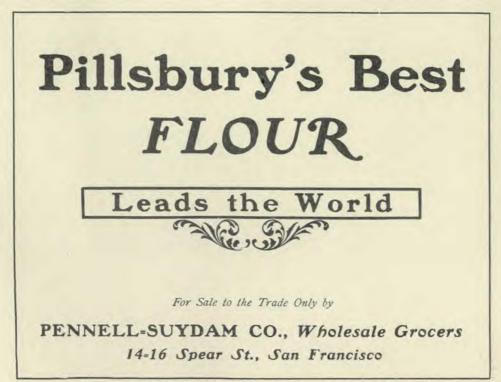
A. J. HECHTMAN, Vice-President San Francisco, Cal.

A. W. PORTER | Managers

Porter Brothers Company

RECEIVERS, PACKERS and SHIPPERS CALIFORNIA DRIED FRUITS Prunes, Raisins, Nuts, Honey, Etc.

> Corner Washington and Drumm Sts. SAN FRANCISCO, CAL.



DIRECTORY OF PACIFIC COAST SANITARIUMS

ST. HELENA SANITARIUM St. Helena, California T. J EVANS, M. D., Medical Superintendent

PORTLAND SANITARIUM Portland, Oregon W. R. SIMMONS M. D., Superintendent

MOUNT VIEW SANITARIU/I Spokane, Washington SILAS VARNELL, M. D., Superintendent

LOS ANGELES SANITARIUM 315 West Third Street Los Angeles, Cal F. B. MORAN, M. D., Superintendent California

NEVADA SANITARIUM 619 Ralston Street DR. M. B. McDONALD Reno, Nevada

SEATTLE BRANCH BATTLE CREEK SANITARIUM 612 Third Avenue Seattle, Washington A. Q. SHRYOCK, M. D., Manager

SAN FRANCISCO BRANCH ST. HELENA SANITARIUM 1436 Market Street San Francisco, California R. A. BUCHANAN, M. D., Superintendent

HYDRIATIC DISPENSARY 916 Laguna Street, San Francisco

SACRAMENTO BRANCH ST. HELENA SANITARIUM 7191 K Street Sacramento, California

EUREKA BRANCH ST. HELENA SANITARIUM Eureka, Ca C. F. DAIL, M. D., Superintendent Eureka, California

TACOMA BRANCH BATTLE CREEK SANITARIUM 1016 Tacoma Avenue Tacoma, Washington DR. T. J. ALLEN, Medical Superintendent

NORTH YAKIMA TREATMENT ROOMS North Yakima, Washington 317 N. First Street

Phone 1273 Conducted by MR, AND MRS. A. R. STARR Trained Nurses from Battle Creek Sanitarium

SAN DIEGO BRANCH SANITARIUM C Street San Diego, California T. S. WHITELOCK, M. D., Superintendent 1117 C Street

DR. W. L. GARDNER 604-5 Dooley Block Salt Lake City, Utah BRITISH COLUMBIA TREATMENT ROOMS

338 Cambie Street Vancouver, B. C.

DIRECTORY OF PACIFIC COAST VEGETARIAN RESTAURANTS

VEGETARIAN CAFE 755 Market Street San Francisco, California

THE VEGETARIAN Avenue Oakland, California 44-46 San Pablo Avenue

VEGETARIAN RESTAURANT 315 W. Third Street Los Angeles, California

GOOD HEALTH RESTAURANT 616 Third Avenue Seattle, Washington

DEPOSITORY 516 S. Hill Street Los Angeles, California

STORES San Francisco, California San Jose, California Oakland, California Salt Lake City, Utah Provo, Utah San Diego, California Fresno, California 1482 Market Street 72-74 E. Santa Clara Street 46 San Pablo Avenue 63 E. First South Street 124 W. Center Street 1115 C Street 2113-2115 Fresho Street



WHOLE WHEAT, SCIENTIFICALLY BLENDED WITH FRUIT AND NUT.

BLENDED WITH FRUIT AND NUT. THE FOOD NATURE Without cooking or use of drugs, is a palatable, wholesome combination of these perfect food prop-erties. It is a food that no one can eat without being benefited, both mentally and physically. Maccrated wholesome combination of these perfect food prop-erties. It is a food that no one can eat without being benefited, both mentally and physically. Macerated Wheat prolongs life and imparts and restores health by eliminating all germs of disease. Cures stomach and kidney troubles; restores thin people to normal weight; reduces weight of fleshy persons. Mrs. Roxa Bush, New Braintree, Mass., writes Dec. I, 1903: "Weighed to-day 176 lbs., just 53 lbs. less than on March 29. My steady improvement is causing much favorable comment among my friends." Macerated Wheat is a rational and perfect cure for indigestion. Will cure most obstinate case of constipation. Dr. Wilson, Eureka Springs, Ark., writes: "It's very pala-table. Is a sure shot for constipation. Enclosed find \$1.0 for another sack." Macerated Wheat is pleasant to the taste, and should be eaten three times daily. Every ounce of it contains more life and health than a gallon of drugs. Put up in 8-lb. cloth sacks (enough for 40 days). Price, prepaid, 51.00; west of the Rocky Mountains, \$1.50. Full and complete directions for living on natural food accompanying each sack. Write for circulars on Raw Food Diet, covering my personal experience of several years. BYRON TYLER, Ridge Bidg., Kansas City, Mo.

Fifty Cents

Will bring the PACIFIC HEALTH JOURNAL to your home for one year



Ball-Bearing Throughout



It accomplishes very desirable ends not attained by any other typewriter

Our booklet or an examination of the machine will convince you

Standard Typewriter Exchange **303 BUSH STREET** Tel. Main 5967 SAN FRANCISCO, CAL,

A brain and muscle-building food for big, strong men and little babies & It requires no cooking, and is always ready for use &

CARDE CARDE CARDE CARDE CARDE CARD

Granola

GLUTEN is the element in the grains that repairs the waste of tissue from brain, nerve, and muscle work & GRANOLA is rich in gluten, being made from carefully-selected wheat, corn, and oats, the first of which (wheat) contains a large per cent. of gluten & GRANOLA is easy of digestion for old and young alike & A good food for growing children & & &

ASK YOUR GROCER

St. Helena Sanitarium Food Company, St. Helena, Cal. Portland Sanitarium Food Company, Portland, Oregon Walla Walla Food Company, Walla Walla, Washington

N 3 60 3 60 3 60 3 60 3 61

Our Ideas of Education

"Our ideas of education take too narrow and too low a range. There is "need of a broader scope, a higher aim. True education means more than "the perusal of a certain course of study. It means more than a prepara-"tion for the life that now is. It has to do with the whole being, and "with the whole period of existence possible to man. It is the harmonious "development of the physical, the mental, and the spiritual powers. It "prepares the student for the joy of service in this world, and for the "higher joy of wider service in the world to come."



The above is from the opening paragraph of the new volume by Mrs. E. G. White, entitled



It contains 321 pages, and is beautifully bound in cloth. Price \$1.25



SIZE 5 X8 INCHES



O show how this enduring and "harmonious development" may be realized by the youth, the parent, the teacher, the writer, the tiller of the soil, and the business man, is the object of this work.

Do you belong to one of these classes?

- If so, you surely need at once the lessons and counsel contained in this book.
- And after reading it yourself, you will wish to talk to your friends about it.
- We have therefore devised plans which will make such work profitable to you.

Write for Particulars and Descriptive Circular to Pacific Press Publishing Co. & Oakland, Cal.